

RECEIVED

1:47 pm, Sep 17, 2009

Alameda County Environmental Health

September 16, 2009 (date)

Alameda County Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

Re: Chevron Facility #_9-0517_____

Address: 3900 Piedmont Avenue, Oakland, California

I have reviewed the attached report titled <u>Second Semi-Annual 2009 Groundwater Monitoring</u> <u>Report</u>_____ and dated <u>September 16, 2009</u>.

I agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by Conestoga-Rovers & Associates, upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

SHFrencho

Stacie H. Frerichs Project Manager

Enclosure: Report

Stacie H. Frerichs Team Lead Marketing Business Unit

Chevron Environmental Management Company 6001 Bollinger Canyon Road San Ramon, CA 94583 Tel (925) 842-9655 Fax (925) 842-8370



2000 Opportunity Dr, Suite 110, Roseville, California 95678 Telephone: 916-751-4100 Facsimile: 916-751-4199 www.CRAworld.com

September 16, 2009

Reference No. 611995

Mr. Mark Detterman, PG, CEG Alameda County Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Re: Second Semi-Annual 2009 Groundwater Monitoring Report Former Chevron Service Station No. 9-0517 3900 Piedmont Avenue Oakland, California LOP Case #RO0000138

Dear Mr. Detterman:

Conestoga-Rovers & Associates (CRA) is submitting the attached *Groundwater Monitoring and Sampling Report* (report) to Alameda County Environmental Health (ACEH) on behalf of Chevron Environmental Management Company (Chevron) for the site referenced above. The report (prepared by Gettler-Ryan Inc. and dated August 27, 2009) presents the results of the monitoring and sampling of wells MW-3 and MW-4 during third quarter 2009. These wells are monitored and sampled on a semi-annual basis during the first and third quarters; wells MW-1 and MW-2 were gauged but sampling of these wells was recently discontinued. Also attached are Figure 1 (Vicinity Map) showing the site location, and Figure 2 (Concentration Map) presenting the second semi-annual 2009 analytical results along with a rose diagram. The monitoring results during 2009 are summarized below.

During 2009, petroleum hydrocarbon concentrations in the site wells were similar to or less than those observed during 2008. Total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX), and methyl tertiary butyl ether (MTBE) were not detected in wells MW-1 and MW-2 during first quarter 2009, and generally have not been detected in these wells since the start of monitoring in 1998. Thus, sampling of these wells was discontinued with ACEH concurrence. Relatively low concentrations of TPHg (810 micrograms per liter [μ g/L] and 900 μ g/L) were detected in well MW-3 during 2009; benzene was only detected during the third quarter event (4 μ g/L); low concentrations of toluene, ethylbenzene, and xylenes (up to 3 μ g/L) were also detected. Although fluctuations occur, overall decreasing trends are evident in well MW-3. MTBE was not detected in well MW-3 during 2009, and has not been detected since 2003. Elevated concentrations of TPHg (2,900 μ g/L and 6,900 μ g/L) and benzene (84 μ g/L, and 120 μ g/L) were detected in well MW-4 during 2009; low concentrations of MTBE (2 μ g/L), toluene (up to 34 μ g/L), ethylbenzene (up to 11 μ g/L), and xylenes (up to 36 μ g/L) were also detected. The TPHg and BTEX concentrations in well MW-4

Equal Employment Opportunity Employer



September 16, 2009

Reference No. 611995

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have remained relatively stable over the past several years; however, the MTBE concentrations have decreased since the start of monitoring and only low concentrations remain.

Based on the analytical results, impacted groundwater remains in the area of wells MW-3 and MW-4 downgradient of the former underground storage tanks (USTs) and dispenser islands. CRA recommends continued monitoring and sampling to further evaluate groundwater quality and concentration trends. Additional investigation is planned to further evaluate the downgradient extent of impacted groundwater as well as onsite soil vapor quality. CRA submitted a *Work Plan for Additional Site Investigation* dated July 16, 2009, and is awaiting concurrence from ACEH to begin the work.

Please contact Mr. James Kiernan at (916) 751-4102 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Christopher J. Benedict

CB/kw/5 Encl.

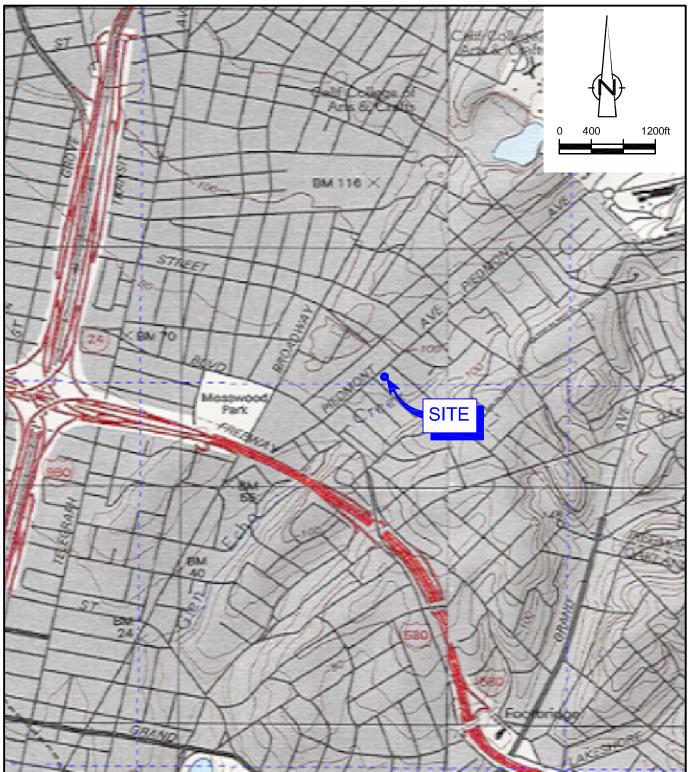
James P. Kiernan, P.E. #C68498



Figure 1	Vicinity Map
Figure 2	Concentration Map – August 7, 2009

Attachment A Second Semi-Annual 2009 Groundwater Monitoring and Sampling Report

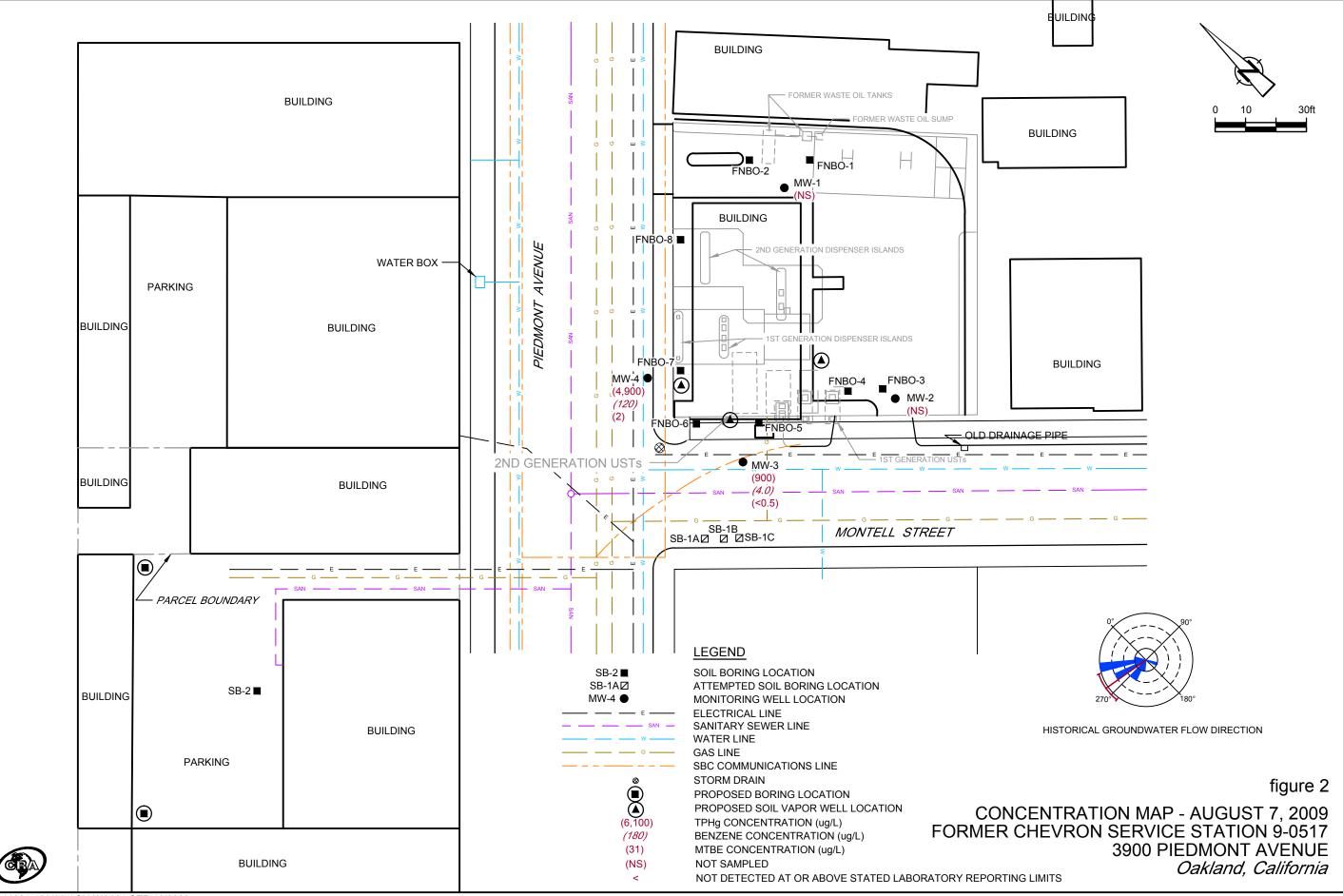
cc: Ms. Stacie Frerichs, Chevron Environmental Management Company Mr. Neil B. and Mrs. Diane C. Goodhue FIGURES



SOURCE: TOPO! MAPS.

figure 1

VICINITY MAP FORMER CHEVRON SERVICE 9-0517 3900 PIEDMONT AVENUE *Oakland, California*



⁶¹¹⁹⁹⁵⁻¹⁹⁹⁽⁰⁰⁵⁾GN-WA001 SEP 16/2009

ATTACHMENT A

SECOND SEMI-ANNUAL 2009 GROUNDWATER MONITORING AND SAMPLING REPORT



TRANSMITTAL

September 8, 2009 G-R #386420

- TO: Mr. James Kiernan Conestoga-Rovers & Associates 2000 Opportunity Drive, Suite 110 Roseville, California 95678
- FROM: Deanna L. Harding Project Coordinator Gettler-Ryan Inc. 6747 Sierra Court, Suite J Dublin, California 94568

RE: Former Chevron Service Station #9-0517 (MTI) 3900 Piedmont Avenue Oakland, California RO 0000138

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
2	August 27, 2009	Groundwater Monitoring and Sampling Report Second Semi-Annual Event of August 7, 2009

COMMENTS:

Pursuant to your request, we are providing you with copies of the above referenced report for <u>your use</u> and distribution to the following:

Ms. Stacie H. Frerichs, Chevron Environmental Management Company, 6111 Bollinger Canyon Road, Room 3596, San Ramon, CA 94583

Please provide any comments/changes and propose any groundwater monitoring modifications for the next event prior to *September 22, 2009*, at which time this final report will be distributed to the following:

 Mr. Mark Detterman, Alameda County Health Care Services, Dept. of Environmental Health, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502-6577 (No Hard Copy-UPLOAD TO ALAMEDA CO.)
 Mr. Nail P. Goodhua and Mra. Diana C. Goodhua 200 Hillaida Augura Dialactic CA 94611

Mr. Neil B. Goodhue and Mrs. Diane C. Goodhue, 300 Hillside Avenue, Piedmont, CA 94611

Enclosures



Stacie H. Frerichs Team Lead Marketing Business Unit Chevron Environmental Management Company 6001 Bollinger Canyon Road San Ramon, CA 94583 Tel (925) 842-9655 Fax (925) 842-8370

September 8, 2009 (date)

Alameda County Health Care Services 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

Re: Chevron Facility # 9-0517

Address: 3900 Piedmont Avenue, Oakland, California

have reviewed the attached routine groundwater monitoring report dated September 8, 2009.

l agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by Gettler-Ryan, Inc., upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

rencho

Stacie H. Frerichs Project Manager

Enclosure: Report

WELL CONDITION STATUS SHEET

Client/Facility #:		#9-0517					Job #	386420			
Site Address: City:	3900 Pie Oakland	dmont Av , CA	/enue				Event Date: Sampler:		-09		
WELL ID	Vault Frame Condition	Gasket/ O-Ring (M)missing	BOLTS (M) Missing (R) Replaced	Bolt Flanges B= Broken S= Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/N	REPLACE CAP Y / N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Yes / No
mw-1		M	0.12	0.K	o.lc	e.lc	0.1c	N	N	8"Boart-Longy/3	No
MW-2		М	(1) of 3 br ingider	oken flange	1	4	TOC extenter	5	1		
MW-3		M	5.6	0.(c			2.K			11	
mw-d		O.K	0.10	0.10		\checkmark	0.k	J	\mathbf{V}	6" Morrison /2	V
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											· · · · · · · · · · · · · · · · ·
	<u></u>										
Comments	94							<u>, ,</u>			



August 27, 2009 G-R Job #386420

Ms. Stacie H. Frerichs Chevron Environmental Management Company 6111 Bollinger Canyon Road, Room 3596 San Ramon, CA 94583

RE: Second Semi-Annual Event of August 7, 2009 Groundwater Monitoring & Sampling Report Former Chevron Service Station #9-0517 3900 Piedmont Avenue Oakland, California

Dear Ms. Frerichs:

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

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

Groundwater samples were collected from the monitoring wells and submitted to a state certified laboratory for analyses. The field data sheets for this event are attached. Analytical results are presented in the table(s) listed below. The chain of custody document and laboratory analytical report are also attached. All groundwater and decontamination water generated during sampling activities was removed from the site, per the Standard Operating Procedure.

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

Sincerely,

udy Deanna L. Harding Project Coordinator **lo. 6882** Lee Dou tlas 🗛 Senior Geologist, P.G. No. 6882 CALI Figure 1: Potentiometric Map Table 1: Groundwater Monitoring Data and Analytical Results Standard Operating Procedure - Groundwater Sampling Attachments: Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports

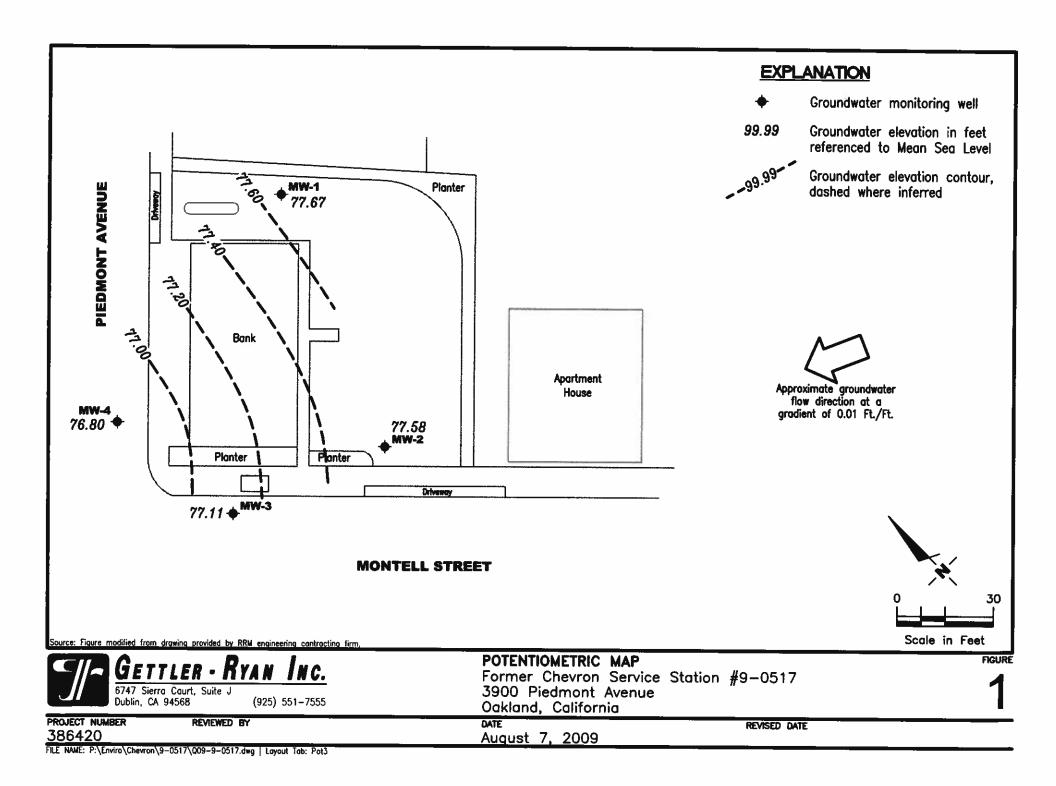


Table 1 Groundwater Monitoring Data and Analytical Results Former Chevron Service Station #9-0517

3900 Piedmont Avenue

				Oakland, O	California				
WELL ID/	TOC*	GWE	DTW	TPH-GRO	B	T	E	X	MTBE
DATE	(1)	(msl)	(1-)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-1									
08/03/98	87.89	75.46	12.43	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/23/98	87.89	78.84	9.05	<50	<0.5	<0.5	<0.5	<0.5	<2.0
02/08/99	87.89	81.39	6.50	<50	<0.5	<0.5	<0.5	<0.5	<2.5
05/07/99	87.89	80.76	7.13	<50	<0.5	<0.5	<0.5	<0.5	<5.0
08/23/99	87.89	78.74	9.15	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/03/99	87.89	78.35	9.54	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/15/00	87.89	81.99	5.90	<50	<0.5	<0.5	<0.5	<0.5	<5.0
05/12/00 ³	87.89	80.84	7.05	<50	<0.50	<0.50	<0.50	<0.50	<2.5
07/31/00	87.89	79.49	8.40	<50	<0.50	<0.50	<0.50	<0.50	<2.5
10/30/00	87.89	79.24	8.65	<50.0	<0.500	<0.500	<0.500	<1.50	<2.50
02/27/01	87.89	82.06	5.83	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
05/15/01	87.89	80.18	7.71	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
08/23/01	87.89	DRY					=		
02/25/02	87.89	81.18	6.71	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/05/02	87.89	79.00	8.89	<50	<0.50	<0.50	<0.50	<1.5	<2.5
02/11/03	87.89	80.53	7.36	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/09/035	87.89	78.42	9.47	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/25/04 ⁵	87.89	81.59	6.30	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/04 ⁵	87.89	77.77	10.12	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/11/055	87.89	81.10	6.79	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/15/05 ⁵	87.89	79.00	8.89	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/10/06 ⁵	87.89	81.24	6.65	<50	1	<0.5	<0.5	<0.5	<0.5
08/02/06 ⁵	87.89	80.16	7.73	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/09/07 ⁵	87.89	80.12	7.77	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/07 ⁵	87.89	78.30	9.59	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/18/085	87.89	80.48	7.41	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/12/08 ⁵	87.89	78.11	9.78	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/19/09 ⁵	87.89	82.28	5.61	<50	<0.5	<0.5	<0.5	<0.5	<0.5
0 8/07 /0 9	87 .8 9	77.67	10.22			-	_		
MW-2									
08/03/98	86.09	74.75	11.24	~50	-0.5	-0 -	-0.7	-0 -	
11/23/98	86.09	74.75 79.19	11.34	<50	<0.5	<0.5	<0.5	<0.5	3.4
02/08/99	86.09	80.86	6.90 5.22	<50	<0.5	<0.5	<0.5	<0.5	<2.0
05/07/99	86.09		5.23	<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/0//77	80.UY	79.97	6.12	<50	<0.5	<0.5	<0.5	<0.5	<5.0

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

Oakland California

				Oakland, (California				
WELL ID/	TOC*	GWE	DTW	TPH-GRO	B	Т	E	X	MTBE
DATE	(ħ.)	(msl)	(ft.)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-2 (cont)									
08/23/99	86.09	79.68	6.41	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/03/99	86.09	78.80	7.29	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/15/00	86.09	81.60	4.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0
05/12/00	86.09	80.19	5.90	4,000 ³	240	26	100	76	<100
07/31/00	86.09	79.51	6.58	<50	<0.50	<0.50	<0.50	<0.50	<2.5
10/30/00	86.09	79.86	6.23	<50.0	<0.500	2.92	<0.500	1.88	4.89
02/27/01	86.09	81.49	4.60	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
05/15/01	86.09	79.79	6.30	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
08/23/01	86.09	78.81	7.28	<50	<0.50	<0.50	<0.50	<0.50	<2.5
02/25/02	86.09	80.48	5.61	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/05/02	86.09	78.99	7.10	<50	<0.50	<0.50	<0.50	<1.5	<2.5
02/11/03	86.09	78.64	7.45	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/09/03 ⁵	86.09	78.44	7.65	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/25/04 ⁵	86.09	81.24	4.85	<50	<0.5	<0.5	<0.5	<0.5	<0.5
0 8/23/04⁵	86.09	77.86	8.23	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/11/05 ⁵	86.09	80.16	5.93	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/15/05 ⁵	86.09	78.50	7.59	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/10/06 ⁵	86.09	80.36	5.73	<50	0.6	<0.5	<0.5	<0.5	<0.5
08/02/06 ⁵	86.09	79.14	6.95	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/09/07 ⁵	86.09	79.80	6.29	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/07 ⁵	86.09	78.69	7.40	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/18/08 ⁵	86.09	79.62	6.47	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/12/08 ⁵	86.09	79.01	7.08	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/19/09 ⁵	86.09	79.59	6.50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/07/09	86.09	77.58	8.51				-	-	-
MW-3									
08/03/98	86.28	74.20	12.08	4000	160	<5.0	<5.0	73	180
11/23/98	86.28	78.59	7.69	4000	67.7	7.56	17.1	24.5	41.2
02/08/99	86.28	80.01	6.27	<50	<0.5	<0.5	<0.5	<0.5	<2.5
)5/07/99	86.28	79.32	6.96	1800	53.6	8.96	33	18.6	21.4
08/23/99	86.28	78.36	7.92	3970	155	24	88.8	39.8	185
1/03/99	86.28	78.36	7.92	3320	108	19.9	98.4	44.8	<25
2/15/00	86.28	80.54	5.74	779	26.7	3.82	15.4	4.24	<12.5
05/12/00	86.28	79.52	6.76	12,000 ³	3,100	120	980	1,400	820

Table 1 Groundwater Monitoring Data and Analytical Results Former Chevron Service Station #9-0517

3900 Piedmont Avenue

Oakland	California
Oakianu,	Camornia

				Oakland, O	California				
WELL ID/	TOC*	GWE	DTW	TPH-GRO	B	T	E	X	MTBE
DATE	(71.)	(msl)	(ft.)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(pg/L)	(µg/L)
MW-3 (cont)									
07/31/00	86.28	78.98	7.30	1,2003	32	<5.0	11	7.3	39
10/30/00	86.28	79.26	7.02	3,3004	119	<5.00	40.0	<15.0	<25.0
02/27/01	86.28	80.39	5.89	432 ³	15.5	1.53	14.9	1.06	15.7
05/15/01	86.28	79.21	7.07	3,220 ³	96.4	12.6	11.5	11.6	128
08/23/01	86.28	78.23	8.05	2,300	48	<10	<10	<10	100
2/25/02	86.28	79.55	6.73	3,100	27	2.1	4.8	6.6	<2.5
8/05/02	86.28	78.33	7.95	4,100	87	21	90	47	21
2/11/03	86.28	79.23	7.05	3,700	21	2.3	4.4	9.0	<20
)8/09/03 5	86.28	78.05	8.23	1,600	12	1	2	4	0.7
)2/25/04 ⁵	86.28	80.43	5.85	<50	<0.5	<0.5	<0.5	<0.5	<0.5
8/23/045	86.28	77.23	9.05	3,000	21	3	3	9	<0.5
2/11/05 ⁵	86.28	79.26	7.02	540	15	1	<0.5	0.8	<0.5
08/15/05 ⁵	86.28	77.87	8.41	2,600	11	1	1	2	<0.5
2/10/065	86.28	79.35	6.93	970	20	2	<0.5	3	<0.5
8/02/065	86.28	78.28	8.00	1,000	16	ī	<0.5	3	<0.5
2/09/075	86.28	78.95	7.33	590	3	<0.5	<0.5	0.5	<0.5
8/23/075	86.28	77.45	8.83	2,700	18	4	2	8	<0.5
2/18/085	86.28	79.01	7.27	1,300	8	1	0.6	1	<0.5
8/12/085	86.28	76.70	9.58	2,000	21	3	1	4	<0.5
2/19/095	86.28	79.52	6.76	810	<0.5	<0.5	<0.5	i	<0.5
8/07/095	86.28	77.11	9.17	900	4	0.9	3	3	<0.5
MW-4									
8/03/98	87.22	74.30	12.92	1900	110	12	<0.5	55	130
1/23/98	87.22	77.82	9.40	4080	136	17.8	37.2	30.1	51.8
2/08/99 ¹	87.22	79.40	7.82	2900	150	16	<5.0	15	230/30.7 ²
5/07/99	87.22	79.80	7.42	6050	161	<25	39.8	36.9	<250/30.2 ²
8/23/99	87.22	77.83	9.39	3930	203	37.6	58.6	42.2	255
1/03/99	87.22	77.41	9.81	5350	324	44.7	91.5	42.2 56.1	233 < 5 0
2/15/00	87.22	79.50	7.72	4080	161	27.7	31.1		
5/12/00	87.22	79.31	7.91	4080 3,600 ³	101	27.7	49	39.1 64	73.9
7/31/00	87.22	78.57	8.65	2,900 ³	160	20	49 15	64 56	170
0/30/00	87.22	78.14	9.08	2,900 5,630⁴	301	20 17.8	15	56 51.5	170
2/27/01	87.22	79.92	7.30	2,140 ³	95.1	17.6			<25.0
5/15/01	87.22	79.07	8.15	4,580 ³	200		53.4	43.0	235
	01.44	17.07	0.10	4,300	200	44.1	46.3	51.7	172

Table 1 Groundwater Monitoring Data and Analytical Results Former Chevron Service Station #9-0517

3900 Piedmont Avenue

	Oakland, California										
WELL ID/	TOC*	GWE	DTW	TPH-GRO	В	T	E	x	MTBE		
DATE	(11.)	(msl)	(ft.)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(pg/L)	(µg/L)		
MW-4 (cont)											
08/23/01	87.22	77.89	9.33	2,700	250	44	21	72	130		
02/25/02	87.22	79.42	7.80	4,100	100	18	27	39	<10		
08/05/02	87.22	80.12	7.10	4,100	130	18	50	20	<10		
02/11/03	87.22	79.10	8.12	4,100	100	23	20	51	<50		
08/09/035	87.22	77.67	9.55	3,700	110	24	10	45	8		
02/25/045	87.22	79.16	8.06	5,400	94	28	34	49	5		
08/23/045	87.22	77.03	10.19	5,100	100	26	7	43	5		
02/11/055	87.22	79.25	7.97	3,900	58	16	25	16	2		
08/15/055	87.22	78.40	8.82	2,400	76	16	11	26	3		
02/10/065	87.22	79.41	7.81	1,600	68	16	8	27	4		
08/10/065	87.22	78.64	8.58	2,500	100	19	5	30	3		
02/09/07 ⁵	87.22	78.51	8.71	6,200	200	39	16	52	3		
08/23/07 ⁵	87.22	76.84	10.38	5,800	190	48	20	61	3		
02/18/085	87.22	79.11	8.11	4,900	110	24	11	32	2		
08/12/085	87.22	76.64	10.58	6,100	180	31	9	52	3		
02/19/095	87.22	79.50	7.72	2,900	84	20	5	24	2		
08/07/09 ⁵	87.22	76.80	10.42	4,900	120	34	11	36	2		
TRIP BLANK											
08/03/98				<50	<0.5	<0.5	<0.5	<0.5	<2.5		
11/23/98		-	-	<50	<0.5	<0.5	<0.5	<0.5	<2.0		
02/08/99			-	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
05/07/99		-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
08/23/99			(-4-2)	<50	<0.5	<0.5	<0.5	<0.5	<2.5		
11/03/99				<50	<0.5	<0.5	<0.5	<0.5	<2.5		
02/15/00	-	-		<50	<0.5	<0.5	<0.5	<0.5	<5.0		
05/12/00	-			<50	<0.50	<0.50	<0.50	<0.50	<2.5		
07/31/00		-		<50	<0.50	<0.50	<0.50	<0.50	<2.5		
10/30/00	-	-		<50.0	<0.500	<0.500	<0.500	<1.50	<2.50		
02/27/01				<50.0	<0.500	<0.500	<0.500	<0.500	<2.50		
05/15/01	-	0.77		<50.0	<0.500	<0.500	<0.500	<0.500	<2.50		
08/23/01				<50	<0.50	<0.50	<0.50	<0.50	<2.5		

Table 1 Groundwater Monitoring Data and Analytical Results Former Chevron Service Station #9-0517

3900 Piedmont Avenue

Oakland, California

				Oakialiu, C	witterintu				
WELL ID/	TOC*	GWE	DTW	TPH-GRO	В	Ť	E	X	MTBE
DATE	(fL)	(msl)	(1-)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(pg/L)	(µg/L)
QA									000
02/25/02			-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/05/02		-		<50	<0.50	<0.50	<0.50	<1.5	<2.5
02/11/03			-	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/09/03 ⁵			-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/25/045				<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/045				<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/11/05 ⁵	-		-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/15/055				<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/10/065				<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/02/065			-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/09/075				<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/075				<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/18/085				<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/12/085			-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/19/095				<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/07/095		-	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5

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

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to May 12, 2000, were compiled from reports prepared by Blaine Tech Services, Inc.

TOC = Top of Casing (ft.) = Feet GWE = Groundwater Elevation (msl) = Mean sea level DTW = Depth to Water TPH = Total Petroleum Hydrocarbons GRO = Gasoline Range Organics B = Benzene T = Toluene E = Ethylbenzene X = Xylenes MTBE = Methyl Tertiary Butyl Ether (µg/L) = Micrograms per liter -- = Not Measured/Not Analyzed QA = Quality Assurance/Trip Blank

- * TOC elevations are referenced to msl.
- ¹ Chromatogram pattern indicates gas and an unidentified hydrocarbon.
- ² Confirmation run.
- ³ Laboratory report indicates gasoline C6-C12.
- ⁴ Laboratory report indicates hydrocarbon pattern present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
- ⁵ BTEX and MTBE by EPA Method 8260.

STANDARD OPERATING PROCEDURE -GROUNDWATER SAMPLING

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

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

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

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

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

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

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



WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#:	Chevron #9-051	7	Job Numb	er: 386420		
Site Address:	3900 Piedmont	Avenue	Event Date		-04	- (inclusive)
City:	Oakland, CA		Sampler:		r	_ (((()))))))))))))))))))))))))))))))))
Well ID	Mw-/		Date Monitore	ed: 8-	7-09	
Well Diameter	2 in.		Volume 3/4"=	0.02 1"= 0.04		
Total Depth	16:76 tt.			0.66 5"= 1.02	2"= 0.17 3"= 0.3 6"= 1.50 12"= 5.8	
Depth to Water	10.2.2 ft.	Check if water	column is less then (0.50 ft.		
Depth to Water		==	x3 case volum	e = Estimated Pur	ge Volume:	_gal.
Deptil to viatel i	w/ 80% Recharge [(Hei	gnt of water Column x	0.20) + DTWJ:	Time St	arted:	(2400 brs)
Purge Equipment:		Sampling Equip	ment:	Time Co	ompleted:	(2400 hrs)
Disposable Bailer		Disposable Bailer		Depth to	Product:	ft
Stainless Steel Bailer		Pressure Bailer		- Depth to	Water:	
Stack Pump		Discrete Bailer			onfirmation/Description	ft
Suction Pump		Peristaltic Pump	······································	i		
Grundfos		QED Bladder Pur	np	Skimme	r / Absorbant Sock (circ	le one)
Peristaltic Pump		Other:		- Amt Rer	noved from Skimmer: noved from Well:	gal
QED Bladder Pump					emoved:	gar
Other:					Transferred to:	
				<u>L</u>		
Start Time (purge):	Weathe	r Conditions:		· · · · · ·	
Sample Time/Da		Water (Odor: Y /	N	
Approx. Flow Rat			nt Description:			
Did well de water						
Did wen derwater	· ii yes,	Time:		_gal. DIW@) Sampling:	<u> </u>
Time	Valume (ant)	Conductivity	/ Temperature	D.O.	ORP	
(2 400 hr.)	Volume (gal.) pH	(µmhos/cm - µ		(mg/L)	(mV)	
/						
			- <u> </u>	·		
<i>†</i>				·	<u> </u>	
1				·		
				· · · · · · · · · · · · · · · · · · ·		
		LABORATOR				
SAMPLE ID		RIG. PRESERV. T	YPE LABORATOR		ANALYSES	
<u>MW-</u>	x voa vial YI	S HCL	LANCASTER	TPH-GRO(801	5)/BTEX+MTBE(8260)	
$ \rightarrow $						
$\vdash \longrightarrow \dashv$		<u> </u>				
					<u> </u>	
<u>├</u> ──-	······					
	<u> </u>					
				-{		———
COMMENTS:	M. only					
					<u> </u>	
Add/Replaced Lo	ock:	Add/Replaced Plu	g:	Add/Replace	ed Bolt:	



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WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#:	Chevron #9-	0517		Job Number:	386420	
Site Address:	3900 Piedmo	ont Ave	nue	Event Date:	8-7-0"	(inclusive)
City:	Oakland, CA			Sampler:	Toe	(********************************
Well ID	MW-2	_		Date Monitored:	8-7-09	
Well Diameter	2 in	<u>.</u>		ume 3/4"= 0,1		3"= 0.38
Total Depth	<u>16.61 ft.</u>	_		tor (VF) 4"= 0.0		
Depth to Water	<u>8.51 ft.</u>		Check if water colu			
Depth to Water v	w/ 80% Recharge	_xVF	Water Column x 0.20	_ x3 case volume =) + DTWI:	= Estimated Purge Volume:	gal.
Purge Equipment:	·				Time Started:	(2400 hrs) (2400 hrs)
Disposable Bailer			Sampiing Equipment Disposable Bailer	C.	Depth to Product:	ft
Stainless Steel Bailer			Pressure Bailer	·	Depth to Water:	ft
Stack Pump			Discrete Bailer			ness:ft
Suction Pump			Peristaltic Pump		Visual Confirmation	/Description:
Grundfos	÷		QED Bladder Pump		Skimmer / Absorba	nt Sock (circle one)
Peristaltic Pump			Other:		Amt Removed from	Skimmer:gal
QED Bladder Pump					Water Removed:	Well: gal
Other:						I to:
Start Time (purge			Weather Co	onditions:		
Sample Time/Dat			Water Colo	r:	Odor: Y / N	
Approx. Flow Rat	e:	gpm.	Sediment D	escription.		
Did well de-water	? If	yes, Time	e: Volu	ume:	gal. DTW @ Samplin	ıg:
Time	Velume (set)	_14	Conductivity	Temperature	D.O.	ORP
(2400/hr.)	Volume (gal.)	pН	(µmhos/cm - µS)	(C/F)	(mg/L)	(mV)
			<u>_</u>	· · · _ · ·	<u> </u>	
					<u> </u>	
			·			
SAMPLEID	(#) CONTAINER	REFRIG.	LABORATORY II PRESERV. TYPE			
	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX+M	YSES
				- CANOROTEK		TDE(0200)
		<u>.</u>				
├───						
			 			
			<u> </u>	<u>+</u>		
COMMENTS:	M. only		······	· · · · · · · · · · · · · · · · · · ·	,	
						<u></u>
Add/Replaced Lo						



WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#:	Chevron #9-0517		Job Number:	386420	
Site Address:	3900 Piedmont Av	enue E	- Event Date:	8-7-09	(inclusive)
City:	Oakland, CA	\$	Sampler:	Joe	
Well ID	MW-?>	Date	e Monitored:	8-7-09	
Well Diameter	2 in.	Volume	3/4"= 0.02	1"= 0.04 2"= 0.17	3"= 0.38
Total Depth	17.71 A.	Factor (VF		5"= 1.02 6"= 1.50	12"= 5.80
Depth to Water	9,17 tt. [Check if water colump is	less then 0.50 f	t.	· · ·
Depth to Water v Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	v/ 80% Recharge [(Height	of Water Column x 0.20) + D1 Sampling Equipment: Disposable Bailer Pressure Bailer Discrete Bailer Peristaltic Pump QED Bladder Pump Other:		Time Started: Time Completed: Depth to Product: Depth to Water: Hydrocarbon Thickness Visual Confirmation/De Skimmer / Absorbant S Amt Removed from Sk	(2400 hrs) ft ft s:ft escription: Sock (circle one) immer:gal ell:gal
Start Time (purge) Sample Time/Dat Approx. Flow Rat Did well de-water (2400 hr.) 0746 -0752	e: <u>08/2/8-7-</u> e: gpm.	Sediment Descr ne: Volume: Conductivity T (μ mhos/cm - μ) (2 9 3 2 6 1 0 4 6 1 7	$ \underline{C en} C \\ c e$	I. DTW @ Sampling: D.O. OF	1016 1016 RP M)
SAMPLE ID					

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- C	x voa vi	al YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX+MTBE(8260)
	\sim		<u> </u>		
				·	
					· · · · · · · · · · · · · · · · · · ·
	_		<u>.</u>		
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COMMENTS:

Add/Replaced Bolt: _____



WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#:	Chevron #9-	0517		Jol	b Number:	386420				
Site Address:	3900 Piedmo	ont Aven	ue	Ev	ent Date:	8.7	-09	<u> </u>	- (inclusive)	
City:	Oakland, CA	\		Sa	mpler:	Tre				
Well ID	MW-4			Date I	Monitored:	8-7	09			
Well Diameter	2 in			Volume	3/4"= 0.0		2"= 0.17	3"= 0.38	` 1	
Total Depth	16.30 ft			Factor (VF)	4"= 0.6		6"= 1.50	12"= 5.80		
Depth to Water	10.42 ft		heck if water				· · · · · · · · ·		J	
						Estimated Pur	ge Volume:	<u> </u>	gal.	
Depth to Water w	v/ 80% Recharge	€ [(Height of V	ater Column >	(0.20) + DTW	<u>ז 4.5</u>	<u>9</u>				
Purge Equipment:						Time St Time Co	arted:		(2400 hrs) (2400 hrs)	
Disposable Bailer			ampling Equip			Depth to	Product:	_	(2400 ms)	
Stainless Steel Bailer			sposable Baile essure Bailer	er		Depth to	Water:		ft	
Stack Pump			screte Bailer				rbon Thickne		ft	
Suction Pump	*		enistaltic Pump			Visual C	onfirmation/E	rescription:		
Grundfos			ED Bladder Pu			Skimme	r / Absorbant	Sock (circle	e one)	
Peristaltic Pump			her:			Amt Rer	noved from S	Skimmer:	gai	
QED Bladder Pump							noved from V emoved:	Vell:	gal	
Other:							Transferred t	0:	I	
Start Time (purge	: 0830		Weath	er Conditio	ns: I	25944				
Sample Time/Dat		870	s.1		1 4	Odor: Y /	M?)			
Approx. Flow Rat		gpm.		ent Descript			···			
Did well de-water						gal. DTW @	Sampling	<u> </u>	a2	
	···	Jee , 1880.			`		y Samping		1.2	
Time	Volume (gal.)	pН	Conductivi		perature	D.O.	(ORP		
(2409 hr.)	1	· / //	(µmhos/cm -	196) (CC)/F)	(mg/L)	(mV)		
0856		6.74	<u> </u>	<u>+ /</u>	9.3					
084/	2	6.87	_56	2 10	1.0					
0848	<u></u>	6.87	56	3 4	g.cf	<u> </u>				
<u> </u>										
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV.		ORATORY		ANALY	SES		
الد ددهه										

SAMPLE ID	(#) C(ONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW	6	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX+MTBE(8260)
	<u> </u>					

COMMENTS:

-

Add/Replaced Lock: _____

Add/Replaced Bolt:

	Chevr	on Co	alifo	orn	ia	Re	eg	io	n,	An	al	ys	is	Re	q	Je	st/	'Cho	ain	of Ci	istoc
Lancaster Laboratories	080																			. 018	
		CRA M	TI Pro	ect	未 61	H-19	395	Γ			An	al ys	s A	lequi	ested	Ę	2	٦G	# 11	5686	S
Facility # SS#9-0517 G-R#386420 G	obal ID#TOSC	0102248	1 - E	1	Matri	x =	- 33		-		- Pre		rati	л С	odes				Press	vative Co	
Site Address: 3900 PIEDMONT AVENUE,	OAKLAND, C	A					-	ĽЩ	H		-	+	-	\square				H =	HCI	T = Th	iosullate
Chevron PM:MTI		RAKJ		- -						Sene Sene Sene Sene Sene Sene Sene Sene								$N = HNO_3$ $S = H_2SO_4$	B = NaOH O = Other	-	
Chevron PM:MTI Lear Consultant/Office: G-R, Inc., 6747 Sierra Co	ourt, Suite J, I	Dublin, CA	9456	3	8 S	ः	Siers							11				J value reporting needed			
Consultant Prj. Mgr. Deanna L. Harding (c				-			Containers	8280 R 8021		Sace Gel						Ì		150 MA	ust meet	lowest dete	ction limits
Consultant Phone #:925-551-7555	Fax #: 925-						ŝ	M				1 2	3	8						r 8260 com	
Sampler: JOE AJENIAN	F &A #. <u>320</u>		<u> </u>	-		1	9.0	83	TPH BO15 MOD GRO	PH BOIS MOD DRO	l se	Mathod		Dissolved Land Method				8021 MTBE Confirmation			
						╞	Ë	+ MTBE	ğ	2	5	UNYDEREES		9						hits by 826	
	Date	Time	Grab	š _	Water	2000	Total Numb	*+ ×	8015	8015	8260 tull acan	Total 1 and						C) 80	in	oxy's on hig	hest hit
Sample Identification	Collected	Collected	de la c	5	<u>Š</u>	δ		BTEX	Ē	<u>ē</u>	<u><u> </u></u>	Ê	i	5	·			🗆 Ru	kn	oxy's on all	hits
	8-7-09	0812	\leftarrow	╀─	1~		2	닛	귀			-					_	Com	ments	/ Remark	8
mw-c		0900	5/-		H		6 6	ž	5		+		╀		┝─┤	-+-	-				
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Turnaround Time Requested (TAT) (please cl	rcle)	Betto	shed by			_				Dat	0	Time	1	Recei	ve b		Þ			Date	Time
STD. LAT72 hour48 hou24 hour4 day5 day	r C	Heilogu	shed by		7		-	-			040				2					8774	
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Data Package Options (please circle if required) QC Summary Type I - Full		Relinqui	spied by		~				-	Dat	e	Time	F	locet	TRONY	<u>.</u>				Date	Time
QC Summary Type I - Full II Type VI (Raw Data) Coelt Deliverable not nee		Relinqui	shed by	Сот	mercía	Carr	ier:						-/	lacah	red by	- /	-		- <u> </u>		
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Disk		Tempera	ture Up	on Re	celpt_			14	3	4			• 0	Juste	iy See	s int	act?	1200	No		

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300 Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

4804.01 (north) Flev. 10/12/06

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Analysis Report

2425 New Holland Pilina, PO Box 12425, Lanzanier, PA 17605-2425 +717-656-2300 Fex: 717-656-2661 + www.lancestierlabs.com

ANALYTICAL RESULTS

Prepared for:

Chevron c/o CRA Suite 110 2000 Opportunity Drive Roseville CA 95678 RECEIVED AUG 2 0 2009

GETTLER-RYAN INC. GENERAL CONTRACTORS

916-677-3407 Prepared by:

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

August 19, 2009

SAMPLE GROUP

The sample group for this submittal is 1156868. Samples arrived at the laboratory on Saturday, August 08, 2009. The PO# for this group is 90517 and the release number is MTI.

Client Description QA-T-090807 NA Water MW-3-W-090807 Grab Water MW-4-W-090807 Grab Water Lancaster Labs Number 5744826 5744827 5744828

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC Gettler-Ryan, Inc. COPY TO

Attn: Cheryl Hansen





2425 New Holland Piles, PO Box 12425, Lancealer, PA 17605-2428 + 717-656-2800 Fact 717-656-2661+ www.lancesterlabs.com

Questions? Contact your Client Services Representative Jill M Parker at (717) 656-2300

Respectfully Submitted,

Ausan M Goshert

Susan M. Goshert Group Leader





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Lancaster Laboratories Sample No. WW 5744826	Group No. 1156868 CA		
QA-T-090807 NA Water Facility# 90517 Job# 386420 MTI# 61H-1995 GRD			
3900 Piedmont-Oakland T0600102248 QA			
Collected: 08/07/2009	Account Number: 12099		
Submitted: 08/08/2009 10:50	Chevron c/o CRA		
Reported: 08/19/2009 at 18:55	Suite 110		
Discard: 09/19/2009	2000 Opportunity Drive Roseville CA 95678		

PAOQA

CAT No.	Analysis Name	CAS Number	As Received Result	As Rsceived Method Detection Limit	Dilution Factor
SW-840	58260B GC/MS Vo	latiles	ug/l	ug/1	
06054	Benzene	71-43-2	N.D.	0.5	1
06054	Ethylbenzene	100-41-4	N.D.	0.5	1
06054	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
06054	Toluene	108-88-3	N.D.	0.5	1
06054	Xylene (Total)	1330-20-7	N.D.	0.5	1
SW-846	8015B GC Volat	iles	ug/l	ug/1	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P092233AA	08/11/2009 23:44	Florida A Cimino	1
	BTEX+MTBE by 8260B	SW-846 8260B	1	P092233AA	08/11/2009 23:44	Plerida A Cimino	ī
01146	GC VOA Water Prep	SW-846 5030B	1	09224A07A	08/13/2009 14:07	Fanella S Zamcho	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09224A07A	08/13/2009 14:07	Fanella S Zamcho	ī





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Lancaster Laboratories Sample No. WW 5744827	Group No. 1156868 CA
MW-3-W-090807 Grab Water	
Facility# 90517 Job# 386420 MTI# 61H-1995 GRD 3900 Piedmont-Oakland T0600102248 MW-3	
Collected: 08/07/2009 08:12 by JA	Account Number: 12099
Submitted: 08/08/2009 10:50	Chevron c/o CRA
Reported: 08/19/2009 at 18:55	Suite 110
Discard: 09/19/2009	2000 Opportunity Drive Roseville CA 95678

PAO03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Fector
SW-846	5 8260B GC/MS Vo	latiles	ug/1	ug/1	
06054	Benzene	71-43-2	4	0.5	1
06054	Ethylbenzene	100-41-4	3	0.5	1
06054	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
06054	Toluene	108-88-3	0.9	0.5	1
06054	Xylene (Total)	1330-20-7	3	0.5	1
SW-846	8015B GC Volat:	iles	ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	900	50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Nethod	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P092233AA	08/12/2009 00:07	Florida A Címino	1
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	P092233AA	08/12/2009 00:07	Florida A Cimino	-
01146	GC VOA Water Prep	SW-846 5030B	- -	09224A07B	08/17/2009 15:28	Carrie E Miller	1
	TPH-GRO N. CA water C6-C12		÷		• • •		1
01/20	IPH-GRU N. CA Water C6-C12	SW-846 8015B	1	09224A07B	08/17/2009 15:28	Carrie E Miller	1





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Lancaster Laboratories Sample No. WW 5744828	Group No. 1156868 CA			
MW-4-W-090807 Grab Water				
Facility# 90517 Job# 386420 MTI# 61H-1995 GRD 3900 Piedmont-Oakland T0600102248 MW-4				
Collected: 08/07/2009 09:00 by JA	Account Number: 12099			
Submitted: 08/08/2009 10:50	Chevron c/o CRA			
Reported: 08/19/2009 at 18:55	Suite 110			
Discard: 09/19/2009	2000 Opportunity Drive Roseville CA 95678			

PAO04

CAS Number	As Received Regult	As Received Nethod Detection Limit	Dilution Factor
atiles	ug/l	ug/l	
71-43-2	120	0.5	1
100-41-4	11	0.5	1
1634-04-4	2	0.5	1
108-88-3	34	0.5	1
1330-20-7	36	0.5	ī
les	ug/l	u g/1	
n.a.	4,900	250	5
	atiles 71-43-2 100-41-4 1634-04-4 108-80-3 1330-20-7	CAS Number Result atiles ug/l 71-43-2 120 100-41-4 11 1634-04-4 2 108-80-3 34 1330-20-7 36 les ug/l	As Received Result Method Detection Limit atiles ug/l ug/l 71-43-2 120 0.5 100-41-4 11 0.5 1634-04-4 2 0.5 108-88-3 34 0.5 1330-20-7 36 0.5

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P092233AA	08/12/2009 00:55	Florida A Cimino	1
	BTEX+MTBE by 8260B	SW-846 8260B	1	P092233AA	08/12/2009 00:55		1
01146	GC VOA Water Prep	SW-846 5030B	1	09224A07B	08/17/2009 13:39	Carrie E Miller	5
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09224A07B	08/17/2009 13:39		5





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Quality Control Summary

Client Name: Chevron c/o CRA Reported: 08/19/09 at 06:55 PM

Group Number: 1156868

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analygis Name	Blank <u>Result</u>	Blank MDL	Report <u>Units</u>	LCS <u>BREC</u>	LCSD <u>%REC</u>	LCS/LCSD Limits	<u>ŘPD</u>	RPD Max	
Batch number: P092233AA	Sample num	nber(s): 57	44826-5744	828					
Benzene	N.D.	0.5	ug/l	96	96	80-116	1	30	
Ethylbenzene	N.D.	0.5	ug/l	95	96	80-113	ī	30	
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	95	95	78-117	ō	30	
Toluene	N.D.	0.5	ug/l	97	98	80-115	0	30	
Xylene (Total)	N.D.	0.5	ug/l	96	97	81-114	1	30	
Batch number: 09224A07A	Sample num	nber(s): 574	44826						
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	118	118	75-135	0	30	
Batch number: 09224A07B	Sample num	nber(s): 574	44827-5744	828					
TPH-GRO N. CA water C6~C12	N.D.	50.	ug/l	118	118	75-135	0	30	

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	ms <u>Arec</u>	MSD <u>%REC</u>	NS/MSD Limits	<u>RPD</u>	RPD MAX	BKG <u>Conc</u>	DUP <u>Conc</u>	DUP RPD	Dup RPD Max
Batch number: P092233AA Benzene Ethylbenzene Methyl Tertiary Butyl Ether Toluene Xylene (Total)	Sample 99 100 94 100 99	number(s)	: 5744826 80-126 77-125 72-126 80-125 79-125	-574482	8 UNSPI	K: 5744827			
Batch number: 09224A07A TPH-GRO N. CA water C6-C12	Sample 118	number(s)	: 5744826 63-154	UNS PK :	P74496	55			
Batch number: 09224A07B TPH-GRO N. CA water C6-C12	Sample 118	number(s)	: 5744827- 63-154	574482	8 UNSPK	C: P744965			

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: BTEX+MTBE by 8260B			
Batch number: P092233AA			
Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.





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Quality Control Summary

Client Name: Chevron c/o CRA Reported: 08/19/09 at 06:55 PM

Group Number: 1156868

Surrogate Quality Control

5744826	86	91	87	82
5744827	83	89	87	85
5744828	84	91	86	89
Blank	85	93	88	83
LCS	83	94	67	83
LCSD	84	94	87	85
MŞ	85	96	87	86
Limits:	80-116	77-113	80-113	78-113
Analysis 1	Name: TPH-GRO N. CA	water C6-C12		
Batch num	ber: 09224A07A			
	Trifluorotoluene	- P		
5744826	99			·····
Blank	98			
LCS	110			
LCSD	111			
MS	108			
Limits:	63-135			
Analvsis N	Name: TPH-GRO N. CA	Water (6-01)		
Batch numb	er: 09224A07B			
	Trifluorotoluene	되 –		
			_	
5744827	121			
5744828	117			
Blank	98			
LC\$	110			
JCSD	111			
1S	108			

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Lancaster Laboratories Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D. TNTC IU umhos/cm Cai Cai meq g ug ug mi	none detected Too Numerous To Count International Units micromhos/cm degrees Celsius (diet) calories milliequivalents gram(s) microgram(s) milliliter(s)	BMQL MPN CP Units NTU F ib. kg mg i ui	Below Minimum Quantitation Level Most Probable Number cobalt-chloroplatinate units nephelometric turbidity units degrees Fahrenheit pound(s) kilogram(s) milligram(s) liter(s) microliter(s)
m3	cubic meter(s)	fib >5 um/mi	fibers greater than 5 microns in length per ml

< less than – The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

- A TIC is a possible aldol-condensation product
- B Analyte was also detected in the blank
- C Pesticide result confirmed by GC/MS
- D Compound quatitated on a diluted sample
- E Concentration exceeds the calibration range of the instrument
- J Estimated value
- **N** Presumptive evidence of a compound (TICs only)
- P Concentration difference between primary and confirmation columns >25%
- U Compound was not detected
- X,Y,Z Defined in case narrative

Inorganic Qualifiers

- **B** Value is <CRDL, but \geq IDL
- E Estimated due to interference
- M Duplicate injection precision not met
- N Spike amount not within control limits
- S Method of standard additions (MSA) used for calculation
- U Compound was not detected
- W Post digestion spike out of control limits
- * Duplicate analysis not within control limits
- + Correlation coefficient for MSA < 0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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