

ENVIRONMENTAL
PROTECTION



Chevron

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May 14, 1998

Chevron Products Company

6001 Bollinger Canyon Road
Building L
San Ramon, CA 94583
P.O. Box 6004
San Ramon, CA 94583-0904

Marketing - Sales West

Phone 510 842-9500

Ms. Susan Hugo
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

**Re: Former Chevron Service Station # 9-1026
3701 Broadway
Oakland, California**

Dear Ms. Hugo:

Enclosed is a copy of the First Quarter (Semi-Annual) Groundwater Monitoring & Sampling Report for 1998 that was prepared by our consultant Gettler-Ryan Inc. for the above noted site. The sampling events are conducted in the 1st and 3rd quarters with the monitoring wells sampled and analyzed for TPH-g, BTEX and MtBE constituents.

Ten wells were sampled (A, B, B-1, B-2, B-3, B-4, E, F, EA-1 and EA-2). The concentration of benzene declined in monitoring well A from the previous sampling event, while increasing in wells B-1, B-4 and EA-2. Separate phase hydrocarbons (SPH) were detected in monitoring wells B and B-2. The wells were bailed and approximately 3.0 gals. and 2.0 gals., were removed from the respective wells. No SPH was detected SPH in well B-3 in this sampling event. Wells E, F and EA-1 were below method detection limits for all constituents.

Monitoring wells A and B-4, which are upgradient of Chevron's former tanks and lines, continues to be impacted by petroleum hydrocarbon constituents, which may indicate the presence of a source located upgradient of Chevron's site. Chevron's portion of the plume appears to stable and contained.

Depth to the groundwater varied from 8.43 feet to 13.73 feet below grade, with direction of flow to the southwest.

May 14, 1998
Ms. Susan Hugo
Former Chevron Service Station #9-1026
Page 2

Since we continue to recover SPH in monitoring wells B and B-2 and recently in well B-3 over a long period of time, it appears that SPH may have accumulated in pockets surrounding these wells. **Chevron recommends the installation of an oxidant such as hydrogen peroxide, to oxidize the hydrocarbons in the areas surrounding each well.** Hydrogen peroxide is a non-threat compound as the by-products are carbon dioxide (CO2) and water (H2O).

If you have any questions or comments, call me at (510) 842-9136.

Sincerely
CHEVRON PRODUCTS COMPANY



Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

Cc. Ms. Bette Owen, Chevron

Mr. W. Bruce Bercovich
Kay & Merkel
100 The Embarcadero, 3rd Floor
San Francisco, CA 94105



GETTLER - RYAN INC.

May 8, 1998

Job #5127.80

Mr. Phill Briggs
Chevron Products Company
P.O. Box 6004
San Ramon, CA 94583

Re: Semi-Annual Groundwater Monitoring & Sampling Report
Former Chevron Service Station #9-1026
3701 Broadway
Oakland, California

Dear Mr. Briggs:

This report documents the semi-annual groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On April 2, 1998, field personnel were on-site to monitor ten wells (A, B, B-1 through B-4, E, EA-1, EA-2, and F), and sample eight wells (A, B-1, B-3, B-4, E, EA-1, EA-2, and F) at the Former Chevron Service Station #9-1026 located at the above mentioned site.

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were present in three wells (B, B-2 and B-3). Static water level data and groundwater elevations are presented in Table 1. Separate-phase hydrocarbon removal data is presented in Table 2. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells as specified by G-R Standard Operating Procedure - Groundwater Sampling (attached). The field data sheets for this event are also attached. The samples were analyzed by Sequoia Analytical. Analytical results are presented in Table 1. The chain of custody document and laboratory analytical reports are attached.

Thank you for allowing Gettler-Ryan Inc. to provide environmental services to Chevron. Please call if you have any questions or comments regarding this report.

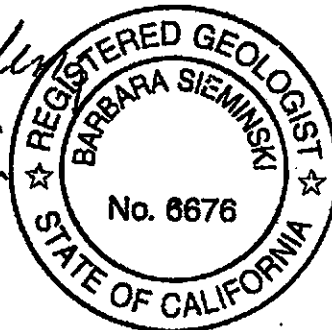
Sincerely,

Deanna L. Harding

Deanna L. Harding
Project Coordinator

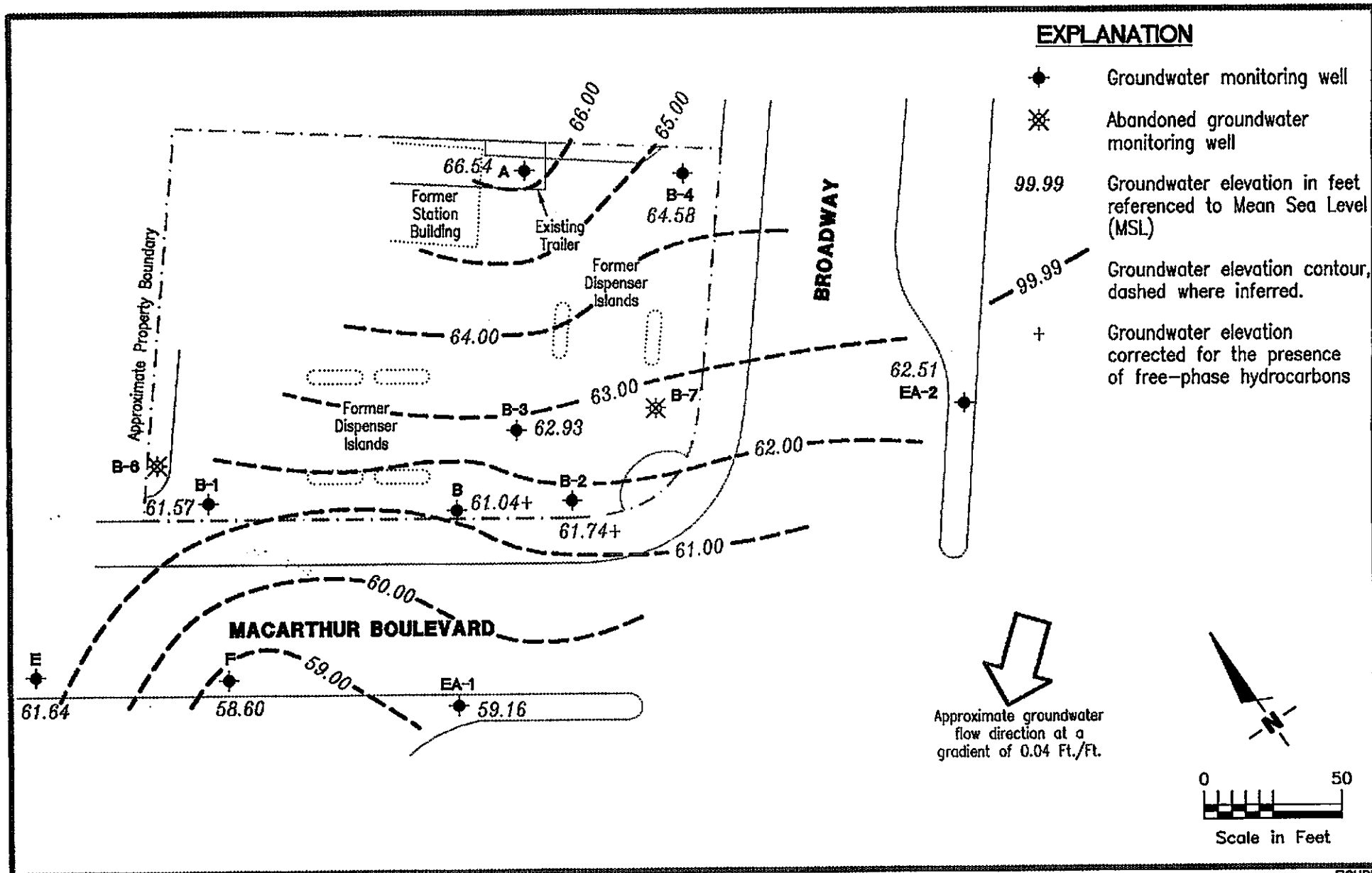
Barbara Sieminski

Barbara Sieminski
Project Geologist, R.G. No. 6676



DLH/SJC/ah
5127.QML

Figure 1: Potentiometric Map
Table 1: Water Level Data and Groundwater Analytical Results
Table 2: Separate-phase Hydrocarbon Thickness and Product Removal
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports



Gettler - Ryan Inc.

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

POTENTIOMETRIC MAP
Former Chevron Service Station No. 9-1026
3701 Broadway
Oakland, California

FIGURE

1

JOB NUMBER
5127

REVIEWED BY

DATE
April 2, 1998

REVISED DATE

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G) <-----	B	T	E	X	MTBE >-----	
											ppb
A	5/9/89	13.92	61.36	0	11,000	260	<2	94	230	---	
	8/9/89	15.62	59.66	0	12,000	370	<1.5	100	240	---	
75.28	11/9/89	15.95	59.33	0	16,000	690	10	180	350	---	
	2/8/90	14.73	60.55	0	14,000	600	7	120	270	---	
	5/10/90	15.48	59.80	0	16,000	840	4.8	140	340	---	
	8/9/90	15.66	59.62	0	17,000	510	40	170	280	---	
	11/13/90	16.48	58.80	0	9,000	570	3.1	86	170	---	
	3/27/91	---	---	---	8,000	660	<5	110	250	---	
	4/5/91	13.22	62.06	0	---	---	---	---	---	---	
	6/19/91	15.37	59.91	0	8,900	740	<3	120	280	---	
	8/21/91	15.99	59.29	0	6,800	620	23	85	200	---	
	11/8/91	16.15	59.13	0	4,000	640	<5	77	160	---	
	2/13/92	14.58	60.70	0	8,000	860	<5	120	390	---	
	5/1/92	14.26	61.02	0	13,000	870	19	220	780	---	
	75.29	11/18/92	16.38	58.91	0	12,000	1,500	83	360	530	---
3/19/93		12.16	63.13	0	14,000	820	6.1	180	420	---	
6/10/93		14.25	61.04	0	9,000	700	13	170	310	---	
9/8/93		---	---	---	---	---	---	---	---	---	
12/21/93		---	---	---	---	---	---	---	---	---	
3/9/94		13.34	61.95	0	9,600	860	21	200	390	---	
9/21/94 ¹		---	---	---	---	---	---	---	---	---	
12/20/94 ²		---	---	---	---	---	---	---	---	---	
3/28/95 ³		---	---	---	---	---	---	---	---	---	
6/22/95 ³		---	---	---	---	---	---	---	---	---	
9/21/95 ⁷		---	---	---	---	---	---	---	---	---	
3/22/96 ⁷		---	---	---	---	---	---	---	---	---	
9/25/96 ⁷		---	---	---	---	---	---	---	---	---	
3/6/97 ⁷		---	---	---	---	---	---	---	---	---	
9/12/97		14.56	60.73	0	2,600	460	<10	70	11	67	
4/2/98		8.75	66.54	0	1,700 ⁸	130	1.7	44	42	<2.5	
B		5/9/89	13.97	59.58	0.20	---	---	---	---	---	---
	8/9/89	15.69	57.86	0.20	---	---	---	---	---	---	
	73.39	11/9/89	15.29	58.16	0.08	---	---	---	---	---	---
		2/8/90	14.46	58.93	0	---	---	---	---	---	---
	5/10/90	14.07	58.32	0	---	---	---	---	---	---	
	8/9/90	15.12	58.27	0	---	---	---	---	---	---	
	11/13/90	15.76	57.63	0	---	---	---	---	---	---	
	4/5/91	13.38	60.01	0	---	---	---	---	---	---	
	6/19/91	15.14	58.25	0	26,000	7,100	370	430	1,000	---	
	8/21/91	15.58	57.81	0	16,000	4,900	270	390	640	---	

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California
(continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G) <-----	B	T	-----ppb----->		
								E	X	MTBE
B (cont)	11/8/91	15.71	57.68	0	11,000	2,400	48	280	160	---
	2/13/92	14.66	58.73	0	6,800	2,400	60	220	140	---
	5/1/92	14.50	58.89	Sheen	16,000	6,000	180	370	460	---
	11/18/92	15.60	57.79	0	28,000	2,200	150	920	4,300	---
	3/19/93	13.29	60.12	0.03	---	---	---	---	---	---
	6/10/93	14.30	59.11	0.03	---	---	---	---	---	---
	9/8/93	15.33	58.25	0.24	---	---	---	---	---	---
	12/21/93	14.73	58.76	0.12	---	---	---	---	---	---
	3/9/94	14.07	59.35	0.04	---	---	---	---	---	---
	9/21/94	15.50	57.91 ³	0.02 ⁴	---	---	---	---	---	---
	12/20/94	13.75	59.88 ³	0.12	---	---	---	---	---	---
	3/28/95 ²	---	---	---	---	---	---	---	---	---
	6/22/95	14.56	58.92 ³	0.11	---	---	---	---	---	---
	9/21/95	15.88	58.41 ³	1.12	---	---	---	---	---	---
	3/22/96	13.02	61.19 ³	1.02	---	---	---	---	---	---
	9/25/96	15.76	58.81 ³	1.47	---	---	---	---	---	---
	3/6/97	14.30	59.95 ³	1.08	---	---	---	---	---	---
	9/12/97	14.61	59.32 ³	0.68	---	---	---	---	---	---
	4/2/98	12.50	61.04 ³	0.19	---	---	---	---	---	---
	B-1	5/9/89	12.58	59.19	0	16,000	2,300	260	81	740
8/9/89		14.09	57.68	0	12,000	2,600	340	100	870	---
71.77	11/9/89	14.06	57.71	0	17,000	340	140	110	760	---
	2/8/90	12.65	59.12	0	5,500	70	19	17	150	---
	5/10/90	13.62	58.15	0	18,000	770	110	73	600	---
	8/9/90	13.87	57.90	0	82,000	750	66	95	980	---
	11/13/90	14.38	57.39	0	43,000	1,300	120	74	760	---
	3/27/91	---	---	---	18,000	580	92	94	770	---
	4/5/91	11.73	60.04	0	---	---	---	---	---	---
	6/19/91	13.56	58.21	0	21,000	910	56	96	810	---
	8/21/91	13.90	57.87	0	50,000	2,400	610	300	1,800	---
	11/8/91	14.05	57.72	0	540,000	3,600	1,500	1,900	5,900	---
72.30	2/13/92	12.68	59.09	0	20,000	500	100	150	920	---
	5/1/92	12.92	58.85	Sheen	27,000	2,800	200	310	1,900	---
	11/18/92	14.30	58.00	0	300	9.7	3.4	2.3	21	---
	3/19/93	12.28	60.02	0	130	23	.9	<0.5	5.6	---
	6/10/93	13.04	59.26	0	170	21	1.1	.8	6.6	---
	9/8/93	13.88	58.46	0.05	---	---	---	---	---	---
	12/21/93	13.53	58.77	0	<50	6.7	.5	<0.5	1.2	---
	3/9/94	12.65	59.65	0	1,300	520	8.8	2.4	53	---
	9/21/94	14.40	57.90	0	390	130	2.7	2.4	7.7	---

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California
(continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G) <-----	B	T	E	X	MTBE ----->
B-1 (cont)	12/20/94	12.35	59.95	0	1,600	520	9.9	8.9	34	---
	3/28/95	10.76	61.54	0	160	38	2.1	1.4	5.4	---
	6/22/95	12.60	59.70	0	340	73	3.1	2.4	7.5	---
	9/21/95	13.65	58.65	0	140	19	1.0	1.2	6.1	---
	3/22/96	10.94	61.36	0	200	<0.5	0.6	2.1	2.2	<5.0
	9/25/96	13.76	58.54	0	690	5.4	1.2	1.6	6.8	<5.0
	3/6/97	12.08	60.22	0	420	31	1.0	2.5	4.3	5.9
	9/12/97	13.54	58.76	0	170	31	1.4	1.6	4.6	11
	4/2/98	10.73	61.57	0	670 ^s	91	4.2	8.7	17	<2.5
B-2	5/9/89	14.58	59.93	0	170,000	30,000	8,400	2,300	12,000	---
	8/9/89	16.06	58.45	0	60,000	29,000	8,700	2,400	12,000	---
74.51	11/9/89	16.95	57.56	0	110,000	32,000	5,500	2,800	12,000	---
	2/8/90	15.56	58.95	0	67,000	28,000	5,900	2,300	11,000	---
	5/10/90	15.94	58.57	0	69,000	24,000	4,800	2,000	11,000	---
	8/9/90	15.97	58.54	0	100,000	33,000	4,000	2,100	12,000	---
	11/13/90	16.70	57.81	0	110,000	33,000	4,300	2,900	13,000	---
	3/27/91	---	---	---	160,000	26,000	3,200	2,600	15,000	---
	4/5/91	14.20	60.31	0	---	---	---	---	---	---
	6/19/91	15.83	58.68	0	100,000	22,000	2,500	2,000	11,000	---
	8/21/91	16.31	58.20	0	80,000	28,000	2,800	2,400	12,000	---
	11/8/91	16.60	57.91	0	94,000	29,000	1,900	2,200	11,000	---
74.52	2/13/92	15.93	58.58	0	280,000	34,000	2,500	4,600	23,000	---
	5/1/92	14.94	59.57	Sheen	29,000	1,700	300	1,100	4,300	---
	11/18/92	16.71	57.81	0	26,000	11,000	170	870	950	---
	3/19/93	14.06	60.46	0	110,000	28,000	1,200	2,200	12,000	---
	6/10/93	14.88	59.64	0	140,000	15,000	930	1,900	8,800	---
	9/8/93	16.03	58.52	0.04	---	---	---	---	---	---
	12/21/93	15.61	58.91	0	980,000	21,000	30,000	9,100	71,000	---
	3/9/94	14.53	59.99	Sheen	110,000	23,000	920	1,300	7,800	---
	9/21/94 ^s	---	---	---	---	---	---	---	---	---
	12/20/94	14.65	59.86	0	70,000	25,000	710	920	5,300	---
	3/28/95	12.30	62.22	0	76,000	20,000	920	1,200	5,200	---
	6/22/95	14.22	60.30	0	89,000	21,000	3,800	1,500	6,800	---
	9/21/95	15.80	58.72	0	84,000	24,000	2,900	1,800	9,800	---
3/22/96	12.85	61.69 ^p	0.02	---	---	---	---	---	---	
9/25/96	15.98	58.56 ^p	0.03	---	---	---	---	---	---	
3/6/97	14.11	60.43 ^p	0.02	---	---	---	---	---	---	
9/12/97	15.35	59.19 ^p	0.03	---	---	---	---	---	---	
4/2/98	13.07	61.74 ^p	0.36	---	---	---	---	---	---	

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California
(continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G) <-----	B	T	E	X	MTBE ----->
B-3	5/9/89	14.02	60.01	0	70,000	12,000	9,500	400	8,900	---
	8/9/89	15.38	58.74	0	---	---	---	---	---	---
74.12	11/9/89	15.55	58.61	0.05	---	---	---	---	---	---
	2/8/90	14.68	59.44	<0.01	---	---	---	---	---	---
	5/10/90	15.15	58.99	0.02	---	---	---	---	---	---
	8/9/90	15.27	58.85	<0.01	---	---	---	---	---	---
	11/13/90	16.04	58.13	0.06	---	---	---	---	---	---
	4/5/91	13.30	60.82	<0.01	---	---	---	---	---	---
	6/19/91	15.16	58.96	0	260,000	20,000	9,000	2,200	16,000	---
	8/21/91	15.61	58.51	0	70,000	28,000	11,000	1,800	11,000	---
	11/8/91	15.77	58.35	0	150,000	29,000	9,700	2,200	13,000	---
	2/13/92	14.88	59.24	0	100,000	27,000	9,906	2,000	11,000	---
	5/1/92	14.20	59.93	0.01	---	---	---	---	---	---
74.13	11/18/92	15.68	58.47	0.03	---	---	---	---	---	---
	3/19/93	13.75	61.24	1.08	---	---	---	---	---	---
	6/10/93	14.79	60.04	0.87	---	---	---	---	---	---
	9/8/93	15.38	58.81	0.08	---	---	---	---	---	---
	12/21/93	14.74	59.39	0.00	1,100,000	18,000	29,000	8,900	59,000	---
	3/9/94	13.53	60.60	0.00	130,000	11,000	20,000	1,700	15,000	---
	9/21/94	15.70	58.45 ³	0.02 ⁴	---	---	---	---	---	---
	12/20/94	13.48	60.67 ³	0.03	---	---	---	---	---	---
	3/28/95	---	---	1.54	---	---	---	---	---	---
	6/22/95	14.25	60.86 ³	1.23	---	---	---	---	---	---
	9/21/95	15.25	59.12 ³	0.30	---	---	---	---	---	---
	3/22/96	11.46	62.97 ³	0.37	---	---	---	---	---	---
	9/25/96	14.82	60.13 ³	1.02	---	---	---	---	---	---
	3/6/97	13.12	61.23 ³	0.28	---	---	---	---	---	---
	9/12/97	14.67	59.56 ³	0.13	---	---	---	---	---	---
	4/2/98	11.20	62.93	Sheen	160,000	27,000	26,000	2,500	14,000	< 500
B-4	5/9/89	14.93	61.50	0	3,600	840	34	120	200	---
	8/9/89	16.65	59.78	0	< 500	4,200	130	370	260	---
76.43	11/9/89	---	---	---	5,000	4,200	83	400	250	---
	2/8/90	16.99	59.44	0	14,000	6,000	70	530	300	---
	5/10/90	16.05	60.38	0	12,000	5,400	130	460	320	---
	8/9/90	16.49	59.94	0	16,000	7,400	120	530	350	---
	11/13/90	16.64	59.79	0	21,000	7,000	100	550	320	---
	3/27/91	17.42	59.01	0	17,000	8,500	120	500	300	---
	4/5/91	14.66	61.77	0	14,000	7,700	75	610	210	---
	6/19/91	16.48	59.95	0	16,000	7,800	110	550	340	---
	8/21/91	17.00	59.43	0	18,000	11,000	110	450	340	---

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California
(continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G) <-----	B	T	E	X	MTBE ----->
B-4 (cont)	11/8/91	17.38	59.05	0	18,000	6,800	98	500	620	---
	2/13/92	16.42	60.01	0	15,000	9,100	86	570	350	---
	5/1/92	15.50	60.93	0	36,000	16,000	180	990	690	---
	3/19/93	14.11	62.32	0	26,000	15,000	150	900	790	---
	6/10/93	15.44	60.99	0	35,000	14,000	180	940	590	---
	9/8/93	16.65	59.78	0	34,000	15,000	170	1,100	870	---
	12/21/93	16.45	59.98	0	30,000	12,000	74	610	340	---
	3/9/94	14.88	61.55	0	37,000	15,000	140	1,000	580	---
	9/21/94	17.14	59.29	0	32,000	14,000	110	660	190	---
	12/20/94	14.99	61.44	0	23,000	8,400	97	640	530	---
	3/28/95	11.33	65.10	0	27,000	9,900	120	880	540	---
	6/22/95	14.59	61.84	0	33,000	12,000	84	650	150	---
	9/21/95	16.19	60.24	0	20,000 ^e	12,000	72	540	68	---
	3/22/96	12.00	64.43	0	29,000	10,000	72	560	170	400
	9/25/96	16.28	60.15	0	53,000	11,000	<50	160	74	<500
	3/6/97	13.56	62.87	0	<5,000	17,000	<50	<50	<50	<500
	9/12/97	16.02	60.41	0	7,600	8,100	65	520	38	300
4/2/98	11.85	64.58	0	28,000 ^f	9,700	59	760	220	<250	
B-6 72.66	5/9/89	12.11	60.55	0	26,000	120	110	250	1,300	---
	8/9/89	14.72	57.94	0	19,000	470	150	440	1,400	---
	11/9/89	13.85	58.81	0	13,000	70	36	36	440	---
	2/8/90	7.73	64.93	0	2,900	16	5	10	58	---
	5/10/90	---	---	---	---	---	---	---	---	---
	8/9/90	14.51	58.15	0	14,000	55	3	130	500	---
	11/13/90	14.86	57.80	0	---	---	---	---	---	---
	4/5/91	10.43	62.23	0	---	---	---	---	---	---
6/19/91 ¹	---	---	---	---	---	---	---	---	---	
B-7 75.40	5/9/89	14.73	60.67	0	210,000	13,000	19,000	2,000	20,000	---
	8/9/89	16.36	59.04	0	672,000	8,7000	17,000	2,700	30,000	---
	11/9/89	16.64	58.76	0	150,000	7,000	12,000	1,800	16,000	---
	2/8/90	15.69	59.71	0	41,000	2,500	6,900	1,100	11,000	---
	5/10/90	---	---	---	---	---	---	---	---	---
	8/9/90	16.31	59.09	0	50,000	1,100	3,900	640	7,200	---
	11/13/90	17.09	58.31	0	---	---	---	---	---	---
	4/5/91	14.36	61.04	0	---	---	---	---	---	---
6/19/91 ¹	---	---	---	---	---	---	---	---	---	
E 70.07	11/18/92	12.20	57.87	0	280	2.7	2.4	3	12	---
	3/19/93	9.97	60.10	0	<50	<0.5	<0.5	<0.5	<1.5	---

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California
(continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G) <-----	B	T	ppb		MTBE ----->
								E	X	
E (cont)	6/10/93	10.98	59.09	0	<50	<0.5	<0.5	<0.5	<1.5	---
	9/8/93	11.80	58.29	0.03	---	---	---	---	---	---
	12/21/93	11.25	58.82	0	<50	<0.5	<0.5	<0.5	<0.5	---
	3/9/94	10.67	59.40	0	<50	<0.5	0.7	<0.5	0.7	---
	9/21/94	12.29	57.78	0	<50	2.5	<0.5	1.0	<0.5	---
	12/20/94	15.53	54.54	0	<50	0.5	<0.5	<0.5	<0.5	---
	3/28/95	8.45	61.62	0	<50	<0.5	<0.5	<0.5	<0.5	---
	6/22/95	10.57	59.50	0	<50	<0.5	<0.5	<0.5	<0.5	---
	9/21/95	11.59	58.48	0	<50	<0.5	<0.5	<0.5	<0.5	---
	3/22/96	9.02	61.05	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	3/6/97	12.32	57.75	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	9/12/97	---	---	---	---	---	---	---	---	---
	4/2/98	8.43	61.64	0	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	F 72.01 71.72	5/9/89	18.70	53.31	0	<500	<0.5	<0.5	0.6	1
8/9/89		19.03	52.98	0	---	---	---	---	---	---
11/9/89		19.02	52.99	0	---	---	---	---	---	---
2/8/90		18.70	53.31	0	<50	0.4	<0.3	0.3	<0.6	---
5/10/90		18.98	53.03	0	---	---	---	---	---	---
8/9/90		18.95	53.06	0	---	---	---	---	---	---
11/13/90		19.10	52.91	0	---	---	---	---	---	---
3/27/91		---	---	---	64	<0.5	<0.5	<0.5	1	---
6/19/91		18.95	53.06	0	---	---	---	---	---	---
8/21/91		> 19.94	<52.07	0	---	---	---	---	---	---
11/8/91		> 19.94	<52.07	0	---	---	---	---	---	---
2/13/92		18.60	53.41	0	<50	<0.5	<0.5	<0.5	<0.5	---
5/1/92		Dry	---	---	---	---	---	---	---	---
11/18/92		14.85	56.87	0	<50	<0.5	<0.5	<0.5	<0.5	---
3/19/93		14.25	57.47	0	<50	<0.5	<0.5	<0.5	<1.5	---
6/10/93		13.92	57.80	0	<50	<0.5	<0.5	<0.5	<1.5	---
9/8/93		14.80	56.95	0.04	---	---	---	---	---	---
12/21/93		13.31	58.41	0	<50	<0.5	<0.5	<0.5	<0.5	---
3/9/94		12.99	58.73	0	<50	<0.5	<0.5	<0.5	<0.5	---
9/21/94		16.30	55.42	0	<50	<0.5	<0.5	<0.5	<0.5	---
12/20/94	12.57	59.15	0	<50	<0.5	<0.5	<0.5	<0.5	---	
3/28/95	8.95	62.77	0	<50	<0.5	<0.5	<0.5	<0.5	---	
6/22/95	13.77	57.95	0	<50	<0.5	<0.5	<0.5	<0.5	---	
9/21/95	13.45	58.27	0	<50	<0.5	<0.5	<0.5	<0.5	---	
3/22/96	11.16	60.56	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
3/6/97	11.38	60.34	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0	

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California
(continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G) <-----	B	T	E	X	MTBE	-----ppb----->		
F (cont)	9/12/97	---	---	---	---	---	---	---	---	---	---	---	
	4/2/98	13.12	58.60	0	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5		
EA-1	5/9/89	14.56	59.38	0	<500	<0.5	<0.5	<0.5	<0.5	<0.5	---		
	8/9/89	16.09	57.85	0	<500	<0.5	<0.5	<0.5	<0.5	<0.5	---		
73.94	11/9/89	15.84	58.10	0	<500	<0.5	<0.5	<0.5	<0.5	<0.5	---		
	2/8/90	15.05	58.89	0	<50	<0.3	<0.3	<0.3	<0.6	<0.6	---		
	5/10/90	15.65	58.29	0	<50	1	0.3	<0.3	<0.6	<0.6	---		
	8/9/90	15.67	58.27	0	<50	<0.3	<0.3	<0.3	<0.6	<0.6	---		
	11/13/90	16.32	57.62	0	<50	<0.4	<0.3	<0.3	<0.4	<0.4	---		
	3/27/91	---	---	---	<50	0.7	0.5	<0.5	<0.5	<0.5	---		
	4/5/91	14.03	59.91	0	---	---	---	---	---	---	---		
	6/19/91	15.56	58.38	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---		
	8/21/91	15.99	57.95	0	<50	<0.4	<0.3	<0.3	<0.4	<0.4	---		
	11/08/91	16.13	57.81	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---		
	2/13/92	15.10	58.84	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---		
	5/1/92	18.80	55.14	0	<50	2.7	<0.5	<0.5	<0.5	<0.5	---		
	71.85	11/18/92	15.97	55.88	0	<10	<0.3	<0.3	<0.3	<0.5	<0.5	---	
		3/19/93	13.66	58.19	0	<50	<0.5	<0.5	<0.5	<1.5	<1.5	---	
6/10/93		14.71	57.14	0	<50	<0.5	<0.5	<0.5	<1.5	<1.5	---		
9/8/93		15.58	56.33	0.08	---	---	---	---	---	---	---		
12/21/93		15.02	56.83	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---		
3/9/94		14.38	57.47	0	<50	<0.5	1.0	<0.5	<0.5	<0.5	---		
9/21/94		16.12	55.73	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---		
12/20/94		14.05	57.80	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---		
3/28/95		12.05	59.80	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---		
6/22/95		14.35	57.50	0	<50	2.0	<0.5	<0.5	<0.5	<0.5	---		
9/21/95		15.36	56.49	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---		
3/22/96		12.71	59.14	0	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0		
3/6/97		13.88	57.97	0	<50	2.8	<0.5	<0.5	<0.5	0.8	<5.0		
9/12/97		---	---	---	---	---	---	---	---	---	---		
4/2/98	12.69	59.16	0	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5			
EA-2	5/9/89	15.95	59.29	0	760	<0.5	<0.5	1.1	<0.5	<0.5	---		
	8/9/89	17.45	57.79	0	<500	<0.5	<0.5	<0.5	<0.5	<0.5	---		
75.24	11/9/89	17.41	57.83	0	<500	<0.5	1	<0.5	<0.5	<0.5	---		
	2/8/90	16.57	58.67	0	190	<0.3	<0.3	<0.3	<0.6	<0.6	---		
	5/10/90	17.12	58.12	0	<50	<0.3	<0.3	<0.3	<0.6	<0.6	---		
	8/9/90	17.20	58.04	0	120	<0.3	<0.3	<0.3	<0.6	<0.6	---		
	11/13/90	17.88	57.36	0	160	<0.4	1	<0.3	<0.4	<0.4	---		

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California
(continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G) <-----ppb----->	B	T	E	X	MTBE
EA-2 (cont)	3/27/91	---	---	---	110	<0.5	<0.5	<0.5	<0.5	---
	4/5/91	15.54	59.70	0	---	---	---	---	---	---
76.24	6/19/91	17.07	58.17	0	<50	<0.5	<0.5	<0.5	<0.5	---
	8/21/91	17.46	57.78	0	70	0.8	1.4	<0.3	<0.4	---
	11/8/91	17.58	57.66	0	<50	<0.5	0.7	<0.5	<0.5	---
	2/13/92	16.69	58.55	0	<50	<0.5	<0.5	<0.5	<0.5	---
	5/1/92	16.16	59.08	0	340	<0.5	2.6	0.7	<0.5	---
	11/18/92	17.61	58.63	0	450	<0.5	3.3	<0.5	0.8	---
	3/19/93	15.00	61.24	0	450	<0.5	2.3	0.6	<1.5	---
	6/10/93	16.08	60.16	0	250	<0.5	1.3	<0.5	<1.5	---
	9/8/93	17.07	59.17	0	<50	<0.5	<0.5	<0.5	<1.5	---
	12/21/93	16.60	59.64	0	170	<0.5	1.3	<0.5	<0.5	---
	3/9/94	15.83	60.41	0	200	1.8	1.4	<0.5	<0.5	---
	9/21/94	17.60	58.64	0	<50	<0.5	<0.5	<0.5	<0.5	---
	12/20/94	15.53	60.71	0	950	31	15	1.7	<0.5	---
	3/28/95	13.28	62.96	0	71	2.0	0.6	<0.5	<0.5	---
	6/22/95	15.62	60.62	0	300	<0.5	3.7	<0.5	0.6	---
	9/21/95	16.78	59.46	0	170	<0.5	<0.5	<0.5	<0.5	---
	3/22/96	13.88	62.36	0	90	<0.5	<0.5	<0.5	<0.5	<5.0
	3/6/97	15.06	61.18	0	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	9/12/97	---	---	---	---	---	---	---	---	---
	4/2/98	13.73	62.51	0	230 ^a	0.99	<0.50	<0.50	<0.50	<2.5
Trip Blank TBLB	5/9/89	---	---	---	<500	<0.5	<0.5	<0.5	<0.5	---
	8/9/89	---	---	---	<500	<0.5	<0.5	<0.5	<0.5	---
	11/9/89	---	---	---	<500	<0.5	<0.5	<0.5	<0.5	---
	2/8/90	---	---	---	<50	<0.3	<0.3	<0.3	<0.6	---
	5/10/90	---	---	---	<50	<0.3	<0.3	<0.3	<0.6	---
	8/9/90	---	---	---	<50	<0.3	<0.3	<0.3	<0.6	---
	11/13/90	---	---	---	<50	<0.4	<0.3	<0.3	<0.4	---
TB-LB	3/27/91	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	6/19/91	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	8/21/91	---	---	---	<50	<0.4	<0.3	<0.3	<0.4	---
	11/8/91	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	2/13/92	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	5/1/92	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	11/18/92	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
	3/19/93	---	---	---	<50	<0.5	<0.5	<0.5	<1.5	---
	6/10/93	---	---	---	<50	<0.5	<0.5	<0.5	<1.5	---
	9/8/93	---	---	---	<50	<0.5	<0.5	<0.5	<1.5	---

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California
(continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	TPH(G) <-----ppb----->					
					B	T	E	X	MTBE	
Trip Blank	12/21/93	---	---	---	< 50	<0.5	<0.5	<0.5	<0.5	---
(cont)	3/9/94	---	---	---	< 50	<0.5	<0.5	<0.5	<0.5	---
	9/21/94	---	---	---	< 50	<0.5	<0.5	<0.5	<0.5	---
	12/20/94	---	---	---	< 50	<0.5	<0.5	<0.5	<0.5	---
	3/28/95	---	---	---	< 50	<0.5	<0.5	<0.5	<0.5	---
	6/22/95	---	---	---	< 50	<0.5	<0.5	<0.5	<0.5	---
	9/21/95	---	---	---	< 50	<0.5	<0.5	<0.5	<0.5	---
	3/22/96	---	---	---	< 50	<0.5	<0.5	<0.5	<0.5	<5.0
	9/25/96	---	---	---	< 50	<0.5	<0.5	<0.5	<0.5	<5.0
	3/6/97	---	---	---	< 50	<0.5	<0.5	<0.5	<0.5	<5.0
	9/12/97	---	---	---	< 50	<0.50	<0.50	<0.50	<0.50	<2.5
	4/2/98	---	---	---	< 50	<0.50	<0.50	<0.50	<0.50	<2.5

Table 1. Water Level Data and Groundwater Analytical Results - Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California (continued)

EXPLANATION:

TOC = Top of casing elevation
(ft) = feet
DTW = Depth to water
GWE = Groundwater elevation
msl = Mean sea level
TPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl tertiary butyl ether
ppb = Parts per billion
--- = Not analyzed/not applicable

ANALYTICAL METHODS

EPA Method 8015/5030 for TPH(G)
EPA Method 8020 for BTEX & MTBE

NOTES:

Analytical results and groundwater data prior to 1995 were compiled from the quarterly groundwater monitoring reports prepared for Chevron by Sierra Environmental Services.

Analytical methods prior to September 21, 1994 are assumed to be 8015/8020.

* Product thickness measurements on and after September 21, 1994 were measured using an MMC flexi-dip interface probe.

¹ Well abandoned. Exact date unknown.

² Well inaccessible on this date.

³ GWE corrected for the presence of free-phase hydrocarbons using: $GWE = [(TOC - DTW) + (0.8)(Product\ Thickness)]$. 0.8 is the assumed specific gravity of free-phase hydrocarbons.

⁴ Approximate thickness; equipment not functioning properly.

⁵ Well not located this event.

⁶ Laboratory report indicates data obtained from multiple dilutions. Dilution factor noted represents the dilution used for majority of results.

⁷ Well inaccessible due to office trailer positioned over well.

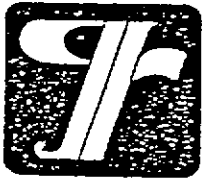
⁸ Laboratory report indicates unidentified hydrocarbons C6-C12.

Table 2. Separate-phase Hydrocarbon Thickness and Product Removal -
Former Chevron Service Station #9-1026, 3701 Broadway, Oakland, California

WELL ID	DATE	PRODUCT THICKNESS (ft)	PRODUCT/WATER BAILED (Gallons)
B	6/22/95	0.11	1.00
	9/21/95	1.12	2.00
	3/22/96	1.02	2.00
	9/25/96	1.47	1.50
	3/6/97	1.08	2.00
	9/12/97	0.68	3.00
	4/2/98	0.19	3.00
B-2	3/22/96	0.02	0.25
	9/25/96	0.03	0.25
	3/6/97	0.02	0.00
	9/12/97	0.03	1.50
	4/2/98	0.36	2.00
B-3	3/28/95	1.54	2.00
	6/22/95	1.23	0.50
	9/21/95	0.30	0.50
	3/22/96	0.37	0.25
	9/25/96	1.02	1.00
	3/6/97	0.28	0.50
	9/12/97	0.13	2.00
	4/2/98	Sheen	0.00

EXPLANATION:

(ft) = feet



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 a MMC flexi-dip interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, static water level measurements are collected with the interface probe and are also recorded in the field notes.

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

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

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

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

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

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Chevron Facility # 9-1026
 Address: 3701 Broadway
 City: Oakland, CA

Job#: 5127.80
 Date: 4-2-98
 Sampler: E. Cline

Well ID: A
 Well Diameter: 2' in.
 Total Depth: 20' ft.
 Depth to Water: 8.75 ft.

Well Condition: okay

Hydrocarbon Thickness: e in. Amount Bailed e (gal.)
 Volume Factor (VF):
 2" = 0.17 3" = 0.38 4" = 0.66
 6" = 1.50 12" = 5.80

11.25 x VF $\frac{0.17}{1.9}$ = 1.9 x 3 (case volume) = Estimated Purge Volume: 5.7 (gal.)

Purge Equipment: Disposable Bailer
 Bailer
Stack Suction
 Grundfos
 Other: _____

Sampling Equipment: Disposable Bailer
 Bailer
 Pressure Bailer
 Grab Sample
 Other: _____

Starting Time: 12:23
 Sampling Time: 12:31
 Purging Flow Rate: 1 gpm.
 Did well de-water? NO

Weather Conditions: cloudy warm
 Water Color: clear Odor: None
 Sediment Description: None
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>12:25</u>	<u>2</u>	<u>6.59</u>	<u>720</u>	<u>18.5</u>			
<u>12:27</u>	<u>4</u>	<u>6.52</u>	<u>119</u>	<u>18.4</u>			
<u>12:29</u>	<u>6</u>	<u>6.51</u>	<u>121</u>	<u>19.0</u>			
<u>12:31</u>	<u>7</u>	<u>6.52</u>	<u>120</u>	<u>18.8</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>A</u>	<u>3 x 40m/VOA</u>	<u>Y</u>	<u>HCL</u>	<u>WETTEL SEQ.</u>	<u>TPH-Gas/BTEX/MTBE</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Chevron Facility # 9-1026
 Address: 3701 Broadway
 City: Oakland, CA

Job#: 5127.80
 Date: 4-2-98
 Sampler: E. Cline

Well ID B
 Well Diameter 4" in.
 Total Depth _____ ft.
 Depth to Water 12.31-12.56 ft.

Well Condition: clay
 Hydrocarbon Thickness: 0.19 in.
 Amount Bailed (product/water): 35 gal / 1 1/2 P/B
 Volume Factor (VF) 2" = 0.17 3" = 0.38 4" = 0.66 6" = 1.50 12" = 5.80

_____ 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: _____ Weather Conditions: _____
 Sampling Time: _____ Water Color: _____ Odor: _____
 Purging Flow Rate: _____ gpm. Sediment Description: _____
 Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

Bailed product until none appeared

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	3 x 40m/VOA	Y	HCL	NEHOTEL SEQ.	TPH-Gas/BTEX/MTBE

COMMENTS: Bailed product until none appeared.

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Chevron Facility # 9-1026

Job#: 5127.80

Address: 3701 Broadway

Date: 4-2-98

City: Oakland, CA

Sampler: E. Cline

Well ID: E
 Well Diameter: 2" in.
 Total Depth: 33' ft.
 Depth to Water: 81.43 ft.

Well Condition: dry

Hydrocarbon Thickness: 0 in. Amount Bailed: 0 (gal.)

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

29.57 X VF 0.17 4.2 X 3 (case volume) = Estimated Purge Volume: 125 (gal.)

Purge Equipment: Disposable Bailer
 Stack
 Suction
 Grundfos
 Other: _____

Sampling Equipment: Disposable Bailer
 Bailer
 Pressure Bailer
 Grab Sample
 Other: _____

Starting Time: 10:35
 Sampling Time: 10:40
 Purging Flow Rate: 1.5 gpm.
 Did well de-water? No

Weather Conditions: Rainy cloudy
 Water Color: clear Odor: None
 Sediment Description: None
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
10:38	4.5	6.46	1948	19.0			
10:41	9.0	6.40	1940	19.1			
10:44	13.0	6.38	1957	19.1			
10:46	17.0	6.35	1905	19.2			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>E</u>	<u>3 x 40m/VOA</u>	<u>Y</u>	<u>HCL</u>	<u>NEWTEL SEQ.</u>	<u>TPH-Gas/BTEX/MTBE</u>

COMMENTS: _____

WELL MONITORING/SAMPLING FIELD DATA SHEET

Chevron Facility # 9-1026

Job#: 5127.80

Address: 3701 Broadway

Date: 4-2-98

City: Oakland, CA

Sampler: E. Cline

Well ID: P
 Well Diameter: 21 in.
 21 ft.
 Total Depth: 1312 ft.
 Depth to Water: 988 ft.

Well Condition: dry

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	

988 X VF 0.17 = 1.3 X 3 (case volume) = Estimated Purge Volume: 39 (gal.)

Purge Equipment: Disposable Bailer
 Bailer
 Stack
 Suction
 Grundfos
 Other: _____

Sampling Equipment: Disposable Bailer
 Bailer
 Pressure Bailer
 Grab Sample
 Other: _____

Starting Time: 10:56
 Sampling Time: 1101
 Purging Flow Rate: 1.5 gpm.
 Did well de-water? _____

Weather Conditions: Rainy
 Water Color: clear Odor: None
 Sediment Description: None
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1057</u>	<u>15</u>	<u>6.35</u>	<u>1966</u>	<u>19.2</u>			
<u>1058</u>	<u>30</u>	<u>6.35</u>	<u>1976</u>	<u>19.5</u>			
<u>1059</u>	<u>45</u>	<u>6.34</u>	<u>1976</u>	<u>19.5</u>			
<u>1101</u>	<u>60</u>	<u>6.35</u>	<u>1975</u>	<u>19.6</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>P</u>	<u>3 x 40m/VOA</u>	<u>Y</u>	<u>HCL</u>	<u>NEHOTEL SEQ.</u>	<u>TPH-Gas/BTEX/MTBE</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Chevron Facility # 9-1026
 Address: 3701 Broadway
 City: Oakland, CA

Job#: 5127.80
 Date: 4-2-98
 Sampler: F.Cline

Well ID: BA-1
 Well Diameter: 4" in.
 Total Depth: 27' ft.
 Depth to Water: 12.69 ft.

Well Condition: dry
 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

1413 X VF .66 = 9.4 X 3 (case volume) = Estimated Purge Volume: 28.5 (gal.)

Purge Equipment: Disposable Bailer
 Bailer
 Stack
 Suction
 Grundfos
 Other: _____

Sampling Equipment: Disposable Bailer
 Bailer
 Pressure Bailer
 Grab Sample
 Other: _____

Starting Time: 11:05
 Sampling Time: 11:23
 Purging Flow Rate: 20 gpm.
 Did well de-water? NO

Weather Conditions: rainy cloudy
 Water Color: clear Odor: None
 Sediment Description: None
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ hos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>11:05</u>	<u>10</u>	<u>6.47</u>	<u>1044</u>	<u>20.0</u>	<u>F</u>		
<u>11:20</u>	<u>20</u>	<u>6.46</u>	<u>1033</u>	<u>20.6</u>			
<u>11:30</u>	<u>30</u>	<u>6.47</u>	<u>1023</u>	<u>19.6</u>			
<u>11:35</u>	<u>31</u>	<u>6.48</u>	<u>1024</u>	<u>19.8</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>BA-1</u>	<u>3 x 40ml/VOA</u>	<u>Y</u>	<u>HCL</u>	<u>NEWTEL SEQ.</u>	<u>TPH-Gas/BTEX/MTBE</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Chevron Facility # 9-1026
 Address: 3701 Broadway
 City: Oakland, CA

Job#: 5127.80
 Date: 4-2-88
 Sampler: F. Cline

Well ID: EAC
 Well Diameter: 4" in.
 Total Depth: 30' ft.
 Depth to Water: 13.73 ft.

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

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

16.07 X VF 0.17 = 2.73 X 3 (case volume) = Estimated Purge Volume: 30.2 (gal.)

Purge Equipment: Disposable Bailer
 Bailer
Stack
 Suction
 Grundfos
 Other: _____

Sampling Equipment: Disposable Bailer
 Bailer
 Pressure Bailer
 Grab Sample
 Other: _____

Starting Time: 11:30
 Sampling Time: 11:47
 Purging Flow Rate: 2.7 gpm.
 Did well de-water? N

Weather Conditions: Rainy cool
 Water Color: Clear Odor: Na
 Sediment Description: Na
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>11:35</u>	<u>10.5</u>	<u>7.02</u>	<u>1422</u>	<u>18.5</u>			
<u>11:40</u>	<u>21.0</u>	<u>6.79</u>	<u>1310</u>	<u>19.3</u>			
<u>11:45</u>	<u>31.5</u>	<u>6.78</u>	<u>1320</u>	<u>19.2</u>			
<u>11:47</u>	<u>32.0</u>	<u>6.79</u>	<u>1315</u>	<u>19.4</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>EAC</u>	<u>3 x 40m/VOA</u>	<u>Y</u>	<u>HCL</u>	<u>NET/TEL SEQ.</u>	<u>TPH-Gas/BTEX/MTBE</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Chevron Facility # 9-1026

Job#: 5127.80

Address: 3701 Broadway

Date: 4-2-98

City: Oakland, CA

Sampler: E. Cline

Well ID: B-1

Well Condition: okay

Well Diameter: 4" in.

Hydrocarbon Thickness: 0 in.

Amount Bailed (product/water): 0 (gal.)

Total Depth: 33' ft.

Depth to Water: 10.73 ft.

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

22.27 x VF 0.66 = 14.7 x 3 (case volume) = Estimated Purge Volume: 44 (gal.)

Purge Equipment: Disposable Bailer
Stack
Bailer
Suction
Grundfos
Other: _____

Sampling Equipment: Disposable Bailer
Bailer
Pressure Bailer
Grab Sample
Other: _____

Starting Time: 1155
Sampling Time: 12:15
Purging Flow Rate: 2.5 gpm.
Did well de-water? NO

Weather Conditions: cloudy warming
Water Color: clear Odor: None
Sediment Description: None
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>12:01</u>	<u>15</u>	<u>6.53</u>	<u>355</u>	<u>20.0</u>	<u>20.0</u>		
<u>12:07</u>	<u>30</u>	<u>6.50</u>	<u>89</u>	<u>20.5</u>			
<u>12:13</u>	<u>45</u>	<u>6.51</u>	<u>100</u>	<u>20.6</u>			
<u>12:15</u>	<u>46</u>	<u>6.56</u>	<u>100</u>	<u>20.5</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>B-1</u>	<u>3 x 40m/VOA</u>	<u>Y</u>	<u>HCL</u>	<u>NEWTEL SEQ.</u>	<u>TPH-Gas/BTEX/MTBE</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Chevron Facility # 9-1026

Job#: 5127.80

Address: 3701 Broadway

Date: 4-2-98

City: Oakland, CA

Sampler: F.Cline

Well ID B-2

Well Condition: dry

Well Diameter 2" in.

Hydrocarbon Thickness: 0.36 in. Amount Bailed (product/water): 2 gals (gal.)

Total Depth _____ ft.

Depth to Water 12.71-13.07 ft.

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

_____ 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: _____

Weather Conditions: _____

Sampling Time: _____

Water Color: _____ Odor: _____

Purging Flow Rate: _____ gpm.

Sediment Description: _____

Did well de-water? _____

If yes; Time: _____ Volume: _____ (gal.)

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

Bailed product until none found in Bailer

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE /	LABORATORY	ANALYSES
	3 x 40m/VOA	Y	HCL	NEWTEL SEQ.	TPH-Gas/BTEX/MTBE

COMMENTS: Bailed product until none appeared

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Chevron Facility # 9-1026
 Address: 3701 Broadway
 City: Oakland, CA

Job #: 5127.80
 Date: 2/2/98
 Sampler: F. Cline

Well ID: B-3
 Well Diameter: 2" in.
 Total Depth: 16.0 ft.
 Depth to Water: 11.20 ft.

Well Condition: okay
 Hydrocarbon Thickness: Film 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	

4.80 x VF 0.17 = 0.8 X 3 (case volume) = Estimated Purge Volume: 2.4 (gal.)

Purge Equipment: Disposable Bailer
 Bailer
 Stack
 Suction
 Grundfos
 Other: _____

Sampling Equipment: Disposable Bailer
 Bailer
 Pressure Bailer
 Grab Sample
 Other: _____

Starting Time: 12:50
 Sampling Time: 12:56
 Purging Flow Rate: NA gpm.
 Did well de-water? NA

Weather Conditions: cloudy Breeze
 Water Color: _____ Odor: None
 Sediment Description: _____
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ hos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>12:52</u>	<u>1</u>	<u>6.54</u>	<u>109</u>	<u>19.0</u>	_____	_____	_____
<u>12:54</u>	<u>2</u>	<u>6.53</u>	<u>108</u>	<u>19.0</u>	_____	_____	_____
<u>12:56</u>	<u>3</u>	<u>6.53</u>	<u>108</u>	<u>19.1</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>B-3</u>	<u>3 x 40m/VOA</u>	<u>Y</u>	<u>HCL</u>	<u>NEPSTEL SEQ.</u>	<u>TPH-Gas/BTEX/MTBE</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: Film present in well

WELL MONITORING/SAMPLING FIELD DATA SHEET

Chevron Facility # 9-1026

Job#: 5127.80

Address: 3701 Broadway

Date: 4-2-98

City: Oakland, CA

Sampler: F. Cline

Well ID: B-4

Well Condition: okay

Well Diameter: 2" in.

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

Total Depth: 75' ft.

Depth to Water: 11.85 ft.

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

7.15 x VF 0.17 = 1.2 x 3 (case volume) = Estimated Purge Volume: 3.6 (gal.)

Purge Equipment: Disposable Bailer
 Bailer
 Stack
 Suction
 Grundfos
 Other: _____

Sampling Equipment: Disposable Bailer
 Bailer
 Pressure Bailer
 Grab Sample
 Other: _____

Starting Time: 12:40

Weather Conditions: cloudy

Sampling Time: _____

Water Color: clear Odor: None

Purging Flow Rate: 1.3 gpm.

Sediment Description: None

Did well de-water? NO

If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>12:41</u>	<u>1.3</u>	<u>6.50</u>	<u>120</u>	<u>17.9</u>	_____	_____	_____
<u>12:42</u>	<u>2.6</u>	<u>6.46</u>	<u>116</u>	<u>18.8</u>	_____	_____	_____
<u>12:43</u>	<u>3.9</u>	<u>6.52</u>	<u>117</u>	<u>18.8</u>	_____	_____	_____
<u>12:45</u>	<u>4.5</u>	<u>6.50</u>	<u>116</u>	<u>18.8</u>	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>B-4</u>	<u>3 x 40m/VOA</u>	<u>Y</u>	<u>HCL</u>	<u>NETOTEL SEQ.</u>	<u>TPH-Gas/BTEX/MTBE</u>

COMMENTS: _____



RECEIVED

Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: Chevron 9-1026, Oakland Sample Descript: TB-LB Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9804220-01	Sampled: 04/02/98 Received: 04/03/98 Analyzed: 04/10/98 Reported: 04/15/98
---	---	---

QC Batch Number: GC041098802004A

Instrument ID: GCHP04

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	77

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568 Attention: Deanna Harding	Client Proj. ID: Chevron 9-1026, Oakland Sample Descript: A Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9804220-07	Sampled: 04/02/98 Received: 04/03/98 Analyzed: 04/10/98 Reported: 04/15/98
--	---	---

QC Batch Number: GC041098802004A
Instrument ID: GCHP04

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	1700
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	130
Toluene	0.50	1.7
Ethyl Benzene	0.50	44
Xylenes (Total)	0.50	42
Chromatogram Pattern: Unidentified HC		C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	85

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568 Attention: Deanna Harding	Client Proj. ID: Chevron 9-1026, Oakland Sample Descript: B-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9804220-06	Sampled: 04/02/98 Received: 04/03/98 Analyzed: 04/10/98 Reported: 04/15/98
--	---	---

QC Batch Number: GC041098802004A
Instrument ID: GCHP04

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	670
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	91
Toluene	0.50	4.2
Ethyl Benzene	0.50	8.7
Xylenes (Total)	0.50	17
Chromatogram Pattern: Unidentified HC		C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	85

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: Chevron 9-1026, Oakland Sample Descript: B-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9804220-09	Sampled: 04/02/98 Received: 04/03/98 Analyzed: 04/13/98 Reported: 04/15/98
---	---	---

QC Batch Number: GC041398802004A
Instrument ID: GCHP04

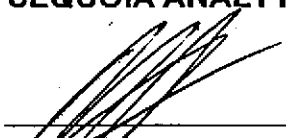
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10000	160000
Methyl t-Butyl Ether	500	N.D.
Benzene	100	27000
Toluene	100	26000
Ethyl Benzene	100	2500
Xylenes (Total)	100	14000
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	94

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: Chevron 9-1026, Oakland Sample Descript: B-4 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9804220-08	Sampled: 04/02/98 Received: 04/03/98 Analyzed: 04/13/98 Reported: 04/15/98
Attention: Deanna Harding		

QC Batch Number: GC041398802004A
Instrument ID: GCHP04

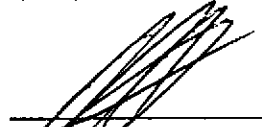
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	5000	28000
Methyl t-Butyl Ether	250	N.D.
Benzene	50	9700
Toluene	50	59
Ethyl Benzene	50	760
Xylenes (Total)	50	220
Chromatogram Pattern: Gas & Unidentified HC		C6-C12

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	88

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: Chevron 9-1026, Oakland Sample Descript: E Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9804220-02	Sampled: 04/02/98 Received: 04/03/98 Analyzed: 04/10/98 Reported: 04/15/98
Attention: Deanna Harding		

QC Batch Number: GC041098802004A
Instrument ID: GCHP04

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	85

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager





**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: Chevron 9-1026, Oakland
Sample Descript: F
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9804220-03

Sampled: 04/02/98
Received: 04/03/98

Analyzed: 04/10/98
Reported: 04/15/98

QC Batch Number: GC041098802004A
Instrument ID: GCHP04

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	74

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: Chevron 9-1026, Oakland Sample Descript: EA-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9804220-04	Sampled: 04/02/98 Received: 04/03/98 Analyzed: 04/10/98 Reported: 04/15/98
Attention: Deanna Harding		

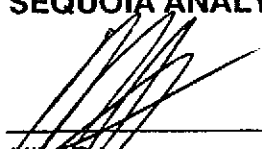
QC Batch Number: GC041098802004A
Instrument ID: GCHP04

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	79

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Mike Gregory
Project Manager





Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: Chevron 9-1026, Oakland Sample Descript: EA-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9804220-05	Sampled: 04/02/98 Received: 04/03/98 Analyzed: 04/10/98 Reported: 04/15/98
Attention: Deanna Harding		

QC Batch Number: GC041098802004A
Instrument ID: GCHP04

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	230
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	0.99
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern: Unidentified HC		C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	100

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Mike Gregory
Project Manager





**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Wainut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568
Attention: Deanna Harding

Client Proj. ID: Chevron 9-1026, Oakland

Received: 04/03/98

Lab Proj. ID: 9804220

Reported: 04/15/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 13 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPGBMW: Sample 9804220-08 was diluted 100-fold.
Sample 9804220-09 was diluted 200-fold.

SEQUOIA ANALYTICAL


Mike Gregory
Project Manager





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Gettler Ryan/Geostrategies
6747 Sierra Court, Ste J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Chevron 9-1026, Oakland
Matrix: Liquid

Work Order #: 9804220 -01-07

Reported: Apr 16, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC041098802004A	GC041098802004A	GC041098802004A	GC041098802004A	GC041098802004A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	S.L.	S.L.	S.L.	S.L.	S.L.
MS/MSD #:	98040084	98040084	98040084	98040084	-
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	-
Prepared Date:	4/9/98	4/9/98	4/9/98	4/9/98	-
Analyzed Date:	4/9/98	4/9/98	4/9/98	4/9/98	-
Instrument I.D.#:	GC4	GC4	GC4	GC4	-
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	-
Result:	19	20	21	62	-
MS % Recovery:	95	100	105	105	-
Dup. Result:	18	19	20	60	-
MSD % Recov.:	90	95	100	100	-
RPD:	5.4	5.1	4.9	3.3	-
RPD Limit:	0-25	0-25	0-25	0-25	-

LCS #:	LCS041098	LCS041098	LCS041098	LCS041098	LCS041098
Prepared Date:	4/10/98	4/10/98	4/10/98	4/10/98	4/10/98
Analyzed Date:	4/10/98	4/10/98	4/10/98	4/10/98	4/10/98
Instrument I.D.#:	GC4	GC4	GC4	GC4	GC4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	500 µg/L
LCS Result:	19	20	20	62	519
LCS % Recov.:	95	100	100	105	104

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
Control Limits					

SEQUOIA ANALYTICAL
Elap #2142

Mike Gregory
Project Manager

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9804220.GET <1>





Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(510) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Gettler Ryan/Geostrategies 6747 Sierra Court, Ste J Dublin, CA 94568 Attention: Deanna Harding	Client Project ID: Chevron 9-1026, Oakland Matrix: Liquid Work Order #: 9804220-08, 09	Reported: Apr 16, 1998
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QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC041398802004A	GC041398802004A	GC041398802004A	GC041398802004A	GC041398802004A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	S.L.	S.L.	S.L.	S.L.	S.L.
MS/MSD #:	98040162	98040162	98040162	98040162	-
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	-
Prepared Date:	4/13/98	4/13/98	4/13/98	4/13/98	-
Analyzed Date:	4/13/98	4/13/98	4/13/98	4/13/98	-
Instrument I.D.#:	GC4	GC4	GC4	GC4	-
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	-
Result:	16	18	21	54	-
MS % Recovery:	80	90	105	90	-
Dup. Result:	18	20	24	61	-
MSD % Recov.:	90	100	120	101	-
RPD:	12	11	13	12	-
RPD Limit:	0-25	0-25	0-25	0-25	-

LCS #:	LCS041398	LCS041398	LCS041398	LCS041398	LCS041398
Prepared Date:	4/13/98	4/13/98	4/13/98	4/13/98	4/13/98
Analyzed Date:	4/13/98	4/13/98	4/13/98	4/13/98	4/13/98
Instrument I.D.#:	GC4	GC4	GC4	GC4	GC4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	1000 µg/L
LCS Result:	19	19	24	61	968
LCS % Recov.:	95	95	120	101	97

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
Control Limits					

SEQUOIA ANALYTICAL
Elap #2142

Gregory
Project Manager

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9804220.GET <2>

