

Olivia Skance Team Lead Marketing Business Unit Chevron Environmental Management Company 6101 Bollinger Canyon Road San Ramon, CA 94583 Tel (925) 790-6521

March 23, 2012

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

5:29 pm, Mar 28, 2012

Alameda County Environmental Health

Re:

Chevron Facility # 90517

Address: 3900 Piedmont Avenue, Oakland, California

I have reviewed the attached report titled <u>2012 Annual Groundwater Monitoring Report</u> and dated <u>March</u> <u>23, 2012</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,

Olivia Skance Project Manager

Enclosure: Report



10969 Trade Center Drive Rancho Cordova, California 95670

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

www.CRAworld.com

March 23, 2012

Reference No. 611995

Mr. Mark Detterman, P.G., C.E.G. Alameda County Environmental Health (ACEH) 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Re: 2012 Annual Groundwater Monitoring Report

Former Chevron Service Station 90517

3900 Piedmont Avenue Oakland, California Case No. 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 February 22, 2012) presents the results of the sampling of wells MW-3 and MW-4 during first quarter 2012. These wells are gauged and sampled annually during the first quarter; wells MW-1 and MW-2 are gauged but no longer sampled. As requested by ACEH in a letter dated April 14, 2011, MW-1 was supposed to be sampled during the current event to analyze for waste-oil constituents; however, it could not be accessed for gauging or sampling due to rubber mats (glued down) that had been placed over the well by the new building occupant (SOL Performance Trainer). We were not informed that a new tenant had occupied the building. Also attached are Figure 1 (Vicinity Map) showing the site location, and Figure 2 (Concentration Map) presenting the 2012 annual analytical results along with a rose diagram. The monitoring results during 2012 are summarized below.

During 2012, the detected petroleum hydrocarbon concentrations in MW-3 and MW-4 were within historical ranges. Total petroleum hydrocarbons as gasoline (TPHg) was detected at 720 micrograms per liter (μ g/L) in MW-3, an increase from the concentration detected during the previous event. Low concentrations of benzene and xylenes (0.9 μ g/L) were also detected in MW-3; benzene, toluene, ethylbenzene, and xylenes (BTEX) are only periodically detected in this well. Although fluctuations occur, overall decreasing trends are evident in MW-3. Methyl tertiary butyl ether (MTBE) was not detected in MW-3, and has not been detected since 2003. TPHg and benzene were detected in MW-4 at 6,700 μ g/L and 110 μ g/L, respectively. The TPHg concentration in MW-4 was the highest detected to date in this well, but is only slightly above previously observed concentrations. The TPHg and benzene concentrations in MW-4 have fluctuated, but have remained relatively stable overall. Low concentrations of toluene,

Equal Employment Opportunity Employer



March 23, 2012 Reference No. 611995

ethylbenzene, and xylenes (up to 34 μ g/L) were also detected in MW-4, and have also remained relatively stable. Conversely, the MTBE concentrations in MW-4 have steadily decreased and only a low concentration remains (1 μ g/L).

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. Concentrations are stable to declining. CRA recommends continued monitoring and sampling to further evaluate groundwater quality and concentration trends. CRA will contact the new tenant to arrange for access to MW-1. Depending on when this is achieved, either a special sample event will be performed, or sampling of MW-1 will occur during the next event.

On June 13, 2011, CRA submitted a *Revised Work Plan for Additional Site Investigation* (work plan) that proposed the installation and sampling of two sub-slab vapor probes within the site building as well as indoor air and ambient air sampling to evaluate potential vapor intrusion concerns. This work plan was requested by ACEH in the April 14, 2011 letter; however, we have not received a response or approval to implement the work plan. Given the length of time without a response from ACEH, we are assuming agency concurrence with the work plan and hereby provide 30-day notice of our intent to implement the scope of work, as written, in an effort to continue to move this case toward closure. If ACEH has any comments on the work plan, please provide them prior to this time.



March 23, 2012 Reference No. 611995

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.

JK/aa/12 Encl.

Figure 1 Vicinity Map

Figure 2 Concentration Map

Attachment A Groundwater Monitoring and Sampling Report

cc: Ms. Olivia Skance, Chevron (electronic copy only)

Mr. Neil B. and Mrs. Diane C. Goodhue, property owners

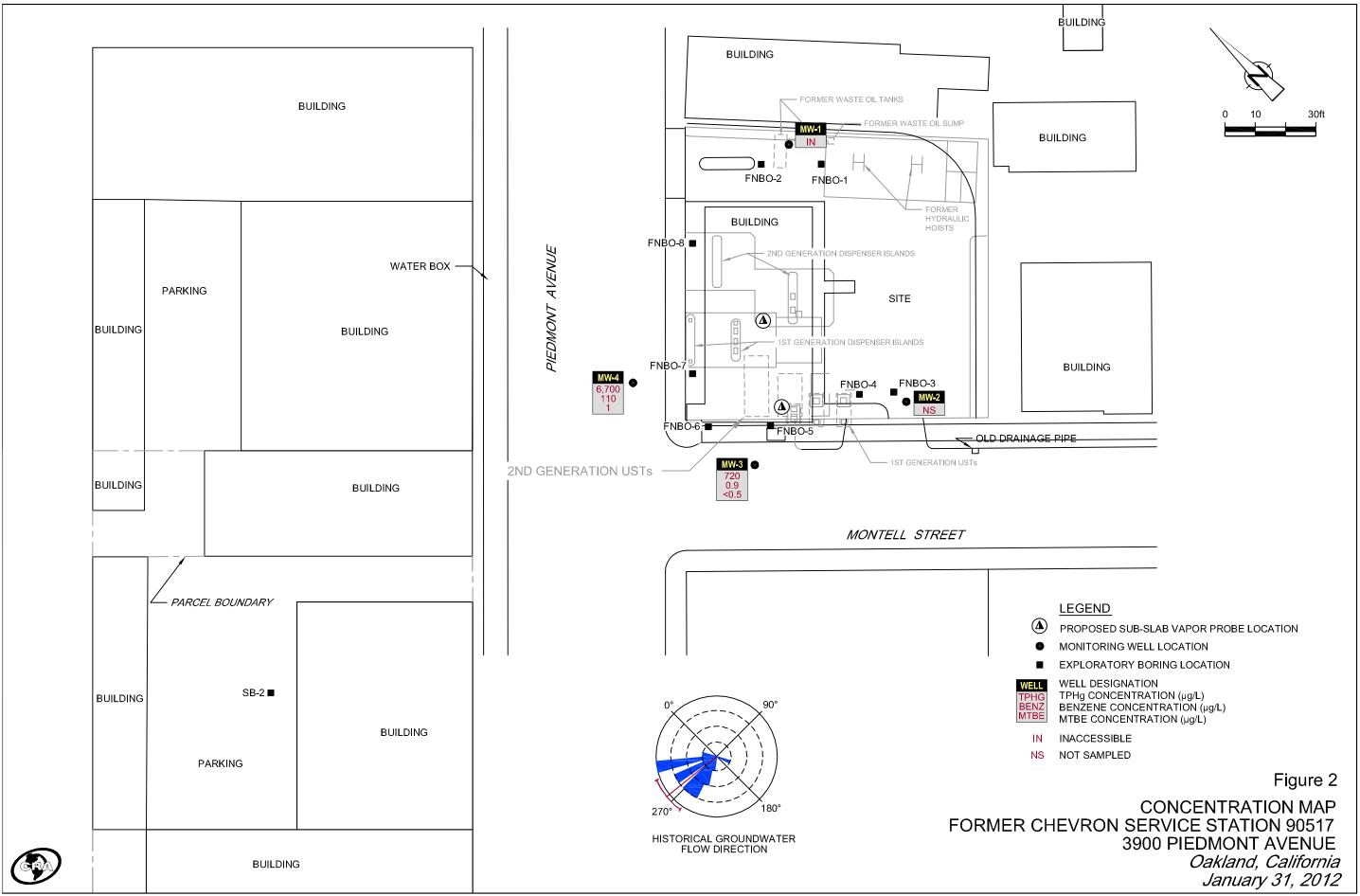
FIGURES



SOURCE: TOPO! MAPS.

Figure 1
VICINITY MAP
FORMER CHEVRON SERVICE 90517
3900 PIEDMONT AVENUE
Oakland, California





ATTACHMENT A

GROUNDWATER MONITORING AND SAMPLING REPORT



February 22, 2012 G-R Job #386420

Ms. Olivia Skance Chevron Environmental Management Company 6101 Bollinger Canyon Road San Ramon, CA 94583

RE: Annual Event of January 31, 2012

Groundwater Monitoring & Sampling Report Former Chevron Service Station #9-0517 3900 Piedmont Avenue Oakland, California

Dear Ms. Skance:

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.

No. 6882

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

Sincerely,

Deanna L. Harding

Project Coordinator

Douglas J. Lee

Senior Geologist, P.G. No. 6882

Figure 1:

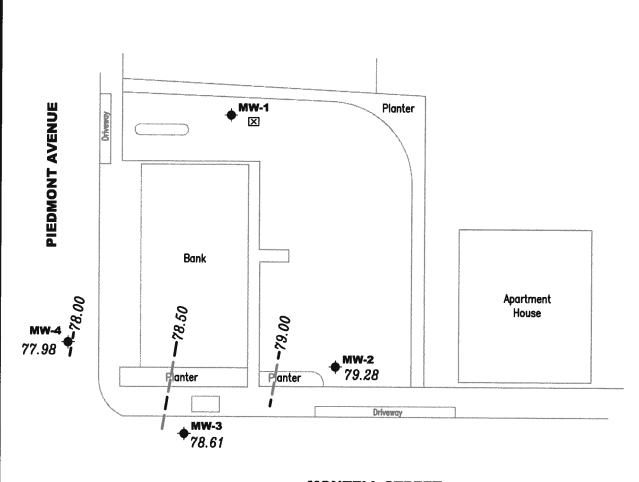
Potentiometric Map

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



EXPLANATION

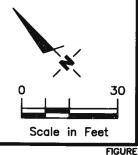
Groundwater monitoring well

99.99 Groundwater elevation in feet referenced to Mean Sea Level

Groundwater elevation contour, dashed where inferred

Inaccessible \boxtimes

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



MONTELL STREET



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

DATE REVISED DATE

PROJECT NUMBER 386420

REVIEWED BY

January 31, 2012

				Oakiand, C					
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)
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 D	RY				••			
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
08/09/03 ⁵	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
08/23/045	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
08/02/065	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
08/23/075	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
08/12/085	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	••					
01/29/10	87.89	81.85	6.04						
08/11/10	87.89	79.54	8.35						
02/02/11	87.89	81.35	6.54						
01/31/12	INACCESSIBLE		-						

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)			
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			
02/25/045	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			
02/10/065	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			
02/09/075	86.09	79.80	6.29	<50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5			
08/23/075	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			
02/19/095	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									
01/29/10	86.09	79.80	6.29									
08/11/10	86.09	78.89	7.20									
02/02/11	86.09	79.22	6.87	••								
01/31/12	86.09	79.28	6.81									

Oakland, California											
WELL ID/	TOC*	GWE	DTW	TPH-GRO	В	verse en	E	X	MTBE		
DATE	(ft.)	(msl)	(ft.)	(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	<12.5		
05/12/00	86.28	79.52	6.76	$12,000^3$	3,100	120	980	1,400	820		
07/31/00	86.28	78.98	7.30	1,200 ³	32	<5.0	11	7.3	39		
10/30/00	86.28	79.26	7.02	3,300 ⁴	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		
02/25/02	86.28	79.55	6.73	3,100	27	2.1	4.8	6.6	<2.5		
08/05/02	86.28	78.33	7.95	4,100	87	21	90	47	21		
02/11/03	86.28	79.23	7.05	3,700	21	2.3	4.4	9.0	<20		
08/09/03 ⁵	86.28	78.05	8.23	1,600	12	1	2	4	0.7		
02/25/045	86.28	80.43	5.85	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
08/23/045	86.28	77.23	9.05	3,000	21	3	3	9	<0.5		
02/11/055	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		
08/02/06 ⁵	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		
08/23/07 ⁵	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		
08/12/08 ⁵	86.28	76.70	9.58	2,000	21	3	1	4	<0.5		
02/19/09 ⁵	86.28	79.52	6.76	810	< 0.5	< 0.5	<0.5	1	<0.5		
08/07/09 ⁵	86.28	77.11	9.17	900	4	0.9	3	3	<0.5		
01/29/105	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		
2/2/20115	86.28	79.12	7.16	97	< 0.5	< 0.5	<0.5	<0.5	<0.5		
01/31/125	86.28	78.61	7.67	720	0.9	<0.5	<0.5	0.9	<0.5		

WELL ID/	TOC*	GWE	DTW	TPH-GRO	В	\mathbf{r}	E	X	MTBE
DATE	(fi.)	(msl)	(fi.)	(µg/L)	(μg/L)	(µg/L)	(μg/L)	Λ (μg/L)	(μg/L)
MW-4			*	16 G	(r.s)	(P-8	(#8/ -7)		(µg/L)
08/03/98	87.22	74.20		1000		4.0	17/2		
11/23/98	87.22	74.30	12.92	1900	110	12	<0.5	55	130
02/08/991	87.22	77.82	9.40	4080	136	17.8	37.2	30.1	51.8
05/07/99		79.40	7.82	2900	150	16	<5.0	15	230/30.7 ²
	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	2,9003	160	20	15	56	170
10/30/00	87.22	78.14	9.08	5,6304	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.I	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
08/09/035	87.22	77.67	9.55	3,700	110	24	10	45	8
02/25/04 ⁵	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
08/15/05 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
08/10/065	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
02/18/085	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
)2/19/09 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
01/29/10 ⁵	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	i
2/2/20115	87.22	78.57	8.65	3,800	76	29	16	31	i
01/31/12 ⁵	87.22	77.98	9.24	6,700	110	32	7	34	1

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											
08/03/98				<50	<0.5	<0.5	< 0.5	< 0.5	<2.5		
11/23/98	(49)	**	4	<50	< 0.5	< 0.5	<0.5	<0.5	<2.0		
02/08/99		Cent		<50	< 0.5	< 0.5	< 0.5	< 0.5	<2.5		
05/07/99	5.			<50	< 0.5	<0.5	< 0.5	< 0.5	<5.0		
8/23/99		49		<50	<0.5	<0.5	< 0.5	< 0.5	<2.5		
1/03/99	**			<50	< 0.5	<0.5	< 0.5	< 0.5	<2.5		
2/15/00			-	<50	< 0.5	< 0.5	< 0.5	< 0.5	<5.0		
5/12/00	-	-		<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		
0/30/00	**	-		<50.0	< 0.500	< 0.500	< 0.500	<1.50	<2.50		
2/27/01		-		<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50		
5/15/01	**	-		<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50		
8/23/01	100	1 20		<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5		
)A											
2/25/02	-30	-		<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	(-4)	-		<50	< 0.50	<0.50	< 0.50	<1.5	<2.5		
8/09/035	-	4-	***	<50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
2/25/04 ⁵	144	**	-	<50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
8/23/045	-		-	<50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
2/11/055	-	77		<50	< 0.5	< 0.5	< 0.5	< 0.5	<0.5		
8/15/055	-	3	-	<50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
2/10/065		-		<50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
8/02/065	**			<50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
2/09/07 ⁵	30	-	-	<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	-		+-	<50	<0.5	< 0.5	< 0.5	< 0.5	< 0.5		
8/12/085	-	-	-	<50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
2/19/095	46	W4.	-	<50	< 0.5	< 0.5	<0.5	<0.5	< 0.5		
8/07/09 ⁵ DISCONTINUED			1.4	<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 CasingTPH = Total Petroleum HydrocarbonsX = Xylenes(ft.) = FeetGRO = Gasoline Range OrganicsMTBE = Methyl Tertiary Butyl EtherGWE = Groundwater ElevationB = Benzene($\mu g/L$) = Micrograms per liter(msl) = Mean sea levelT = Toluene--- = Not Measured/Not AnalyzedDTW = Depth to WaterE = EthylbenzeneQA = 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 –WELL DEVELOPMENT 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 well development, each well is monitored for the presence of free-phase hydrocarbons and the depth to water is recorded. Wells are then developed by alternately surging the well with the bailer, then purging the well with a pump to remove accumulated sediments and draw groundwater into the well. Development continues until the groundwater parameters (temperature, pH, and conductivity) have stabilized.

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.

As requested by Chevron Environmental Management Company, the purge water and decontamination water generated during sampling activities is transported by Clean Harbors Environmental Services to Evergreen Oil located in Newark, California.



	Client/Facility#:	Chevron #9	-0517	_	Job i	Number:	386420		
	Site Address:	3900 Piedm	ont Ave	nue	Even	it Date:	1/31	12	(inclusive)
	City:	Oakland, C	Α		—— Samı	pler:	GM		(
_									
	Well ID	/MW (Date Mo	onitored:	1/31/	12	
	Well Diameter	2	in.	ſ	Volume	3/4"= 0.02			0.38
	Total Depth		ft.		Factor (VF)	4"≈ 0.66		-	5.80
	Depth to Water		<u>t.</u>	Check if water	column is less	then 0.50	ft.		
			xVF	_=_=	x3 case	e volume = l	Estimated Purg	e Volume:	gal.
	Depth to Water v	w/ 80% Recharg	e [(Height of	Water Column x	0.20) + DTW]: _		_ [
	Purge Equipment:			C			Time Sta	rted: npleted:	(2400 hrs) (2400 hrs)
	Disposable Bailer			Sampling Equip ı Disposable Bailer			Depth to	Product:	(2400 fils)
	Stainless Steel Bailer			Pressure Bailer			Depth to	Water:	ft
	Stack Pump			Discrete Bailer				bon Thickness: nfirmation/Descrip	
	Suction Pump		1	Peristaltic Pump	 				
	Grundfos		•	QED Bladder Pum			Skimmer	/ Absorbant Sock	circle one)
	Peristaltic Pump			Other:			Amt Rem	oved from Skimme oved from Well:	er:gal gal
	QED Bladder Pump Other:						Water Re	moved:	
	Other						Product T	rangeerred to:	
_	Start Time (a								
	Start Time (purge)			•	r Conditions:				
	Sample Time/Dat			Water C			9dor: Y / 1	٧	
	Approx. Flow Rate			Sedimer	nt Description				
	Did well de-water	? If	ryes, Time	·: \	√olume: <u> </u>	g:	al. DTW @	Sampling:	
	Time	Volume (gal.)	mt 1	Conductivity	Tempe	ratoce	D.O.	ORP	
	(2400 hr.)	volume (gal.)	pΗ	(μmhos/cm - μ		F)	(mg/L)	(mV)	
							_		
					Z =				
									
				LABORATOR	VINEODIA	7/01			
Γ	SAMPLE ID	(#) CONTAINER	REFRIG/	LABORATOR PRESERV. TO		RATORY		ANALYSES	
	MW-	x voa vial	YE8	HCL			PH-GRO(8015)/BTEX+MTBE(826	60)
L							······································		,
┝				 					
┝				 				-	
									
L		/					-		
				L					
C	OMMENTS:	WELL CE	NEKET	> WITH	MATS	THA	T ARE.	GLUDD D	odur.
	PIC	WELL CO	AKEN.	UTA				- 12	·
	 .						178		
	Add/Replaced Lo	ck:	Add/	Replaced Plug	•		dd/Replaced	d Polt:	
	- j- · · · · · · ·		, (447)	p.:aooa i iug	·	_ ^	www.vehiacec	<i>i</i> DUIL	



Client/Facility#:	Chevron #9-0517		Job Number:	386420	
Site Address:	3900 Piedmont A	venue	Event Date:	1/31/12	(inclusive)
City:	Oakland, CA		Sampler:	Gar	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Well ID	MW- 2		Date Monitored:	1/31/12	
Well Diameter	2 in.	Val	·		
Total Depth	16.53 ft.		ame 3/4"= 0.02 for (VF) 4"= 0.66		
Depth to Water	6.81 ft.	Check if water colu	mn is less then 0.50		
					, and
Depth to Water w	v/ 80% Recharge [(Heigh	t of Water Column x 0.20) + DTWI:		:: gal.
		•	· · · · · · · · · · · · · · · · · · ·	Time Started:	(2400 hrs)
Purge Equipment:	<	Sampling Equipment	t:	Time Completed:_ Depth to Product:_	(2400 hrs)
Disposable Bailer		Disposable Bailer		Depth to Water:	
Stainless Steel Bailer		Pressure Bailer		Hydrocarbon Thick	
Stack Pump		Discrete Bailer		Visual Confirmation	
Suction Pump		Peristaltic Pump		Ckimara	ant Sock (circle one)
Grundfos		QED Bladder Pump		Amt Removed from	orit Sock (circle one) n Skimmer: gal
Peristaltic Pump QED Bladder Pump		Other:		Amt Removed from	n Well: gal i
Other:				Water Removed:	
Oute1				Product Transferre	d to:
					
Start Time (purge)		Weather Co	onditions:		
	e: <u>/</u>	Water Colo	r:	Odor: Y / N	
Approx. Flow Rate	e: gpm.	Sediment D	escription:		
Did well de-water?	If yes, Ti			al. DTW @ Sampli	ua.
			X	, , , , , , , , , , , , , , , , , , ,	······
Time (2400 hr.)	Volume (gal.) pH	Conductivity (µmhos/cm µS)	Temperature	D.O.	ORP
(2400 III.)		(µmnos/cm / µS)	(C × F)	(mg/L)	(mV)
· · · · · · · · · · · · · · · · · · ·					
		- /			
		-/			
					
SAMPLE ID	(#) CONTAINER REFRI	G. PRESERV. TYPE			
MW-	x voa vial YES			PH-GRO(8015)/BTEX+	YSES
		1102	LANCASTER II	111-GKO(6013)/BTEX-4	WI DE(020U)
			 		
					
/	/				
<u> </u>		· · · · · · · · · · · · · · · · · · ·	ļ		
			-		
			 		
COMMENTS:	M10				
Add/Replaced Lo					



Client/Facility#:	Chevron #	9-0517		Job Number:	386420	
Site Address:	3900 Piedr	nont Ave	nue	Event Date:	1/31/12	(inclusive)
City:	Oakland, C	A		– Sampler:	Gm	(mordorec)
				<u> </u>		
Well ID	MW-	3		Date Monitored:	1/3/1/12	
Well Diameter	2	in.	Vo	lume 3/4"= 0.0		3"= 0.38
Total Depth	17.70	ft.	The state of the s	ctor (VF) 4"= 0.6		12"= 5.80
Depth to Water		ft. 🔲	Check if water colu	umn is less then 0.50	0 ft.	
	10.03	xVF <u></u>	·13 = 1·3	x3 case volume =	Estimated Purge Volume:_	5.5 gal.
Depth to Water	w/ 80% Rechar	ge [(Height of	f Water Column x 0.20	D) + DTW]: <u>9.67</u>		
Purge Equipment:			Sampling Equipmen	14•	Time Started: Time Completed:	(2400 hrs) (2400 hrs)
Disposable Bailer			Disposable Bailer	 -	Depth to Product:	ft
Stainless Steel Baile	r		Pressure Bailer		Depth to Water:	
Stack Pump			Discrete Bailer		Hydrocarbon Thicknet Visual Confirmation/J	
Suction Pump Grundfos			Peristaltic Pump			
Peristaltic Pump			QED Bladder Pump Other:		Skimmer / Absorbant Amt Removed from S	Sock (circle one) Skimmer:gal
QED Bladder Pump			Outer		Amt Removed from V	Vell:gal
Other:					Water Removed: Product Transferred t	ro:
Start Time (purge): 0840		Weather C	onditions (CLOUDY	
Sample Time/Dat	te: 0910 /	1/31/12		or: SL YELLOW		OBEKATE.
Approx. Flow Rat	e:	gpm.		Description:	51- T	1000-111
Did well de-water	? ~0	lf yes, Time			gal. DTW @ Sampling	: 9.52
Time						
(2400 hr.)	Volume (gal.)	pН	Conductivity (µmhos/cm -	Temperature (C) F)	a sa s	DRP mV)
0843	2	6.69	455	16.1	(3 -)	,
0846	4	6.68	448	16.0		
0820	6	6.62	440	15.8		
			LABORATORY	NEODINATION		
SAMPLE ID	(#) CONTAINER	REFRIG.	LABORATORY I PRESERV. TYPE	LABORATORY	ANALY	SES
MW- 3	💪 x voa via	YES	HCL		TPH-GRO(8015)/BTEX+MT	
		ļ				
		 		+		
					<u> </u>	
		 	 	+		
COMMENTS:						
						
					· · · · · · · · · · · · · · · · · · ·	
Add/Replaced Lo	ock:	ر ا لـ الـ A	Panlass I Div			
· ·uu/i tepiaceu Lt	<u></u>	Aug/	Replaced Plug: _		Add/Replaced Bolt:	



Client/Facility#:	Chevron #9		 	Job Number:	386420	
Site Address:	3900 Piedm	ont Aver	ue	Event Date:	1/31/12	(inclusive)
City:	Oakland, C	4		Sampler:	GM	,
Well ID Well Diameter Total Depth	1: 2 2	<u>n.</u> t.	Volum	Date Monitored: ne 3/4"= 0.6 or (VF) 4"= 0.6		3"= 0.38
Depth to Water	9.24 f		Check if water column	nn is less then 0.5	0 ft.	12"= 5.80
Depth to Water v	w/ 80% Recharg		Vater Column x 0.20)		Estimated Purge Volume:	gal(2400,hrs)
Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump	<u>×</u> _	D P	ampling Equipment: isposable Bailer ressure Bailer iscrete Bailer	<u></u>	Time Completed: Depth to Product: Depth to Water: Hydrocarbon Thickne	(2400 hrs)ftftft
Suction Pump Grundfos Peristaltic Pump		P Q	eristaltic Pump ED Bladder Pump ther:		Visual Confirmation/I Skimmer / Absorbant Amt Removed from S	Sock (circle one) kimmer: gal
QED Bladder Pump Other:					Amt Removed from W Water Removed: Product Transferred to	
Start Time (purge) Sample Time/Dat Approx. Flow Rate Did well de-water	e: 0825 / s		Sediment De	CLEARL escription:	Crouby Odor: Ø/N <u>57</u> NoNE gal. DTW @ Sampling	RONG :_/0.62
Time (2400 hr.) 0950	Volume (gal.)	pH 6.78 6.73 6.70	Conductivity (µmhos/cm -(15)) 47-(467 458	Temperature (8 F) 6.4 16.4		ORP nV)
		L	ABORATORY IN	FORMATION		
SAMPLE ID MW-	(#) CONTAINER (**) X voa vial	REFRIG. YES	PRESERV. TYPE HCL	LANCASTER LANCASTER	ANALYS TPH-GRO(8015)/BTEX+MTI	
COMMENTS:						
Add/Replaced Lo		Add/R	Replaced Plug:		Add/Replaced Bolt:	

Chevron California Region Analysis Request/Chain of Custody



\$13112-83

For Lancaster Laboratories use only

Acct. #: 12099 Sample # 6536723 - 24 Group #:

Group #: 008759

SS#9 0517 G R#386420 Global IE	#T060010	RA MTI F	Proj	ect	#: 61	H-19	95				A	naiy	/803	Red	que	sted	1			128	748	1
Facility #:3900 PIEDMONT AVENUE, OAKLA	ND, CA				Matri	K		ik.	ĸ		P	res	erva	tion	Co	des					rative Co	
Site Address: MTi Chevron PM: G-R, Inc., 6747 Sierrbead Gense		J Kien in CA 94	nen 1568				s			_										H = HCI N = HNO ₃ S = H ₂ SO ₄	T = Thic B = NaC O = Oth	Н
Consultant/Office: <u>Deanna I. Harding</u> (deanna Consultant Prj. Mgr.: 925-551-7555	@grinc.com	m)		1	Potable NPDES		Containers	8260 🔀 8021 🗆		Silica Gel Cleanup										J value repo	owest detec	tion limits
Consultant Phone #:Fax	925-551- #:	-7899 <u></u>				1	5	3 60 2 60	2				Method	Method						possible for 8021 MTBE C	•	ounds
Sampler: G. MEDINA		— [Site]		¥	nmpe	ATBE 8	MOD G	MOD D	58	Oxygenates								☐ Confirm higi ☐ Confirm all i		
Sample Identification Da Colle	cted Coll	ime fill		Soil	Water	ō	Total Number	BTEX + MTBE	TPH 8015 MOD GRO	TPH 8015 MOD DRO	8260 full scan	ŏ	Total Lead	Dissolved Lead						Run o	ry's on high	est hit
		910 X 825 X			7		6	やな	\ \	\dashv	\dashv	7								Comments /	Remarks	
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Turnaround Time Requested (TAT) (please circle)	F	Relinquishe	by:			100					ate	Tir	me	Re	ceiv	ed b	V: 1				Date	Time
STD-TAF 72 hour 48 hour 24 hour 4 day 5 day	R	Relinquising	d by:	1	1	7		-		D	1/12 ate/ 1/12	19 Tir	me 37)	Re	ceiv	ed b		G	or	- 31	JANIX Date	162¢
Data Package Options (please circle if required) EDF/E	DD	Relinquie	d by:	_				_		_	ate	_	<u>3/)</u> ne	Re	ceiv	ed b	y: /				Date	Time
Type VI (Raw Data) Coelt Deliverable not needed WIP (RWQCB)	R U	telinquished	f by	Cony OdEx	percial		er: her_							72	Ceiv	ed b	y:	./	,	Real P	Date	Time
State			Temperature Upon Receipt 1.0 -2. C° Custody Seals Intage? (788) No. 1-12				935															



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 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 107 10969 Trade Center Dr Rancho Cordova CA 95670

February 08, 2012

Project: 90517

Submittal Date: 02/01/2012 Group Number: 1287481 PO Number: 90517 Release Number: MTI State of Sample Origin: CA

FEB 0.9 2012

GETTLER-RYAN INC. GENERAL CONTRACTORS

Client Sample Description

MW-3-W-120131 Grab Water MW-4-W-120131 Grab Water Lancaster Labs (LLI) #

6536723 6536724

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

Attn: Report Contact

COPY TO

Chevron c/o CRA

ELECTRONIC COPY TO

Chevron

Attn: Anna Avina



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

Respectfully Submitted,

Robin C. Runkle Senior Specialist

Pala Cru



Lancaster Laboratories

Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Sample Description: MW-3-W-120131 Grab Water

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

3900 Piedmont-Oakland T0600102248 MW-3

LLI Sample # WW 6536723

LLI Group # 1287481

Account # 12099

Project Name: 90517

Collected: 01/31/2012 09:10 by GM

Chevron c/o CRA

Suite 107

Submitted: 02/01/2012 09:35 Reported: 02/08/2012 18:18

10969 Trade Center Dr Rancho Cordova CA 95670

05173

CAT No.	Analysis Name	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	0.9	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	0.9	0.5	1
GC Vol	atiles SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	720	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
10943	BTEX/MTBE 8260 Water	SW-846 8260B	1	P120372AA	02/06/2012 13:34	Anita M Dale	1
	GC/MS VOA Water Prep	SW-846 5030B	1	P120372AA	02/06/2012 13:34	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12032A07A	02/02/2012 18:30	Catherine J	1
01146	GG WOL Water Day					Schwarz	
01146	GC VOA Water Prep	SW-846 5030B	1	12032A07A	02/02/2012 18:30	Catherine J	1
						Schwarz	



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Page 1 of 1

Sample Description: MW-4-W-120131 Grab Water

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

3900 Piedmont-Oakland T0600102248 MW-4

LLI Group # 1287481

LLI Sample # WW 6536724

Account

12099

Project Name: 90517

Collected: 01/31/2012 08:25

by GM

Chevron c/o CRA

Suite 107

Submitted: 02/01/2012 09:35

10969 Trade Center Dr Rancho Cordova CA 95670

Reported: 02/08/2012 18:18

05174

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles SW-846	8260B	ug/1	ug/1	
10943	Benzene	71-43-2	110	0.5	1
10943	Ethylbenzene	100-41-4	7	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	1	0.5	1
10943	Toluene	108-88-3	32	0.5	1
10943	Xylene (Total)	1330-20-7	34	0.5	1
GC Vol	atiles SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	6,700	250	5

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
10943	BTEX/MTBE 8260 Water	SW-846 8260B	1	P120372AA	02/06/2012 10:20	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P120372AA	02/06/2012 10:20	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	2	12032A07A	02/02/2012 20:44	Catherine J	5
						Schwarz	
01146	GC VOA Water Prep	SW-846 5030B	1	12032A07A	02/02/2012 20:44	Catherine J	5
						Schwarz	

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Quality Control Summary

Client Name: Chevron c/o CRA Reported: 02/08/12 at 06:18 PM

Group Number: 1287481

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report <u>Units</u>	LCS %REC	LCSD <u>%REC</u>	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: P120372AA	Sample num							
Benzene	N.D.	0.5	ug/l	96		79-120		
Ethylbenzene	N.D.	0.5	ug/l	97		79-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	97		76-120		
Toluene	N.D.	0.5	ug/l	96		79-120		
Xylene (Total)	N.D.	0.5	ug/l	97		80-120		
Batch number: 12032A07A	Sample numi	ber(s): 653	6723-6536	724				
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	118	109	75-135	8	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 %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD
Batch number: P120372AA Benzene Ethylbenzene Methyl Tertiary Butyl Ether Toluene Xylene (Total)	Sample 102 (2) 100 93 99 100	number(s) 97 (2) 102 95 99 101	: 6536723 80-126 71-134 72-126 80-125 79-125	-65367 1 2 1 0	24 UNSP 30 30 30 30 30 30	K: 6536724			

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: P120372AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
6536723	103	101	98	100	
6536724	101	97	98	103	
Blank	104	99	97	97	
LCS	102	101	99	101	
MS	101	102	97	105	
MSD	101	99	99	103	

*- 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: 1287481

Reported: 02/08/12 at 06:18 PM

Limits:

63-135

Surrogate Quality Control

Limits: 80-116 80-113 77-113 78-113 Analysis Name: TPH-GRO N. CA water C6-C12 Batch number: 12032A07ATrifluorotoluene-F 6536723 130 6536724 132 Blank 107 LCS 120 LCSD

*- 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	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	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	Ě	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
μg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	Ĺ	liter(s)
m3	cubic meter(s)	μL	microliter(s)
		pg/L	picogram/liter
_	lose than. The number fellowing the		

- 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.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers Inorganic Qualifiers

Α	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
В	Analyte was also detected in the blank	Ε	Estimated due to interference
С	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
Р	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.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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