

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

November 5, 2010

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

RECEIVED

10:07 am, Nov 08, 2010

Alameda County Environmental Health

I have reviewed the attached report titled <u>Second Semi-Annual 2010 Groundwater Monitoring Report</u> and dated November 5, 2010.

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,

Stacie H. Frerichs Project Manager

5H Frencho

Enclosure: Report



10969 Trade Center Drive Rancho Cordova, California 95670

Telephone: (916) 889-8900 Fax: (916) 889-8999

www.CRAworld.com

November 5, 2010

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 2010 Groundwater Monitoring Report

Former Chevron Service Station 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) on behalf of Chevron Environmental Management Company (Chevron) for the site referenced above. The report (prepared by Gettler-Ryan Inc. and dated September 2, 2010) presents the results of the sampling of wells MW-3 and MW-4 during third quarter 2010. These wells are gauged and sampled on a semi-annual basis during the first and third quarters, wells MW-1 and MW-2 are gauged but no longer sampled. Also attached are Figure 1 (Vicinity Map) showing the site location, and Figure 2 (Concentration Map) presenting the second semi-annual 2010 analytical results along with a rose diagram. The monitoring results during 2010 are summarized below.

During 2010, petroleum hydrocarbon concentrations in wells MW-3 and MW-4 were similar to or less than those observed during 2009. Total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene, and xylenes (BTEX) were not detected in MW-3 during first quarter 2010. However, TPHg was detected at 1,800 micrograms per liter (μ g/L) in MW-3 during third quarter 2010; low concentrations of BTEX (up to 9 μ g/L) were also detected. The detected concentrations were within the range of historical fluctuations. Although fluctuations occur, overall decreasing trends are evident in MW-3. MTBE was not detected in MW-3 during 2010, and has not been detected since 2003. Elevated concentrations of TPHg (3,800 μ g/L and 5,400 μ g/L) and slightly elevated concentrations of benzene (49 μ g/L and 110 μ g/L) were detected in MW-4 during 2010; low concentrations of MTBE (1 μ g/L), toluene (up to 36 μ g/L), ethylbenzene (up to 11 μ g/L), and xylenes (up to 36 μ g/L) were also detected. The TPHg and benzene concentrations in MW-4 have remained relatively stable overall, but have been decreasing over the past several years. The MTBE concentrations in MW-4 have steadily decreased and only low concentrations remain.

Equal Employment Opportunity Employer



November 5, 2010 2 Reference No. 611995

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. However, concentrations are decreasing and the extent appears adequately defined. Therefore, the site appears to be a good candidate for low-risk case closure and as such, no further monitoring is recommended. CRA recently submitted the October 12, 2010 Case Closure Request and is awaiting a response from Alameda County Environmental Health (ACEH).

We appreciate your assistance on this project and look forward to your reply. Please contact Mr. James Kiernan at (916) 889-8917 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

James P. Kiernan, P.E.

CB/jm/9 Encl.

Christopher J. Benedict

Figure 1 Vicinity Map

Figure 2 Concentration Map – August 11, 2010

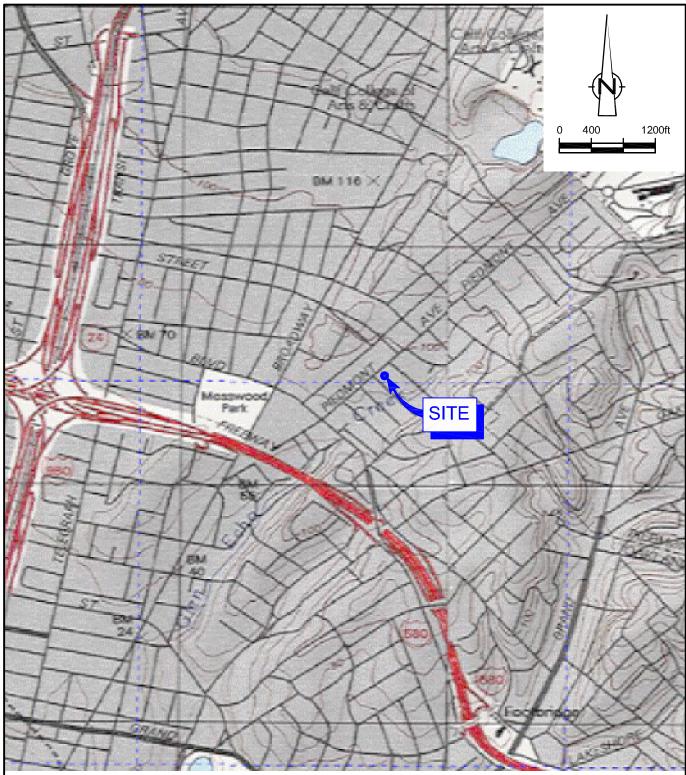
Attachment A Groundwater Monitoring and Sampling Report

cc: Ms. Stacie Frerichs, Chevron (electronic copy only)

Mr. Neil B. and Mrs. Diane C. Goodhue

Exp. 9/30/ /

FIGURES

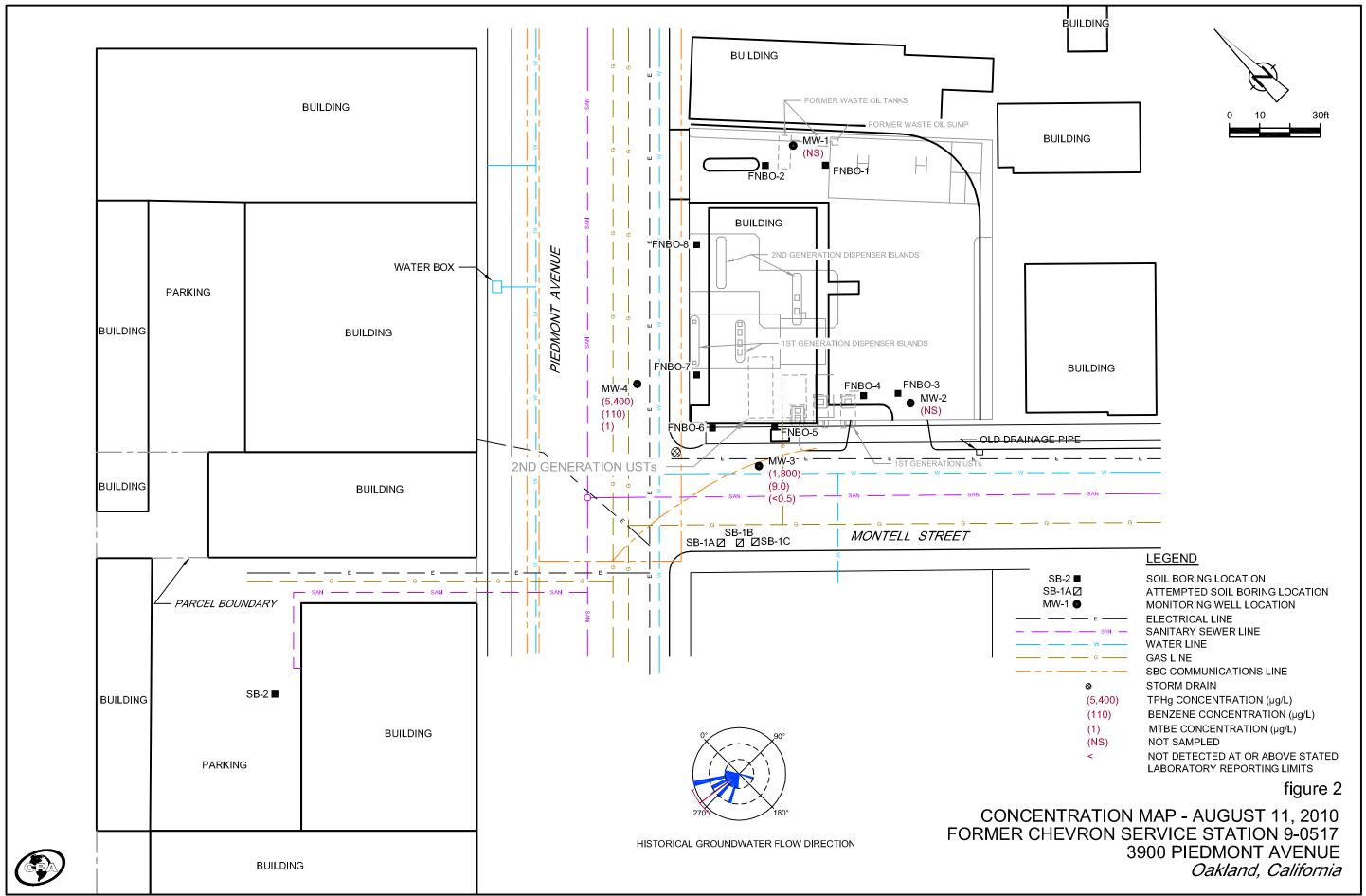


SOURCE: TOPO! MAPS.

figure 1

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





ATTACHMENT A GROUNDWATER MONITORING AND SAMPLING REPORT



TRANSMITTAL

September 8, 2010 G-R #386420

TO:

Mr. James Kiernan

Conestoga-Rovers & Associates 10969 Trade Center Dr, Suite 107 Rancho Cordova, CA 95670

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	September 2, 2010	Groundwater Monitoring and Sampling Report
		Second Semi-Annual Event of August 11, 2010

COMMENTS:

Pursuant to your request, we are providing you with copies of the above referenced report for <u>your</u> <u>use and distribution to the following (including PDF submittal of the entire report to</u> <u>GeoTracker):</u>

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

Please provide any comments/changes and propose any groundwater monitoring modifications for the next event prior to *September 22, 2010*, at which time this final report will be distributed to the following:

cc:

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-CRA UPLOAD TO ALAMEDA CO.)

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 Tef (925) 842-9655 Fax (925) 842-8370

(date)		 _

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

Re:	Chevron Facility #
	Address:
] have	reviewed the attached routine groundwater monitoring report dated

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 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,

Stacie H. Frerichs Project Manager

Enclosure: Report

WELL CONDITION STATUS SHEET

Client/Facility #: Site Address: City:		n #9-0517 edmont Av I, CA	venue			-	Job #: Event Date: Sampler:	386420 8-1	1-10 0 c		
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 CAP Y/N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Yes / No
MW-I	0.1		() of (3)	(R)0.(C	0.10	0.10	O· C	N	N	8"Boart.1./3	No
MW-2		M	broken inst				toufar	47		11	
mw-3		M		(R)	y.		0.10			"	
mw-4	V	0.1	R) v.K	(R) V	V		0,10		V	6" morrison/2	
								•	V		
											
Comments											



September 2, 2010 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 11, 2010

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,

Project Coordinator

Douglas J. Lee

Senior Geologist, P.G. No. 6882

Figure 1: Pote

Potentiometric Map

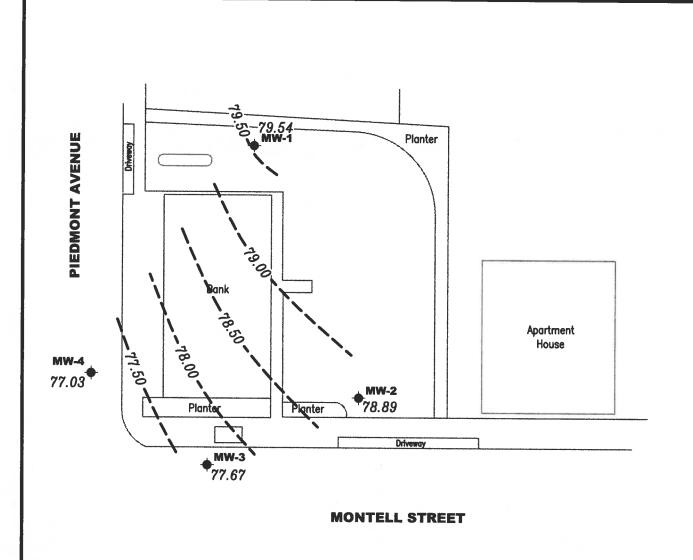
Table 1: Attachments:

Groundwater Monitoring Data and Analytical Results Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports

No. 6882



EXPLANATION

Groundwater monitoring well

99.99

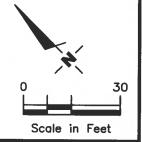
Groundwater elevation in feet referenced to Mean Sea Level

99.99

Groundwater elevation contour, dashed where inferred



Approximate groundwater flow direction at a gradient of 0.02 to 0.03 Ft./Ft.



Source: Figure modified from drowing provided by RRM engineering contracting firm,



REVIEWED BY

POTENTIOMETRIC MAP

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

DATE

August 11, 2010

FIGURE

1

FILE NAME: P:\Enviro\Chevron\9-0517\Q10-9-0517.dwg | Layout Tob: Pot3

PROJECT NUMBER

386420

REVISED DATE

Table 1 Groundwater Monitoring Data and Analytical Results

			· · · · · · · · · · · · · · · · · · ·	Oakiand, C					
WELL ID/	TOC*	GWE	DTW	TPH-GRO	В	${f T}$	Œ	X	MTBE
DATE	(ft.)	(msl)	(ft.)	(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	10000	222					
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
02/25/045	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
02/10/065	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
02/09/075	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
08/07/09	87.89	77.67	10.22	10 cm					
01/29/10	87.89	81.85	6.04	-		; -		344	
08/11/10	87.89	79.54	8.35	-	()	7 44 8			_

Table 1 Groundwater Monitoring Data and Analytical Results

Oakland, California											
WELL ID/	TOC*	GWE	DTW	TPH-GRO	В	Ť	Ē	X	MTBE		
DATE	(ft.)	(msl)	(fi.)	(µg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/ L)		
MW-2									"		
08/03/98	86.09	74.75	11.34	< 50	< 0.5	< 0.5	<0.5	< 0.5	3.4		
11/23/98	86.09	79.19	6.90	<50	< 0.5	< 0.5	<0.5	<0.5	<2.0		
02/08/99	86.09	80.86	5.23	<50	< 0.5	< 0.5	<0.5	<0.5	<2.5		
05/07/99	86.09	79.97	6.12	< 50	< 0.5	< 0.5	< 0.5	<0.5	<5.0		
08/23/99	86.09	79.68	6.41	<50	< 0.5	< 0.5	<0.5	<0.5	<2.5		
11/03/99	86.09	78.80	7.29	<50	< 0.5	< 0.5	< 0.5	<0.5	<2.5		
02/15/00	86.09	81.60	4.49	<50	< 0.5	< 0.5	< 0.5	<0.5	< 5.0		
05/12/00	86.09	80.19	5.90	$4,000^3$	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		
08/23/045	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		
08/02/065	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		
02/18/085	86.09	79.62	6.47	<50	< 0.5	< 0.5	< 0.5	< 0.5	<0.5		
08/12/085	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	22		1. 7.7 .1	-				
01/29/10	86.09	79.80	6.29	-							
08/11/10	86.09	78.89	7.20			·		_			

Table 1 Groundwater Monitoring Data and Analytical Results

WELL ID/	TOC*	GWE	DTW	TPH-GRO	В	T	Ē	X	MTBE
DATE	(ft.)	(msl)	(fi.)	(μg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
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
05/07/99	86.28	79.32	6.96	1800	53.6	8.96	33	18.6	21.4
08/23/99	86.28	78.36	7.92	3970	155	24	88.8	39.8	185
11/03/99	86.28	78.36	7.92	3320	108	19.9	98.4	44.8	<25
02/15/00	86.28	80.54	5.74	779	26.7	3.82	15.4	4.24	
05/12/00	86.28	79.52	6.76	12,000 ³	3,100	120	980	1,400	<12.5
07/31/00	86.28	78.98	7.30	1,200 ³	32	<5.0	11	7.3	820
10/30/00	86.28	79.26	7.02	3,300 ⁴	119	<5.00	40.0		39
02/27/01	86.28	80.39	5.89	432 ³	15.5	1.53		<15.0	<25.0
05/15/01	86.28	79.21	7.07	$3,220^3$	96.4	12.6	14.9	1.06	15.7
08/23/01	86.28	78.23	8.05	2,300	48		11.5	11.6	128
02/25/02	86.28	79.55	6.73	3,100	27	<10	<10	<10	100
08/05/02	86.28	78.33	7.95	4,100	87	2.1	4.8	6.6	<2.5
02/11/03	86.28	79.23	7.05			21	90	47	21
08/09/03 ⁵	86.28	78.05		3,700	21	2.3	4.4	9.0	<20
02/25/04 ⁵	86.28		8.23	1,600	12	1	2	4	0.7
08/23/04 ⁵		80.43	5.85	<50	<0.5	<0.5	<0.5	< 0.5	< 0.5
08/23/04 02/11/05 ⁵	86.28	77.23	9.05	3,000	21	3	3	9	< 0.5
	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
02/10/065	86.28	79.35	6.93	970	20	2	< 0.5	3	< 0.5
08/02/065	86.28	78.28	8.00	1,000	16	1	< 0.5	3	< 0.5
02/09/075	86.28	78.95	7.33	590	3	< 0.5	< 0.5	0.5	< 0.5
08/23/075	86.28	77.45	8.83	2,700	18	4	2	8	< 0.5
02/18/085	86.28	79.01	7.27	1,300	8	1	0.6	1	< 0.5
08/12/085	86.28	76.70	9.58	2,000	21	3	1	4	< 0.5
02/19/095	86.28	79.52	6.76	810	< 0.5	< 0.5	< 0.5	1	< 0.5
08/07/095	86.28	77.11	9.17	900	4	0.9	3	3	< 0.5
01/29/10 ⁵	86.28	79.71	6.57	<50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
08/11/10 ⁵	86.28	77.67	8.61	1,800	9	2	6	5	<0.5

Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID/	TOC*	GWE	DTW	TPH-GRO	В	\mathbf{T}	E	X	MTBE
DATE	(fi.)	(msl)	(fi.)	(μg/L)	(μg/L)	(µg/L)	(μg/L)	(µg/L)	(μg/ L)
MW-4							8		
08/03/98	87.22	74.30	12.92	1900	110	12	< 0.5	55	130
11/23/98	87.22	77.82	9.40	4080	136	17.8	37.2	30.1	51.8
02/08/991	87.22	79.40	7.82	2900	150	16	< 5.0	15	230/30.7 ²
05/07/99	87.22	79.80	7.42	6050	161	<25	39.8	36.9	$<250/30.2^2$
08/23/99	87.22	77.83	9.39	3930	203	37.6	58.6	42.2	255
11/03/99	87.22	77.41	9.81	5350	324	44.7	91.5	56.1	<50
02/15/00	87.22	79.50	7.72	4080	161	27.7	31.1	39.1	73.9
05/12/00	87.22	79.31	7.91	$3,600^3$	170	27	49	64	170
07/31/00	87.22	78.57	8.65	$2,900^3$	160	20	15	56	170
10/30/00	87.22	78.14	9.08	5,630 ⁴	301	17.8	11.8	51.5	<25.0
02/27/01	87.22	79.92	7.30	$2,140^3$	95.1	12.8	53.4	43.0	235
05/15/01	87.22	79.07	8.15	$4,580^3$	200	44.1	46.3	51.7	172
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
08/09/03 ⁵	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
08/23/04 ⁵	87.22	77.03	10.19	5,100	100	26	7	43	5
02/11/05 ⁵	87.22	79.25	7.97	3,900	58	16	25	16	2
08/15/05 ⁵	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
08/10/06 ⁵	87.22	78.64	8.58	2,500	100	19	5	30	3
02/09/075	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
02/18/08 ⁵	87.22	79.11	8.11	4,900	110	24	11	32	2
08/12/08 ⁵	87.22	76.64	10.58	6,100	180	31	9	52	3
02/19/09 ⁵	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
01/29/105	87.22	79.20	8.02	3,800	49	15	4	17	1
08/11/10 ⁵	87.22	77.03	10.19	5,400	110	36	11	36	î

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	(ft.)	(msl)	(fi.)	(μg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(μg/L)
TRIP BLANK		0000	:=337						
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		1 00		<50	< 0.5	< 0.5	<0.5	<0.5	<2.5
05/07/99	1	(<u></u>		<50	< 0.5	< 0.5	<0.5	<0.5	<5.0
08/23/99				<50	< 0.5	< 0.5	<0.5	<0.5	<2.5
11/03/99				<50	< 0.5	< 0.5	<0.5	<0.5	<2.5
02/15/00	1. 4. 0			<50	< 0.5	<0.5	<0.5	<0.5	<5.0
05/12/00		(44		<50	< 0.50	< 0.50	<0.50	< 0.50	<2.5
07/31/00				<50	< 0.50	< 0.50	<0.50	<0.50	<2.5
10/30/00				<50.0	< 0.500	< 0.500	<0.500	<1.50	<2.50
02/27/01	-			<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50
05/15/01				<50.0	< 0.500	< 0.500	<0.500	< 0.500	<2.50
08/23/01			-	<50	< 0.50	< 0.50	<0.50	<0.50	<2.5
QA							0.00	0.50	2.3
2/25/02				<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5
8/05/02				<50	< 0.50	<0.50	<0.50	<1.5	<2.5
2/11/03				<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
)2/25/04 ⁵				<50	< 0.5	<0.5	<0.5	<0.5	<0.5
08/23/04 ⁵		**		<50	< 0.5	<0.5	<0.5	<0.5	<0.5
02/11/05 ⁵	922		22	<50	<0.5	<0.5	<0.5	<0.5	<0.5
8/15/05 ⁵				<50	< 0.5	<0.5	<0.5	<0.5	<0.5
02/10/06 ⁵				<50	< 0.5	<0.5	<0.5	<0.5	<0.5
8/02/06 ⁵				<50	<0.5	<0.5	<0.5	<0.5	<0.5
2/09/075	9 <u>22</u> 3		-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
8/23/075				<50	<0.5	<0.5	<0.5	<0.5	<0.5
2/18/085	9 400 32			<50	<0.5	<0.5	<0.5	<0.5	<0.5
8/12/08 ⁵	0.440		<u>==</u> 0	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/19/09 ⁵	5 <u>777</u> 57			<50	<0.5	<0.5	<0.5	<0.5	< 0.5
08/07/09 ⁵				<50	<0.5	<0.5	<0.5	<0.5	<0.5
DISCONTINUED					V.0	0.5	-0.5	-0.3	-0.3

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

TPH = Total Petroleum Hydrocarbons

X = Xylenes

(ft.) = Feet

GRO = Gasoline Range Organics

MTBE = Methyl Tertiary Butyl Ether

GWE = Groundwater Elevation

B = Benzene

 $(\mu g/L)$ = Micrograms per liter

(msl) = Mean sea level

T = Toluene

-- = Not Measured/Not Analyzed

DTW = Depth to Water

E = Ethylbenzene

QA = Quality Assurance/Trip Blank

 ^{*} TOC elevations are referenced to msl.

Chromatogram pattern indicates gas and an unidentified hydrocarbon.

Confirmation run.

Laboratory report indicates gasoline C6-C12.

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. (GR) field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. All work is performed in accordance with the GR Health & Safety Plan and all client-specific programs. The scope of work and type of analysis to be performed is determined prior to commencing field work.

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, peristaltic or Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging (additional parameters such as dissolved oxygen, oxidation reduction potential, turbidity may also be measured, depending on specific scope of work.). 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 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, as directed by the scope of work. 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. 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.



Client/Facility#:	Chevron #9	-0517		Job Number:	386420	
Site Address:	3900 Piedme	ont Aver	nue	Event Date:	8-11-10	 (inclusive)
City:	Oakland, CA	\		Sampler:	Joe	(
Well ID Well Diameter Total Depth Depth to Water	MW-) 2 in (6.75 ft. 8.35 ft. 8.46	xVF	Check if water colu	Date Monitored: me	02 1"= 0.04 2"= 0.17 3"= 0.066 5"= 1.02 6"= 1.50 12"= 5.8 0 ft. Estimated Purge Volume:	gal(2400 hrs)ftft ft
Grundfos Peristaltic Pump QED Bladder Pump Other:	7		QED Bladder Pump Other:		Skimmer / Absorbant Sock (cir Amt Removed from Skimmer:_ Amt Removed from Well:_ Water Removed:_ Product Transferred to:_	gal gal
Start Time (purge) Sample Time/Date Approx. Flow Rate Did well de-water? Time (2400 hr.)	e:	pH	Weather Co Water Color Sediment Do Conductivity (µmhos/cm - µS)	escription: me: Temperature (C / F)	Odor: Y / N gal. OTW @ Sampling: D.O. ORP (mg/L) (mV)	
SAMPLEID	(#) CONTAINER	REFRIG.	LABORATORY IN			
MW-	x voa vial	YES	PRESERV. TYPE HCL	LABORATORY LANCASTER	ANALYSES TPH-GRO(8015)/BTEX+MTBE(8260)	
COMMENTS: Relaged Add/Replaced Lo	M. On flonges.		Replaced Plug:		Add/Replaced Bolt:	



Client/Facility#:	Chevron #9	-0517		Job Number: 386420					
Site Address:	3900 Piedm	ont Ave	nue	Eve	nt Date:	8-11-10	- (inclusive)		
City:	Oakland, C	4		San	npler:	Joe	_(///0/110/170)		
Well ID	MW-2			D 4 14		m 11 12			
Well Diameter		 n.	r	Date N	lonitored:	8-11-10	- _		
Total Depth	16.60 ft	-		Volume Factor (VF)	3/4"= 0.0		- 1		
Depth to Water	7.20 ft	_	L		4"= 0.6				
Dopur to water	9.40		Check if water of						
Depth to Water v		_ ^Vr	Water Column x (20) + DTWI	se volume =	Estimated Purge Volume:	_ gal.		
	3	- ((THE COLUMN A	J. 20) · D (V).		Time Started:	(2400 hrs)		
Purge Equipment:			Sampling Equipn	nent:		Time Completed:	(2400 hrs)		
Disposable Bailer			Disposable Bailer			Depth to Product: Depth to Water:	ft ft		
Stainless Steel Bailer			Pressure Bailer			Hydrocarbon Thickness:	ft		
Stack Pump Suction Pump			Discrete Bailer			Visual Confirmation/Description:			
Grundfos			Peristaltic Pump DED Bladder Pum			Skimmer / Absorbant Sock (circ	9 000)		
Peristaltic Pump	/		Other:	р		Amt Removed from Skimmer:	gal		
QED Bladder Pump			, and a			Amt Removed from Well:	gal		
Other:						Water Removed: Product Transferred to:			
Start Time (purge)	:		Weather	Conditions	·				
Sample Time/Date			Water C		· —	Odor: Y / N			
Approx. Flow Rate		gpm.		nt Description	20/				
Did well de-water			:\		\ _	gal. DTW @ Sampling:			
		,	· '	/ Oldi 110	——————————————————————————————————————	gai. Divv @ Sampling	w w		
Time (2400 hr.)	Volume (gal.)	pН	Conductivity		erature \	D.O. ORP			
(2400 1113)		·	(μmhos/cm - μ	S) (C	/ F) `	(mg/L) (mV)			
	-								
			LABORATOR	Y INFORM	ATION				
SAMPLEID	(#) CONTAINER	REFRIG.	PRESERV. TY	PE LABO	RATORY	ANALYSES			
MW-	x voa vial	YES	HCL	LAN	CASTER	TPH-GRO(8015)/BTEX+MTBE(8260)			
			 						
ļ									
-									
COMMENTO	-0.1		L						
COMMENTS:	Mion	4-							
			 						
		`							
Add/Replaced Lo	ck:	Add/l	Replaced Plug	j:		Add/Replaced Bolt:	— -		
			_				-		



Client/Facility#:	Chevron #9-0517		Job Number:	386420	
Site Address:	3900 Piedmont A	venue	Event Date:	8-11-10	(inclusive)
City:	Oakland, CA		Sampler:	500	(Illoidsive)
			· · · · · · · · · · · · · · · · · · ·		
Well ID	MW-3_		Date Monitored:	8-11-10	
Well Diameter	2 in.	[·	Volume 3/4"= 0.	02 1"= 0.04 2"= 0.17	3"= 0.38
Total Depth	17.70 ft.	I	Factor (VF) 4"= 0.0		12"= 5.80
Depth to Water	8.61 ft.	Check if water c	column is less then 0.5	0 ft.	
		0.17 = 1.5		= Estimated Purge Volume:_	gal.
Depth to Water v	v/ 80% Recharge [(Heigh	t of Water Column x 0).20) + DTW]: <u>10 · 4</u>	2	
Purge Equipment:	,	Sampling Equipm	oont:	Time Started: Time Completed:	(2400 hrs) (2400 hrs)
Disposable Bailer		Disposable Bailer	ient.	Depth to Product:	ft
Stainless Steel Bailer		Pressure Bailer		Depth to Water:	ft
Stack Pump	····	Discrete Bailer		Hydrocarbon Thicknet Visual Confirmation/	
Suction Pump		Peristaltic Pump		Visual Committation/L	Description
Grundfos		QED Bladder Pum	p	Skimmer / Absorbant	
Peristaltic Pump		Other:		Amt Removed from S Amt Removed from V	
QED Bladder Pump				Water Removed:/	yell:gal
Other:	****			Product Transferred t	o:
Start Time (purge)			Conditions:	clear	
Sample Time/Date	e: 0805 18-11-	Water Co	olor: clear		oderate
Approx. Flow Rate	e: gpm.	_ Sedimen		none	
Did well de-water	P <u> u </u>		· · · · · ·	gal. DTW @ Sampling	: 9.07
Time		Conductivity	Temperature	D.O. (ORP
(2400 hr.)	Volume (gal.) pH	(µmhos/cm -			mV)
0738	_1.5 7.73	814	17.7		
0743	3.5 7.67	826	17.4		
0752	5 7.61	819	17.8		
		LABORATOR	VINEODMATION		
SAMPLE ID	(#) CONTAINER REFRI	G. PRESERV. TY	Y INFORMATION PE LABORATORY	ANALY	SES
MW- 3	x voa vial YES		LANCASTER	TPH-GRO(8015)/BTEX+MT	
/					(0000)
COMMENTS: R	etapped box.	Clanges.			
	0 /	1 /			
Add/Replaced Lo	ck: A	dd/Replaced Plug	· _	Add/Replaced Bolt/3)	3/2"



Client/Facility#:	: Chevron #9-0517			Jo	b Number:	386420	
Site Address:	3900 Piedm	ont Aver	nue	Ev	ent Date:	8-11-10	(inclusive)
City:	Oakland, C.	A		—— Sa	mpler:	Joe	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Well ID	MW-4	•		Date	Monitored:	8-11-10	
Well Diameter	2	in.		Volume	3/4"= 0.0		7 3"= 0.38
Total Depth	16.32	ft.		Factor (VF)	4"= 0.6		
Depth to Water	10.19		Check if water				
	6.13	_xVFc	2.17 = 1.c	9 4 x3 c	ase volume =	= Estimated Purge Volume	: 3 · 5 gal.
Depth to Water v	v/ 80% Recharg	e [(Height of	Water Column x	0.20) + DTW	7: <u>11.41</u>	Time of the stands	
Purge Equipment:		9	Sampling Equip	ment:		Time Started: Time Completed:	(2400 hrs)
Disposable Bailer			Disposable Bailer		V	Depth to Product:_	
Stainless Steel Bailer			Pressure Bailer		11	Depth to Water: Hydrocarbon Thick	ft nage
Stack Pump			Discrete Bailer			Visual Confirmation	
Suction Pump		F	Peristaltic Pump				
Grundfos			QED Bladder Pun			Skimmer / Absorba	int/Sock (circle one) n Skimmer: gal
Peristaltic Pump QED Bladder Pump		C	Other:			Amt Removed from	Well:gal
Other:						Water Removed: Product Transferred	
<u> </u>						Froduct Transferred	1 (0:
Start Time (purge)	1812		Maatha	er Condition		7	
Sample Time/Dat		0-11-1	~		- 1	Clear	1
Approx. Flow Rate		gpm.		Color: <i>C</i> nt Descrip		_Odor: 🔗 / N	trong
Did well de-water		_ gpm. f yes, Time		-		None	4
Did Well de Water	·	r yes, rime	•	volume		gal. DTW @ Samplir	ig: 10.77
Time	Volume (gal.)	pН	Conductivity	/a Tem	perature	D.O.	ORP
(2400 hr.)		1 100	(μmhos/cm - μ	180) (09	/ F)	(mg/L)	(mV)
0822	7.5	6.83	691		8.0		
087	-72-5	6.86	716		8.2		
0875	-3.5	(0 ·0 \$	715		8.1		
			LABORATOR		MATION		
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. T		ORATORY	ANAL	
10100-	& x voa vial	YES	HCL	LAI	NCASTER	TPH-GRO(8015)/BTEX+N	/TBE(8260)
-			ļ				
COMMENTS:	Retapped	Sor 1	laucas			· · · · · · · · · · · · · · · · · · ·	
_		-,-	7 3				
Add/Replaced Lo	ock:	V 44/	Replaced Plu	a		Add/D1 /-	12/1/
- war topiaced Ec	OK	Aud/I	rehiaced Filli	y		Add/Replaced Bolt/2	-) //8

Chevron California Region Analysis Request/Chain of Custody



081110-02

Acct. #: 12099 Sample # 6056467-68 Group #:

	CRA MTI Project #: 61H-1995						95	Analyses Requested						7	C#1	207	120	حاد					
Facility #: SS#9-0517 G-R#386420 Glo					Matri	x		-			P	rese	erva	tion	Coc	es			+		ervativ		
Site Address: 3900 PIEDMONT AVENUE, C	AKLAND, C	A						#	H			-	\dashv	_	=	4		\perp		H = HCI	T =	= Thio:	sulfate
Chevron PM: MTI Lead	Consultant:	RAKJ K	iernar	, -		T				eanu										N = HNO3 S = H2SO		= NaO = Othe	
Consultant/Office: G-R, Inc., 6747 Sierra Col	urt, Suite J,	Dublin, CA	9456	8	bde SES		ners			98									- 1-	J value r			
Consultant Prj. Mgr.: Deanna L. Harding (d	eanna@grin	ic.com)		1	Potable		Containers	N 8021 □		Silica Gel Cleanup						-				Must me	et lowest	t deteci	ion limits
Consultant Phone #: 925-551-7555 Fax #: 925-551-7899				7]	Ö	S X					B	Method						possible 8021 MTBE		-	ounds .
Sampler: JOE AJEMIAN				7				8260	DGR	D DR		ates	Method		- 1				- 1	☐ Confirm			oen l
						¥	Ē	МТВЕ	5 MO	§8	Scan	Oxygenates	9	lead						Confirm			
Sample Identification	Date	Time	Grab	Soil	Water		Total Number	BTEX + MTBE	TPH 8015 MOD GRO	TPH 8015 MOD DRO	8260 full scan	6	Total Lead	Dissolved Lead					1	Run	_oxy's o	n highe	
	Collected 8-11-10	Collected 680 S	0	3 8	3	ō	-	18	E /	유	8	4	P	<u> </u>	_	_		_		Run			is e
MW-4		0845	11	+	11	\dagger	6					\dashv	+		\dashv	+	+	+	- '	Comment	s / Rem	narks	
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Turnaround Time Requested (TAT) (please cire	(Relinqui	sbedib	<u> </u>	7					- 	ate	710		10-			\perp						
STD. TAD 72 hour 48 hour			7		1						1-10	09	me 140	He	COIVE	##V:	_	_{	9		81	Date 11/10	Time 0940
24 nour 4 day 5 day		Relinqui	shedb	-			1/_	1		P	ate	Tir	ne	Re	ceive	dyby:)					Date	Time
Data Package Ontions (places since # as 1)		Relinqui	shed by	1: (120			X / // D	<u>// P</u> ate	/ <u> </u> . Tir	ne	H.	ceive	d h	<u>×</u> _						Time
Data Package Options (please circle if required) QC Summary Type I - Full	DF/EDD			V										ĽŽ	-0.46	- 57			******	•••	ا ا	Date	Time
Type VI (Raw Data) Coelt Deliverable not needed Relinquished				Com										Re	ceive	d by:	_	ı/		Has		Pate	Time
WIP (RWQCB) Disk		<u> </u>					ther_		- J	~				Custody Saals Intact? Yes No			Hr	U750					
		Tempera	iiuia U	JOH H	эсеірт_			~ 1					_C°	Cu	stody	Sea	s int	act?		Yes No	- 1	1	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 -717-656-2500 Fax: 717-656-2681 - www.lancasterlabs.com

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 Prepared for:

Chevron c/o CRA Suite 110 2000 Opportunity Drive Roseville CA 95678

August 23, 2010

Project: 90517

Submittal Date: 08/12/2010 Group Number: 1207206 PO Number: 90517 Release Number: MTI State of Sample Origin: CA

AUG 2 4 2010

GETTLER-RYAN INC GENERAL CONTRACTORS

Client Sample Description

MW-3-W-100811 Grab Water MW-4-W-100811 Grab Water Lancaster Labs (LLI) #

6056467 6056468

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

ELECTRONIC

Gettler-Ryan, Inc.

Attn: Rachelle Munoz

COPY TO ELECTRONIC

Chevron c/o CRA

Attn: Report Contact

COPY TO



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Questions? Contact your Client Services Representative Jill M Parker at (717) 656-2300 Ext. 1241

Respectfully Submitted,

Locy a. Cola



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Page 1 of 1

Sample Description: MW-3-W-100811 Grab Water

Facility# 90517 Job# 386420 MTI# 61H-1995 GRD

3900 Piedmont Ave-Oakland T0600102248 MW-3

LLI Sample # WW 6056467 LLI Group # 1207206 Account # 12099

Project Name: 90517

Collected: 08/11/2010 08:05

by JA

Chevron c/o CRA

Suite 110

Submitted: 08/12/2010 08:50

Reported: 08/23/2010 13:14

2000 Opportunity Drive Roseville CA 95678

Discard: 09/

09/23/2010

PA003

CAT No.		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles SW-846	8260B	ug/l	ug/l	
10943	Benzene	71-43-2	9	0.5	1
10943	Ethylbenzene	100-41-4	6	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10943	Toluene	108-88-3	2	0.5	1
10943	Xylene (Total)	1330-20-7	5	0.5	1
GC Vol	atiles SW-846	8015B	ug/1	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	1,800	50	1

General Sample Comments

State of California Lab Certification No. 2501 Trip blank vials were not received by the laboratory for this sample group.

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
	GC/MS VOA Water Prep BTEX/MTBE 8260 Water	SW-846 5030B SW-846 8260B	1	F102262AA F102262AA	08/14/2010 22:35 08/14/2010 22:35	Kelly E Keller Kelly E Keller	1
	GC VOA Water Prep	SW-846 5030B	1	10229B20A		Tyler O Griffin	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	10229B20A	08/18/2010 11:29	Tyler O Griffin	1



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Sample Description: MW-4-W-100811 Grab Water

Facility# 90517 Job# 386420 MTI# 61H-1995 GRD

3900 Piedmont Ave-Oakland T0600102248 MW-4

LLI Sample # WW 6056468 LLI Group # 1207206

Account

12099

Project Name: 90517

Collected: 08/11/2010 08:45

by JA

Chevron c/o CRA

Suite 110

Submitted: 08/12/2010 08:50

Reported: 08/23/2010 13:14

2000 Opportunity Drive Roseville CA 95678

Discard: 09/23/2010

PA004

CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
8260B	ug/l	ug/l	
71-43-2	110	0.5	1
100-41-4	11	0.5	1
1634-04-4	1	0.5	1
108-88-3	36	0.5	1
1330-20-7	36	0.5	1
8015B	ug/l	ug/l	
n.a.	5,400	500	10
	8260B 71-43-2 100-41-4 1634-04-4 108-88-3 1330-20-7	CAS Number Result 8260B	CAS Number As Received Result Method Detection Limit 8260B ug/l ug/l 71-43-2 110 0.5 100-41-4 11 0.5 1634-04-4 1 0.5 108-88-3 36 0.5 1330-20-7 36 0.5 8015B ug/l ug/l

General Sample Comments

State of California Lab Certification No. 2501 Trip blank vials were not received by the laboratory for this sample group.

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	F102262AA	08/14/2010 22:57	Kelly E Keller	1
10943	BTEX/MTBE 8260 Water	SW-846 8260B	1	F102262AA	08/14/2010 22:57	Kelly E Keller	1
01146	GC VOA Water Prep	SW-846 5030B	1	10228B20A	08/17/2010 00:52	Martha L Seidel	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	10228B20A	08/17/2010 00:52	Martha L Seidel	10



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Quality Control Summary

Client Name: Chevron c/o CRA Reported: 08/23/10 at 01:14 PM

Group Number: 1207206

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank <u>MDL</u>	Report <u>Units</u>	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: F102262AA	Sample num	ber(s): 60	6467-6056	468				
Benzene Ethylbenzene Methyl Tertiary Butyl Ether Toluene	N.D. N.D. N.D. N.D.	0.5 0.5 0.5 0.5	ug/l ug/l ug/l ug/l	87 86 86 89		79-120 79-120 76-120 79-120		
Xylene (Total)	N.D.	0.5	ug/l	86		80-120		
Batch number: 10228B20A TPH-GRO N. CA water C6-C12	Sample num	per(s): 605 50.	66468 ug/l	118	118	75-135	0	30
Batch number: 10229B20A TPH-GRO N. CA water C6-C12	Sample numl	per(s): 605 50.	6467 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>%REC</u>	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD
Batch number: F102262AA	Sample	number(s)	: 6056467	-605646	8 UNSP	K: P056470			
Benzene	96	93	80-126	3	30				
Ethylbenzene	95	92	71-134	3	30				
Methyl Tertiary Butyl Ether	94	88	72-126	7	30				
Toluene	97	97	80-125	1	30				
Xylene (Total)	94	92	79-125	2	30				
Batch number: 10228B20A TPH-GRO N. CA water C6-C12	Sample 127	number(s)	: 6056468 63-154	UNSPK:	P0564	70			
Batch number: 10229B20A TPH-GRO N. CA water C6-C12	Sample	number(s)	: 6056467 63-154	UNSPK:	P0594	58			

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: UST VOCs by 8260B - Water Batch number: F102262AA

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

Group Number: 1207206

Reported: 08/23/10 at 01:14 PM

Surrogate Quality Control

6056467	97	96	104	104
6056468	97	97	105	106
Blank	99	100	102	97
LCS	100	101	101	102
MS	99	101	102	102
MSD	99	98	103	102
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12 Batch number: 10228B20A Trifluorotoluene-F

6056468	104
Blank	90
LCS	118
LCSD	123
MS	125

Limits: 63-135

Analysis Name: TPH-GRO N. CA water C6-C12 Batch number: 10229B20A

Trifluorotoluene-F

6056467	138*
Blank	91
LCS	123
LCSD	118
MS	118

Limits: 63-135

*- 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.



Explanation of Symbols and Abbreviations

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

RL N.D.	Reporting Limit none detected	BMQL MPN	Below Minimum Quantitation Level Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
С	degrees Celsius	ř	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
mi	milliliter(s)	1	liter(s)
m3	cubic meter(s)	₌ ul	microliter(s)

- 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
- J estimated value The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).
- 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. All other results are reported on an as-received basis.

Inorganic Qualifiers

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

	0.940 4		morganic waanners
Α	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
В	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N ·	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and	W	Post digestion spike out of control limits
	confirmation columns >25%	*	Duplicate analysis not within control limits
U	Compound was not detected	+	Correlation coefficient for MSA < 0.995
X,Y,Z	Defined in case narrative		

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

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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