

RECEIVED

9:04 am, Dec 06, 2010

Alameda County Environmental Health **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

December 1, 2010

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

Re: Chevron Facility #_9-2029____

Address: 890 West MacArthur Boulevard, Oakland, California_

I have reviewed the attached report titled <u>Second Semi-Annual 2010 Groundwater Monitoring</u> <u>Report</u>_____ and dated <u>December 1, 2010</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



10969 Trade Center Drive Rancho Cordova, California 95670 Telephone: (916) 889-8900 Fax: (916) 889-8999 www.CRAworld.com

December 1, 2010

Reference No. 611974

Mr. Mark Detterman, P.G., C.E.G. 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 9-2029 890 West MacArthur Boulevard Oakland, California LOP Case #RO0002438

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 November 19, 2010) presents the results of the sampling of wells MW-5 through MW-8 during fourth quarter 2010. Wells MW-5 through MW-8 are sampled on a semi-annual basis during the second and fourth quarters. Also attached are Figure 1 (Vicinity Map) showing the site location, and Figure 2 (Concentration Map) presenting the fourth quarter 2010 analytical results along with a rose diagram. The monitoring results during 2010 are discussed below.

During 2010, elevated concentrations of total petroleum hydrocarbons as gasoline (TPHg) (ranging from 3,500 to 13,000 micrograms per liter [μ g/L]) were detected in wells MW-5 and MW-6 just downgradient of the site. Low concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) (up to 13 μ g/L), and methyl tertiary butyl ether (MTBE) (0.9 μ g/L) were also detected in MW-5. Higher concentrations of benzene (110 μ g/L and 1,100 μ g/L) and MTBE (9 μ g/L and 160 μ g/L) were detected in MW-6; along with higher concentrations of toluene (up to 8 μ g/L), ethylbenzene (up to 670 μ g/L) and xylenes (up to 58 μ g/L). The detected concentrations of TPHg (4,000 μ g/L and 5,700 μ g/L) and benzene (190 μ g/L and 150 μ g/L) were also detected in downgradient well MW-7 during 2010; low concentrations of toluene (0.7 μ g/L during the fourth quarter event), ethylbenzene (up to 270 μ g/L), xylenes (up to 7 μ g/L) and MTBE (up to 6 μ g/L) were also detected. The detected concentrations were generally within the range of historical functions were generally within the range of the store of the store of the fourth quarter event), ethylbenzene (up to 270 μ g/L), xylenes (up to 7 μ g/L) and MTBE (up to 6 μ g/L) were also detected. The detected concentrations were generally within the range of historical fluctuations in this well since it was installed.

Equal Employment Opportunity Employer



December 1, 2010

Reference No. 611974

Low concentrations of tertiary butyl alcohol (TBA) were detected in MW-6 (up to 98 μ g/L) and MW-7 (up to 6 μ g/L) during 2010; and low concentrations of tertiary amyl methyl ether (TAME) (3 μ g/L during the fourth quarter event) were detected in MW-6. Other fuel oxygenates (except MTBE) were not detected. As TBA is a breakdown product of MTBE, the TBA detections may indicate natural biodegradation of MTBE in the subsurface.

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Based on the analytical results, impacted groundwater is present downgradient of the site in the area of wells MW-5, MW-6, and MW-7. The concentrations detected in these wells during 2010 were generally within the range of historical fluctuations; however, concentrations of certain constituents, including MTBE, have decreased. CRA recommends continued monitoring to further evaluate groundwater quality and concentration trends.

Based on the monitoring results in furthest downgradient well MW-7, additional investigation to further evaluate the extent of impacted groundwater is planned. CRA previously submitted the August 25, 2009 *Work Plan for Additional Investigation* (work plan) that proposed the drilling of two additional borings downgradient of MW-7. After further review of the data and site conditions, alternative boring locations (Figure 2) were proposed in an e-mail to ACEH on February 25, 2010. As a response has not been received to date, and since at least 60 days has passed since submittal of the work plan, we intend to proceed with the work as proposed. The work will be performed in general accordance with these documents and we will keep ACEH apprised of the status.



December 1, 2010

James P. Kiernan, P.E.

Reference No. 611974

Please contact Mr. James Kiernan at (916) 889-8917 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Christopher J. Benedict

CB/jm/10 Encl.

Figure 1	Vicinity Map
Figure 2	Concentration Map – November 3, 2010

Groundwater Monitoring and Sampling Report Attachment A

Ms. Stacie Frerichs, Chevron (electronic copy) cc: Mr. Stephen O'Kane



3

FIGURES

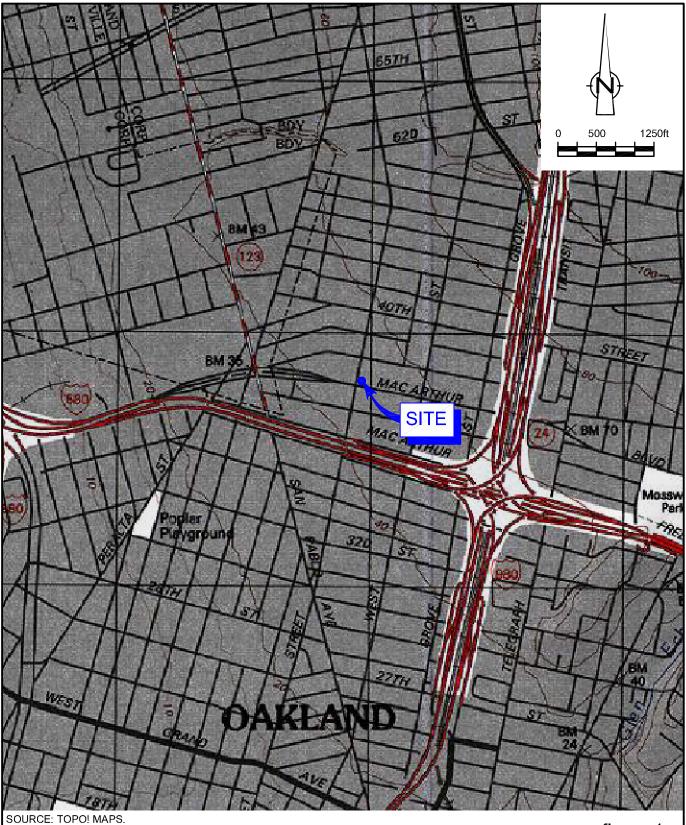


figure 1

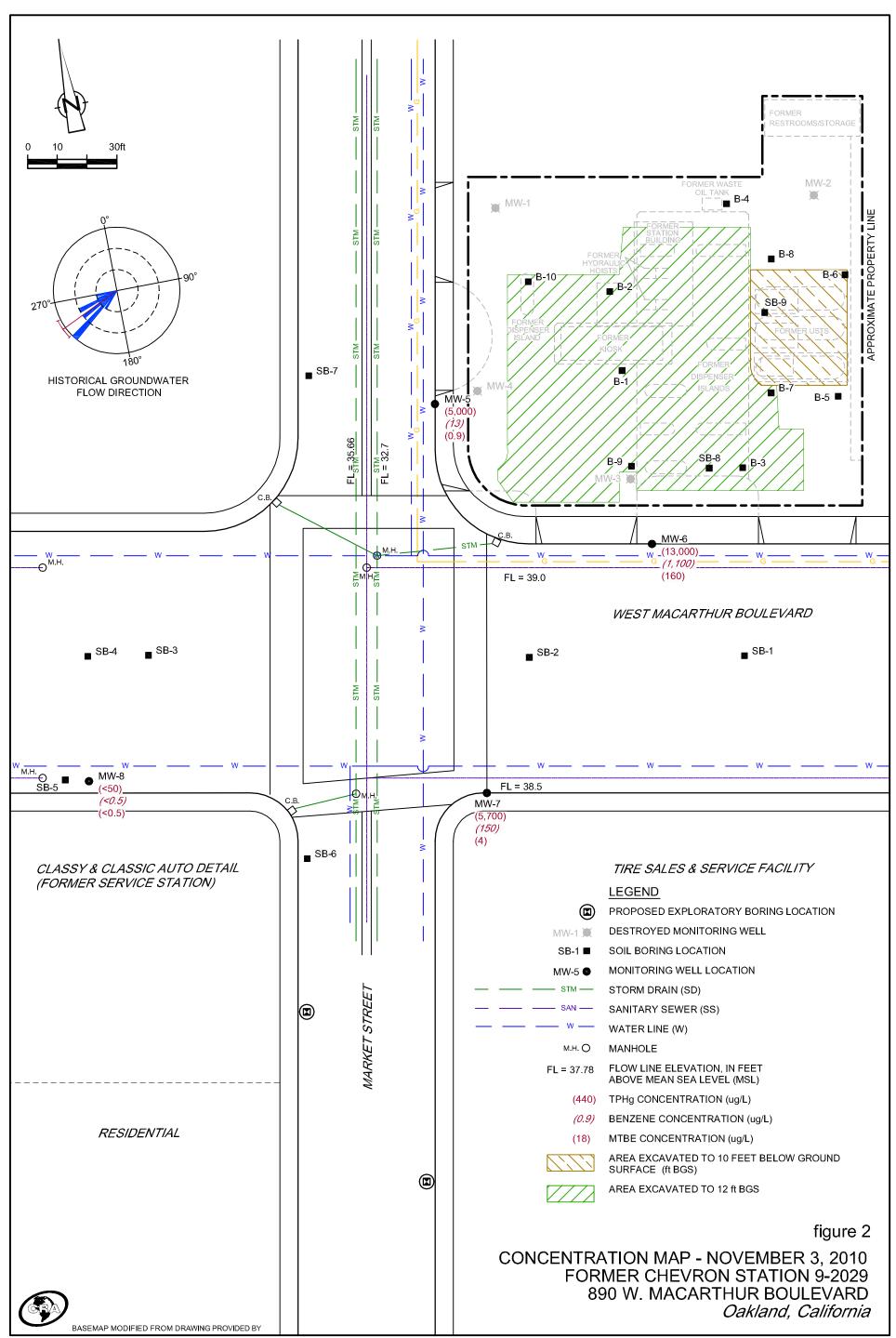
VICINITY MAP

Oakland, California

CHEVRON SERVICE STATION 9-2029 890 WEST MACARTHUR BOULEVARD



611974-199(010)GN-WA001 NOV 24/2010



611974-199(010)GN-WA002 NOV 24/2010

ATTACHMENT A

GROUNDWATER MONITORING AND SAMPLING REPORT



TRANSMITTAL

November 22, 2010 G-R #386911

- TO: Mr. James Kiernan Conestoga-Rovers & Associates 10969 Trade Center Drive, 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 #9-2029 (MTI) 890 West MacArthur Blvd. Oakland, California RO 0002438

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	November 19, 2010	Groundwater Monitoring and Sampling Report Second Semi–Annual Event of November 3, 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 Hartung-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 *December 6, 2010* at which time the 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-CRA UPLOAD TO ALAMEDA CO.)

Enclosures

trans/9-2029-SHF



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 22, 2010 (date)

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

Re: Chevron Facility # 9-2029

Address: 890 West MacArthur Boulevard, Oakland, California

have reviewed the attached routine groundwater monitoring report dated November 22, 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 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,

Hfrencho

Stacie H. Frerichs Project Manager

Enclosure: Report

WELL CONDITION STATUS SHEET

Client/Facility #:	Chevron	n #9-2029					Job #	386911			
Site Address:	890 Wes	t Macarth	nur Blvd.		10.770		Event Date:		11.3	10	
City:	Oakland	, CA					Sampler:	<u> </u>	Fr		
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 (1)		WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Yes /No
MW-5	DK	<i>~</i>					~>	1	1	Monuison/6"/2	
MW-b	OK	-					->				
MW-6 MW-7	OK						->				
MW-8	OK	·					->		4	* *	
Comments	Inte	alled	ment	well l	id on	MW-	P				



November 19, 2010 G-R Job #386911

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

RE: Second Semi-Annual Event of November 3, 2010 Groundwater Monitoring & Sampling Report Former Chevron Service Station #9-2029 890 West MacArthur Boulevard 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.

OUG

No. 6882

CAL

Sincerely,

Deanna L. Harding

Project Coordinator

Douglas V. Lee Senior Geologist, P.G. No. 6882

Figure 1:Potentiometric MapTable 1:Groundwater Monitoring Data and Analytical ResultsTable 2:Groundwater Analytical Results - Oxygenate CompoundsAttachments:Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports

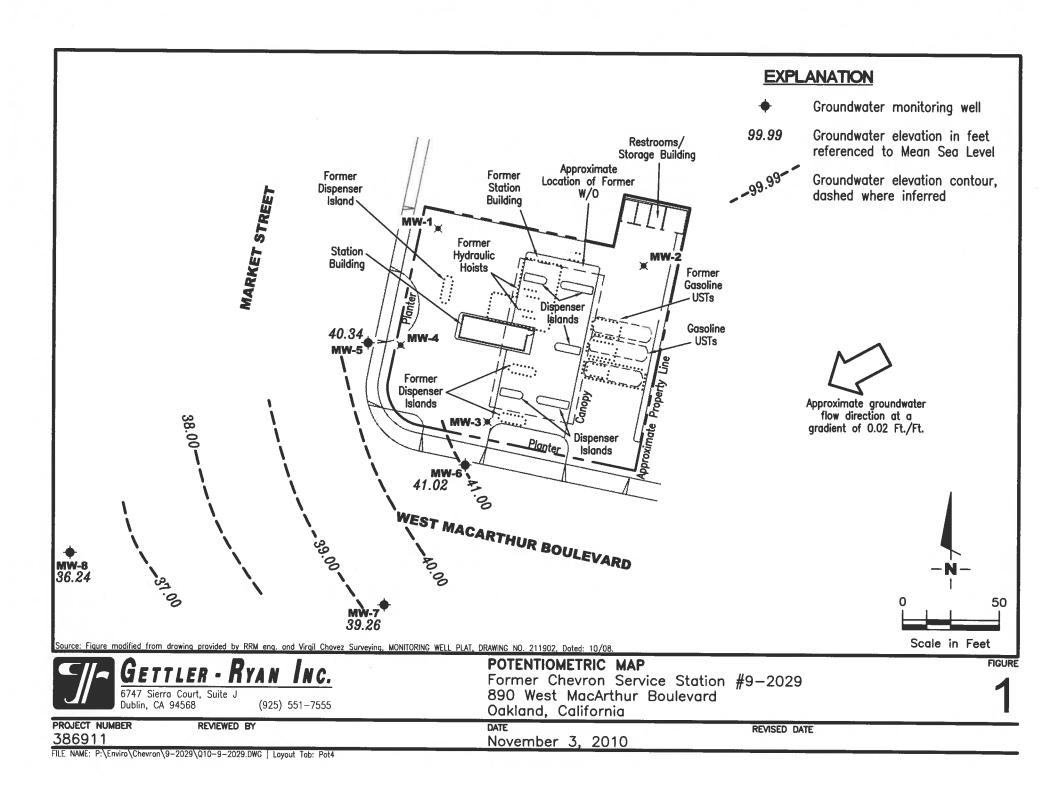


Table 1 Groundwater Monitoring Data and Analytical Results Former Chevron Service Station #9-2029 890 West MacArthur Blvd. Oakland California

			1978.		Oakland, California	1			
WELL ID/	тос*	DTW	GWE	TPH-GRO	В	r	E	x	MTBE
DATE	(f1.)	(ft.)	(msl)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-5									
08/22/08 ¹	49.39	9.97	39.42						
08/27/08 ³	49.39	10.03	39.36	54	0.5	0.8	<0.5	0.7	
11/21/08 ³	49.39	8.42	40.97	6,000	93	6	37	6	10 8
02/13/09 ³	49.39	7.11	42.28	5,100	31	5	20	3	6 6
05/08/09 ³	49.39	7.21	42.18	3,600	18	4	14	2	2
08/07/09 ³	49.39	9.60	39.79	520	0.7	<0.5	< 0.5	<0.5	2
11/05/09 ³	49.39	7.08	42.31	7,400	16	5	18	4	0.9
05/06/10 ³	49.39	6.08	43.31	3,500	4	2	3	0.9	0.9
11/03/10 ⁵	49.39	9.05	40.34	5,000	13	4	8	3	0.9 0.9
				-,		•	0	5	0.9
MW-6									
08/22/08 ¹	49.07	8.98	40.09						
08/27/08 ³	49.07	8.98	40.09	6,000	990	4	350	530	440
11/21/08 ³	49.07	8.12	40.95	14,000	1,000	15	1,300	550	300
02/13/09 ³	49.07	5.84	43.23	9,700	630	4	510	36	180
05/08/09 ³	49.07	5.77	43.30	7,600	240	4	470	67	38
08/07/09 ³	49.07	8.49	40.58	14,000	1,500	12	1,400	180	330
11/05/09 ³	49.07	6.72	42.35	22,000	870	8	1,300	130	160
05/06/10 ³	49.07	4.89	44.18	5,200	110	2	160	23	9
11/03/10 ⁵	49.07	8.05	41.02	13,000	1,100	8	670	58	160
MW- 7									
	40 74	10.20	20.54						
08/22/08 ¹	48.74 48.74	10.20	38.54						
08/27/08 ³		10.19	38.55	<50	<0.5	0.6	<0.5	0.7	6
11/21/08 ³	48.74	9.51	39.23	1,100	80	<0.5	65	0.7	6
02/13/09 ³	48.74	7.95	40.79	630	30	<0.5	38	0.9	7
05/08/09 ³	48.74	8.04	40.70	1,200	83	<0.5	190	2	8
08/07/09 ³	48.74	9.88	38.86	8,900	240	0.7	770	5	5
$11/05/09^3$	48.74	9.03	39.71	12,000	630	<1	1,300	420	5
05/06/10 ³	48.74	7.88	40.86	4,000	190	<0.5	270	7	6
11/03/10 ⁵	48.74	9.48	39.26	5,700	150	0.7	45	2	4

1

Table 1 Groundwater Monitoring Data and Analytical Results Former Chevron Service Station #9-2029

890 West MacArthur Blvd. Oakland, California

					Oakland, California				
WELL ID/	TOC*	DTW	GWE	TPH-GRO	В	Т	E	x	MTBE
DATE	(fi.)	(ft.)	(msl)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-8								1.122	
08/22/08 ¹	47.61	12.41	35.20						
08/27/08 ³	47.61	12.42	35.19	<50	<0.5	0.7	<0.5	0.6	<0.5
11/21/08 ³	47.61	11.42	36.19	<50	<0.5	<0.5	<0.5	< 0.5	<0.5
02/13/09 ³	47.61	8.87	38.74	<50	<0.5	<0.5	<0.5	<0.5	<0.5
05/08/09 ³	47.61	10.79	36.82	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/07/09 ³	47.61	12.33	35.28	<50	<0.5	<0.5	<0.5	<0.5	<0.5
11/05/09 ³	47.61	11.23	36.38	<50	<0.5	<0.5	<0.5	<0.5	<0.5
05/06/10 ³	47.61	10.28	37.33	<50	<0.5	<0.5	<0.5	<0.5	<0.5
11/03/105	47.61	11.37	36.24	<50	<0.5	<0.5	<0.5	<0.5	< 0.5
						UL.		-0.0	~0.5
MW-1									
03/12/02 ¹	50.71	6.50	44.21	<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5/<2 ²
06/07/02	50.71	8.69	42.02	<50	< 0.50	< 0.50	<0.50	<1.5	<2.5/<2 ²
09/13/02	50.71	9.28	41.43	<50	< 0.50	< 0.50	<0.50	<1.5	$<2.5/<2^{2}$
12/13/02	50.71	8.48	42.23	<50	< 0.50	<0.50	< 0.50	<1.5	<2.5/<2 ²
03/01/03	50.71	7.34	43.37	<50	< 0.50	< 0.50	<0.50	<1.5	<2.5/<0.5 ²
$06/27/03^3$	50.71	9.29	41.42	<50	<0.5	0.6	<0.5	<0.5	<0.5
09/30/03 ³	50.71	10.17	40.54	<50	<0.5	0.6	<0.5	<0.5	<0.5
12/03/03 ³	50.71	7.82	42.89	<50	<0.5	< 0.5	<0.5	<0.5	<0.5
03/10/04 ³	50.71	6.57	44.14	<50	<0.5	<0.5	<0.5	<0.5	<0.5
06/30/04 ³	50.71	9.78	40.93	<50	<0.5	<0.5	<0.5	<0.5	<0.5
09/30/04 ³	50.71	9.91	40.80	<50	<0.5	<0.5	<0.5	<0.5	< 0.5
12/29/04 ³	50.71	2.90	47.81	<50	< 0.5	<0.5	<0.5	<0.5	< 0.5
03/23/05 ³	50.71	2.90	47.81	<50	<0.5	< 0.5	<0.5	<0.5	<0.5
06/22/05 ³	50.71	8.59	42.12	<50	< 0.5	<0.5	<0.5	<0.5	<0.5
09/02/05 ³	50.71	9.38	41.33	<50	<0.5	<0.5	<0.5	<0.5	<0.5
12/02/05	50.71	8.44	42.27						
03/20/06	50.71	3.05	47.66					() ()	
06/01/06	50.71	6.77	43.94						
09/11/06	50.71	9.18	41.53		3 44				
DESTROYED									

2

Table 1 Groundwater Monitoring Data and Analytical Results Former Chevron Service Station #9-2029 890 West MacArthur Blvd.

Oakland, California

WELL ID/	ТОС*	DTW	GWE	TPH-GRO	В	T	E	x	MTBE
DATE	(ft.)	(ft.)	(msl)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-2									
03/12/02 ¹	52.57	6.09	46.48	<50	<0.50	<0.50	< 0.50	<1.5	-2 E 122
06/07/02	52.57	8.65	43.92	<50	<0.50	<0.50	<0.50	<1.5	$< 2.5/3^2$
09/13/02	52.57	9.58	42.99	<50	<0.50	<0.50	<0.50	<1.5	<2.5/<2 ² <2.5/<2 ²
12/13/02	52.57	8.50	44.07	<50	<0.50	<0.50	<0.50	<1.5	$<2.5/<2^{2}$ $<2.5/<2^{2}$
03/01/03	52.57	7.00	45.57	<50	<0.50	<0.50	<0.50	<1.5	<2.5/<2 <2.5/<0.5 ²
06/27/03 ³	52.57	9.59	42.98	<50	<0.5	<0.5	<0.5	<0.5	<2.5/<0.5 <0.5
09/30/03 ³	52.57	10.64	41.93	<50	<0.5	<0.5	<0.5	<0.5	0.7
12/03/03 ³	52.57	7.54	45.03	<50	<0.5	<0.5	<0.5	<0.5	<0.5
03/10/04 ³	52.57	6.05	46.52	<50	<0.5	<0.5	<0.5	<0.5	<0.5
06/30/04 ³	52.57	10.15	42.42	<50	<0.5	<0.5	<0.5	<0.5	<0.5
09/30/04 ³	52.57	10.14	42.43	<50	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5
12/29/043	52.57	2.29	50.28	<50	<0.5	<0.5	<0.5	<0.5	<0.5
03/23/053	52.57	2.44	50.13	<50	<0.5	<0.5	<0.5	<0.5	<0.5
06/22/05 ³	52.57	8.99	43.58	<50	<0.5	<0.5	<0.5	<0.5	<0.5
09/02/05 ³	52.57	10.17	42.40	<50	<0.5	<0.5	<0.5	<0.5	<0.5
12/02/05	52.57	8.99	43.58	585 7 <u>44</u> 9				-0.5	
03/20/06	52.57	2.70	49.87		22104				
06/01/06	51.57	6.51	45.06	()					
09/11/06	51.57	10.06	41.51	S 0					
DESTROYED									1
MW-3									
03/12/021	50.31	6.50	43.81	12,000	600	8.5	1,100	370	700/0502
06/07/02	50.31	7.74	42.57	14,000	630	8.8	1,200	160	700/650 ² 520/490 ²
09/13/02	50.31	9.73	40.58	3,000	270	3.2	200	11	520/490 ⁻ 600/640 ²
12/13/02	50.31	8.60	41.71	24,000	1,100	14	2,400	220	650/540 ²
03/01/03	50.31	6.75	43.56	16,000	500	9.0	1,200	130	460/330 ²
$06/27/03^3$	50.31	9.25	41.06	9,500	390	6	450	30	400/330
09/30/03 ³	50.31	10.31	40.00	2,000	110	1	100	3	710
12/03/03 ³	50.31	8.18	42.13	19,000	970	8	2,100	85	420
03/10/04 ³	50.31	6.10	44.21	15,000	550	6	960	95	220
06/30/04 ³	50.31	9.80	40.51	3,200	150	1	100	3	660
09/30/04 ³	50.31	10.18	40.13	1,900	66	0.8	84	4	690
12/29/043	50.31	4.58	45.73	16,000	470	7	820	47	170
03/23/05 ³	50.31	5.07	45.24	18,000	380	6	960	58	140
06/22/05 ³	50.31	8.12	42.19	16,000	700	6	950	62	300

Table 1 Groundwater Monitoring Data and Analytical Results Former Chevron Service Station #9-2029 890 West MacArthur Blvd. Oakland, California

WELL ID/	TOC*	DTW	GWE	TPH-GRO	В	T	E	x	MTBE
DATE	(fi.)	(ft.)	(msl)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
fW-3 (cont)									
9/02/05 ³	50.31	9.41	40.90	8,400	380	4	510		110
2/02/053	50.31	7.97	42.34	16,000	490	6	1,200	41 32	440
03/20/06 ³	50.31	5.32	44.99	4,200	79	0.8	2	10	170
06/01/06 ³	50.31	7.07	43.24	5,400	67	1	26		34
$9/11/06^3$	50.31	9.07	41.24	14,000	270	5	240	3 38	28 97
DESTROYED				1,000	270	5	240	30	97
AW-4									
3/12/021	49.93	5.34	44.59	9,700	360	5.3	1,100	150	170/170 ²
6/07/02	49.93	8.52	41.41	7,300	170	2.7	280	21	200/120 ²
9/13/02	49.93	9.86	40.07	5,800	92	4.5	80	14	190/160 ²
2/13/02	49.93	9.42	40.51	10,000	250	2.2	330	19	190/180 170/200 ²
3/01/03	49.93	7.33	42.60	12,000	300	4.6	900	110	160/100 ²
6/27/03 ³	49.93	9.62	40.31	7,500	110	2	200	58	130
9/30/03 ³	49.93	11.13	38.80	3,600	18	<1	16	7	520
2/03/03 ³	49.93	7.80	42.13	16,000	1,000	6	720	52	73
3/10/043	49.93	6.69	43.24	2,200	230	3	610	71	55
6/30/04 ³	49.93	10.33	39.60	7,700	59	<1	78	17	110
9/30/04 ³	49.93	10.75	39.18	4,800	100	1	33	10	400
2/29/04 ³	49.93	3.34	46.59	13,000	250	3	480	27	42
3/23/05 ³	49.93	4.24	45.69	12,000	130	2	280	16	24
$6/22/05^{3}$	49.93	7.95	41.98	6,400	290	2	11	11	18
9/02/05 ³	49.93	9.46	40.47	3,700	180	1	13	7	18
$2/02/05^{3}$	49.93	7.60	42.33	11,000	840	5	480	24	34
3/20/06 ³	49.93	4.50	45.43	790	14	<0.5	1	0.6	2
6/01/06 ³	49.93	7.30	42.63	5,100	48	0.8	42	4	2
9/11/06 ³ DESTROYED	49.93	9.38	40.55	6,700	64	3	44	3	4
RIP BLANK									
3/12/02				<50	<0.50	<0.50	<0.50	<1.5	<2.5
6/07/02				<50	<0.50	<0.50	<0.50	<1.5	<2.5
9/13/02			0.440	<50	<0.50	< 0.50	<0.50	<1.5	<2.5
2/13/02				<50	<0.50	<0.50	<0.50	<1.5	<2.5
9-2029.xls/#38	6911				4				As of 11/03/1

Table 1 Groundwater Monitoring Data and Analytical Results Former Chevron Service Station #9-2029 890 West MacArthur Blvd.

Oakland, California

WELL ID/	TOC*	DTW	GWE	TPH-GRO	В	Т	E	x	MTBE
DATE	(ft.)	(ft.)	(msl)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
QA (cont)									1.00 ····
03/01/03		-		<50	<0.50	<0.50	<0.50	<1.5	<2.5
06/27/03 ³				<50	<0.5	<0.5	<0.5	<0.5	< 0.5
9/30/03 ³	0.555			<50	<0.5	<0.5	<0.5	<0.5	<0.5
2/03/033				<50	<0.5	<0.5	<0.5	<0.5	<0.5
3/10/04 ³		22	(144)	<50	<0.5	<0.5	<0.5	<0.5	<0.5
6/30/04 ³				<50	<0.5	<0.5	<0.5	<0.5	<0.5
9/30/04 ³	10000		0.000	<50	<0.5	<0.7	<0.8	<0.8	<0.5
2/29/04 ³				<50	<0.5	<0.5	<0.5	<0.5	<0.5
3/23/05 ³	3			<50	<0.5	<0.5	<0.5	<0.5	<0.5
6/22/053				<50	<0.5	<0.5	<0.5	<0.5	<0.5
9/02/05 ³				<50	<0.5	14	<0.5	14	<0.5
2/02/05 ³			3. 3	<50	<0.5	<0.5	<0.5	<0.5	<0.5
3/20/063	2		6 <u>210</u> 00	<50	<0.5	<0.5	<0.5	<0.5	<0.5
6/01/06 ³			233	<50	<0.5	<0.5	<0.5	<0.5	<0.5
9/11/06 ³				<50	<0.5	<0.5	<0.5	<0.5	<0.5
8/27/08 ³				<50	<0.5	<0.5	<0.5	<0.5	<0.5
1/21/085				<50	<0.5	<0.5	<0.5	<0.5	
2/13/09 ⁵			1000	<50	<0.5	<0.5	<0.5	<0.5	
5/08/09 ⁵	3 55 0			<50	<0.5	<0.5	<0.5	<0.5	
8/07/095	5 (5	0 0		<50	<0.5	<0.5	<0.5	<0.5	
ISCONTINUE	D							5.0	

EXPLANATIONS:

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

* TOC elevations were surveyed on October 1, 2008, by CRA. The benchmark for this survey was a USGS bronze disk located near the north end of the curb return at the Northwest corner of 38th Street and Broadway, (Benchmark Elevation = 85.41 feet, NGVD29).

TOC elevations were surveyed on March 14, 2002, by Virgil Chavez Land Surveying. The benchmark for this survey was a USGS bronze disk located near the north end of the curb return at the Northwest corner of 38th Street and Broadway, (Benchmark Elevation = 85.41 feet, NGVD29).

¹ Well development performed.

² MTBE by EPA Method 8260.

³ BTEX and MTBE by EPA Method 8260.

⁴ Analytical result confirmed.

⁵ BTEX by EPA Method 8260.

Table 2 Groundwater Analytical Results - Oxygenate Compounds Former Chevron Service Station #9-2029 890 West MacArthur Blvd.

Oakland, California

				and the second se	kland, California				
WELL ID	DATE	ETHANOL	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB
	000000000000000	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(pg/L)	(µg/L)	(µg/L)	(µg/L)
MW-5	08/27/08		2	10	<0.5	<0.5	<0.5		
	11/21/08		4	8	<0.5	<0.5	<0.5		
	02/13/09		3	6	<0.5	<0.5	<0.5		
	05/08/09		7	2	<0.5	<0.5	<0.5		
	08/07/09		<2	2	<0.5	<0.5	<0.5	-	
	11/05/09		2	0.9	<0.5	<0.5	<0.5		
	05/06/10		<2	0.9	<0.5	<0.5	<0.5		
	11/03/10		<2	0.9	<0.5	<0.5	<0.5		.
MW-6	08/27/08		200	440	-0.5				
v1 vv -0	11/21/08		390 320	440	<0.5	<0.5	6		
	02/13/09	20 00 -0	320	300	<13	<13	<13		
	02/13/09 05/08/09		100	180	<1	<1	4	77 .	
	03/08/09		16	38	<0.5	<0.5	0.9		
			190	330	<3	<3	5		
	11/05/09	0 00 0	86	160	<1	<1	4		
	05/06/10		2	9	<0.5	<0.5	<0.5		
	11/03/10	-	98	160	<3	<3	3		())
MW- 7	08/27/08		<2	6	<0.5	<0.5	<0.5		
	11/21/08	3 4-1 33	5	6	<0.5	<0.5	<0.5	-	
	02/13/09		<2	7	<0.5	<0.5	<0.5		
	05/08/09	3 	<2	8	<0.5	<0.5	<0.5		
	08/07/09		4	5	<0.5	<0.5	<0.5		
	11/05/09	1 01	9	5	<1	<1	<1		
	05/06/10		3	6	<0.5	<0.5	<0.5		
	11/03/10		6	4	<0.5	<0.5	<0.5	-	
MW-8	08/27/08		<2	<0.5	<0.5	<0.5	<0.5		
	11/21/08		<2	<0.5	<0.5	<0.5	<0.5		
	02/13/09		<2	<0.5	<0.5		<0.5		
	05/08/09		<2	<0.5	<0.5	<0.5	<0.5		
						<0.5	<0.5		
	08/07/09		<2	<0.5	<0.5	<0.5	<0.5		

Table 2
Groundwater Analytical Results - Oxygenate Compounds
Former Chevron Service Station #9-2029
890 West MacArthur Blvd.

Oakland, California		
	Oakland	California

WELL ID	DATE	ETHANOL	ТВА	MTBE	kland, California				
· · ·	1 , 1.	LIHANOL (µg/L)	1 DA (μg/L)		DIPE	ETBE	TAME	1,2-DCA	EDB
************		(PB'L)	11.	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-8 (cont)	11/05/09		<2	<0.5	<0.5	<0.5	<0.5		
	05/06/10		<2	<0.5	<0.5	<0.5	<0.5		
	11/03/10	2.5	<2	<0.5	<0.5	<0.5	<0.5	-	-
MW-1	03/12/02		<100	<2	<2	<2	<2	<2	<2
	06/07/02		<100	<2	<2	<2	<2	<2	<2
	09/13/02		<100	<2	<2	<2	<2	<2	<2
	12/13/02	51 1	<100	<2	<2	<2	<2	<2	<2
	03/01/03		<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	06/27/03		<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	09/30/03	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5
	12/03/03	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	03/10/04	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	06/30/04	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	09/30/04	<50	<5	<0.5	<0.5	<0.5	<0.5	< 0.5	< 0.5
	12/31/04	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	03/23/05	<50	<5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5
	06/22/05	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	09/02/05	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	DESTROYED								
MW-2	03/12/02		<100	3	<2	<2	<2	<2	<2
	06/07/02		<100	<2	<2	<2	<2	<2	<2
	09/13/02		<100	<2	<2	<2	<2	<2	<2
	12/13/02		<100	<2	<2	<2	<2	<2	<2
	03/01/03		<5	<0.5	< 0.5	<0.5	<0.5	<0.5	<0.5
	06/27/03		<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	09/30/03	<50	<5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5
	12/03/03	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	03/10/04	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	06/30/04	<50	<5	<0.5	< 0.5	<0.5	<0.5	<0.5	< 0.5
	09/30/04	<50	<5	<0.5	< 0.5	<0.5	<0.5	<0.5	<0.5
	12/31/04	<50	<5	<0.5	< 0.5	<0.5	<0.5	<0.5	<0.5
	03/23/05	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 2
Groundwater Analytical Results - Oxygenate Compounds
Former Chevron Service Station #9-2029

890 West MacArthur Blvd.

					kland, California				
WELL ID	DATE	ETHANOL	ТВА	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-2 (cont)	06/22/05	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	09/02/05	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	DESTROYED								-0.5
MW-3	03/12/02		<100	(20)					
VI W-5	06/07/02		<100	650	<2	<2	18	<2	<2
			230	490	<5.0	<5.0	11	<5.0	<5.0
	09/13/02		170	640	<2	<2	8	<2	<2
	12/13/02	9 77.5	240	540	<2	<2	29	31	<2
	03/01/03	(1 -1)	160	330	<0.5	<0.5	10	<0.5	<0.5
	06/27/03	1 1	200	470	<0.5	<0.5	11	<0.5	<0.5
	09/30/03	<50	120	710	<0.5	<0.5	6	0.7	<0.5
	12/03/03	<250	200	420	<3	<3	14	<3	<3
	03/10/04	<50	140	220	<0.5	<0.5	5	<0.5	<0.5
	06/30/04	<50	100	660	<0.5	<0.5	5	<0.5	<0.5
	09/30/04	<50	72	690	<0.5	< 0.5	4	0.5	<0.5
	12/31/04	<50	77	170	<0.5	<0.5	5	<0.5	<0.5
	03/23/05	<50	<5	140	<0.5	<0.5	4	<0.5	3
	06/22/05	<250	150	300	<3	<3	6	<3	<3
	09/02/05	<100	99	440	<1	<1	<1	<1	<1
	12/02/05	<100	66	170	<1	<1	5	<1	<1
	03/20/06	<50	14	34	<0.5	<0.5	<0.5	<0.5	<0.5
	06/01/06	<50	12	28	<0.5	<0.5	0.8	<0.5	<0.5
	09/11/06	<50	47	97	<0.5	<0.5	2	<0.5	<0.5
	DESTROYED						-	-0.5	-0.5
MW-4	03/12/02		<100	170					1.00.00
	06/07/02		<100	120	<2	<2	13	<2	<2
	09/13/02		<100 <100		<2	<2	14	<2	<2
	12/13/02			160	<2	<2	14	<2	<2
			<100	200	<2	<2	17	<2	<2
	03/01/03		19	100	<0.5	<0.5	8	<0.5	<0.5
	06/27/03		22	130	<0.5	<0.5	11	<0.5	<0.5
	09/30/03	<100	<10	520	<1	<1	9	<1	<1
	12/03/03	<50	18	73	<0.5	<0.5	5	<0.5	<0.5
	03/10/04	<50	11	55	<0.5	<0.5	4	<0.5	<0.5
	06/30/04	<100	<10	110	<1	<1	6	<1	<1
	09/30/04	<50	17	400	<0.5	<0.5	7	<0.5	<0.5
	12/31/04	<50	11	42	<0.5	<0.5	2	<0.5	<0.5

Table 2

Groundwater Analytical Results - Oxygenate Compounds Former Chevron Service Station #9-2029

890 West MacArthur Blvd.

WELL ID	DATE	ETHANOL	ТВА	мтве	DIPE	ETBE	TAME	1,2-DCA	EDB
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-4 (cont)	03/23/05	<50	<5	24	<0.5	<0.5	1	<0.5	0.9
	06/22/05	<50	15	18	<0.5	<0.5	1	<0.5	<0.5
	09/02/05	<50	6	18	<0.5	<0.5	<0.5	<0.5	<0.5
	12/02/05	<50	11	34	< 0.5	<0.5	1	<0.5	<0.5
	03/20/06	<50	<5	2	<0.5	<0.5	<0.5	<0.5	<0.5
	06/01/06	<50	<5	2	<0.5	<0.5	<0.5	<0.5	<0.5
	09/11/06	<50	<5	4	<0.5	<0.5	<0.5	<0.5	<0.5
I	DESTROYED								-0.5

EXPLANATIONS:

TBA = t-Butyl alcohol MTBE = Methyl Tertiary Butyl Ether DIPE = di-Isopropyl ether ETBE = Ethyl t-butyl ether TAME = t-Amyl methyl ether

1,2-DCA = 1,2-Dichloroethane EDB = 1,2-Dibromoethane (μg/L) = Micrograms per liter -- = Not Analyzed

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

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.

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 #	9-2029	-	Job Numbe	er: 3	86911			
Site Address:	890 West	Macarthur	Blvd.	Event Date	:	11-3	3:10	 (inclu	sive)
City:	Oakland, C	A		Sampler:		FT			
Well ID	MW-5			Date Monitore	d:	11-3	10		
Well Diameter	2	in.		olume 3/4"=					
Total Depth	25.01	ft.		••••	0.66	1"= 0.04 5"= 1.02		3"= 0.38 2"= 5.80	
Depth to Water	9.05	ft. 🗋 C	heck if water co	lumn is less then 0).50 ft.				
	15.96			x3 case volum		mated Purce	Volume: 8	🗢 gal.	
Depth to Water w	v/ 80% Recharg					[gui.	
						Time Starte			00 hrs)
Purge Equipment:			mpling Equipme	ent:		Time Comp Depth to Pr		(24	00 hrs)
Disposable Bailer Stainless Steel Bailer			sposable Bailer		-	Depth to W			ft
Stack Pump			essure Bailer screte Bailer	<u> </u>	-		on Thickness:_		ft
Suction Pump			ristaltic Pump	<u> </u>	-	Visual Cont	firmation/Deso	ription:	
Grundfos			D Bladder Pump		-	Skimmer / /	Abserbant Soc	ck (circle one)	
Peristaltic Pump		Otl	ner:		-	Amt Remo	ed from Skim	mer:	gal
QED Bladder Pump						Water Rem	oved:		gal
Other:							insferred to:		
						L			
Start Time (purge)			Weather (Conditions:		SUN	て		10
Sample Time/Dat		11-3.10	Water Co	lor: <u>CLEAN</u>	Od	or: 🕑 N	STE	-cul-	
Approx. Flow Rate		_gpm.	Sediment	Description:		NON	R		
Did well de-water	? <u>No</u>	lf yes, Time: _.	Vo	olume:	_ gal.	DTW @ S	ampling: _	11.96	
Time			Conductivity	Temperature		D.O.		Vores	
(2400 hr.)	Volume (gal.)	рН	(µmhos/cm - µS)			(mg/L)	ORP (mV)		
0935	25	698	500	21.6			()		
0940	50	6.95	511	21.3					
0946	8.0	6.92	520	20.9					
	·								

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 3	💪 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)/ 5 OXYS (8260)
				·	

COMMENTS:

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

5//-	Ge	7	TL	ER	R	YA	N	Inc	5.

Client/Facility#:	Chevron #9-	2029	Job Number:	386911		
Site Address:	890 West M	acarthur Blvd.	Event Date:	11.3.10		(inclusive)
City:	Oakland, CA	k	Sampler:	FT		. ,
Well ID Well Diameter	<u>MW-</u> 2 in		Date Monitored:	11.3.1		
Total Depth	24.98 ft.	-	Volume 3/4"= 0.0 Factor (VF) 4"= 0.6		= 0.17 3"= 0.38 1.50 12"= 5.80	
Depth to Water	8.05 ft. 16-93	and the second se	column is less then 0.50 x3 case volume = (0.20) + DTW]:	ft. Estimated Purge Volu		gal. (2400 hrs)
Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:		Sampling Equip Disposable Baile Pressure Bailer Discrete Bailer Peristaltic Pump QED Bladder Pur Other:	mp	Time Complete Depth to Produ Depth to Wate Hydrocarbon T Visual Confirm Skimmer / Abs Amt Removed Amt Removed Water Removed	ed: r: tickness: ation/Description: orbant Sock (circle from Skimmer: from Well:	(2400 hrs) ft ft ft ft ft ft gal gal
Start Time (purge) Sample Time/Dat Approx. Flow Rat Did well de-water	e: 1045 / 11 e:	310 Water	er Conditions: Color: <u>CLFA</u> ent Description: Volume:	Sになから Odor: Ø/ N ドロンビ jal. DTW @ Sam	STROUL	
Time (2400 hr.) 1020 1025 1032	Volume (gal.) 2.5 5.0 8.5	pH Conductivit $(\mu mhos/cm - 1)$ 6.96 5626.93 $5.736.90$ 5.82	μS) (D.O. (mg/L)	ORP (mV)	
<u> </u>		LABODATO	DV INFORMATION			

SAMPLE ID	(#) CON	TAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 6	6	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)/ 5 OXYS (8260)
MMENTS:		1		HEEN PLE		

Add/Replaced Lock: _____ Add/Replaced Plug: _____

Add/Replaced Boit: _____



Client/Facility#:	Chevron #9-202	9	Job Number:	386911		
Site Address:	890 West Maca	rthur Blvd.	Event Date:	11-3.1	3	- (inclusive)
City:	Oakland, CA		Sampler:	FT		
Well ID	MW-7		Date Monitored:	11-3.10	,	
Well Diameter	2 in.	Г	Volume 3/4"= 0.02			T
Total Depth	24.93 ft.		Factor (VF) 4"= 0.66		0.17 3"= 0.38 1.50 12"= 5.80	
Depth to Water	9.48 ft.	Check if water	column is less then 0.50	ft.		1
	15.45 XVF		x3 case volume = E	Estimated Purge Volu	Ime: 8.0	gal.
Depth to Water v			0.20) + DTWJ: 12-57			- 3
Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:		Sampling Equip Disposable Bailer Pressure Bailer Discrete Bailer Peristaltic Pump QED Bladder Pum Other:	np	Depth to Produ Depth to Water Hydrocarbon T Visual Confirma Skimmer / Abso Amt Removed Water Removed	ed: ct: hickness: ation/Description- ation/Description- from Skimmer: from Well:	(2400 hrs) ft ft ft ft gal gal
Start Time (purge)	0830	Weathe	r Conditions:	SUNNY		
	e: 0900 111.3.	D Water C	Color: CLEAR	Odor: 0/ N	STRONL	
Approx. Flow Rate			nt Description:			
Did well de-water	? No If yes,	Time:	Volume: ga	al. DTW @ Sam	pling: 12.3	22
Time (2400 hr.) 0835	Volume (gal.) pH	(μmnos/cm - μ	S) (O /F)	D.O. (mg/L)	ORP (mV)	
0840		$\frac{3}{512}$	$-\frac{21.4}{21.5}$		· · · · · · · · · · · · · · · · · · ·	
0846		2 530	20.8			

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	💪 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)/ 5 OXYS (8260)
AMENTO					

COMMENTS:

Add/Replaced Lock: _____ Add/Replaced Plug: _____

Add/Replaced Bolt: _____



Client/Facility#:	Chevron #9-	2029		Job Number:	386911		
Site Address:	890 West M	acarthur B	lvd.	Event Date:	11.3	10	(inclusive)
City:	Oakland, CA			Sampler:	Fr		(
						·····	
Well ID	MW- &	_	ſ	Date Monitorèd:		3.10	
Well Diameter	2 in	<u>I.</u>	Volum	ne 3/4"= 0.	02 1"= 0.04	2"= 0.17 3"= 0.38]
Total Depth	24.98 ft	<u> </u>	Facto	r (VF) 4"= 0.0	66 5"= 1.02	6"= 1.50 12"= 5.80	1
Depth to Water	11.37 ft.		-	n is less then 0.5			3
	13-61	_xVF17		x3 case volume =		Volume: 1.0	gal.
Depth to Water	w/ 80% Recharge	E [(Height of Wate	er Column x 0.20) ·	+ DTWJ: 14.04	1 Time Star	ed:	(2400 hrs)
Purge Equipment:		Sam	pling Equipment:		Time Com		(2400 hrs) (2400 hrs)
Disposable Bailer			osable Bailer		Depth to F		ft
Stainless Steel Baile	r	•	sure Bailer		Depth to V	/ater: on Thickness:	ft
Stack Pump		Discr	ete Bailer			firmation/Description.	ft
Suction Pump			taltic Pump				
Grundfos			Bladder Pump		Amt Remo	Absorbant Sock (circle	e one)
Peristaltic Pump QED Bladder Pump	<u> </u>	Other	r:		Arnt Remo	ved from Well:	gal
Other:					Water Ren Product Tr	noved:ansferred to:	
Start Time (purge	1100		Weather Cor	aditions.	S .	こ で し し し し し し し し し し し し し し し し し し	
Sample Time/Da	· · · · · · · · · · · · · · · · · · ·	1-3.10		Ben-	Odor: Y /		······
Approx. Flow Rat		gpm.					
Did well de-water		gpm.	Sealment De	scription:	S	LTY	
				scription:		Gampling: 13	.90
	? <u>NC</u> If	yes, Time:	Volur	ne:	gal. DTW @ s	Sampling: 13	.90
Time (2400 hr.)		yes, Time:	Conductivity	ne:	gal. DTW @ \$	Sampling: 3	90
Time (2400 hr.)	? <u>NC</u> If	yes, Time:	Conductivity	ne:	gal. DTW @ s	Sampling: 13	.90
Time	? <u>NC</u> If	yes, Time:	Conductivity	ne:	gal. DTW @ \$	Sampling: 3	.90
Time (2400 hr.)	? <u>NC</u> If	yes, Time:	Conductivity	ne:	gal. DTW @ \$	Sampling: 3	.90
Time (2400 hr.)	? <u>NC</u> If	yes, Time:	Conductivity $\frac{1}{4}$ SC $\frac{4}{12}$	ne: Temperature (\bigcirc / F) 2(.2) 20.9	gal. DTW @ \$	Sampling: 3	.90
Time (2400 hr.)	? <u>NC</u> If	уеs, Time: рН (µ 7.27 4 7.25 4 7.22 4	Conductivity imhos/cm - μS) 466 412 42.0	$\begin{array}{c} \text{Temperature} \\ (O/F) \\ 2(.2) \\ 20.9 \\ 20.4 \\ \hline 20.4 \\ \hline \end{array}$	gal. DTW @ \$	Sampling: 3	.90
Time (2400 hr.)	? <u>NC</u> If	yes, Time:	Conductivity $\frac{1}{4}$ SC $\frac{4}{12}$	$\begin{array}{c} \text{Temperature} \\ (O/F) \\ 2(.2) \\ 20.9 \\ 20.4 \\ \hline 20.4 \\ \hline \end{array}$	gal. DTW @ \$	Sampling:1 3	.90
Time (2400 hr.) 1105 1110 1115	? <u>NC</u> If Volume (gal.) <u>2.5</u> <u>5.0</u> <u>7.0</u>	yes, Time:	Conductivity imhos/cm - μS) 466 412 420 BORATORY IN	ne: (Ø / F) 2(.2 20.9 20.6 FORMATION	gal. DTW @ \$ D.O. (mg/L)	Sampling: 3	
Time (2400 hr.) 1105 1110 1115 SAMPLE ID	? <u>NC</u> If Volume (gal.) <u>2.5</u> <u>5.0</u> <u>1.0</u> (#) CONTAINER	yes, Time:	Volur Conductivity Imhos/cm - µS) 406 412 420 BORATORY IN PRESERV. TYPE	ne: Temperature (C/F) 21.2 20.9 20.4 FORMATION LABORATORY	gal. DTW @ \$ D.O. (mg/L)	Sampling: ORP (mV)	
Time (2400 hr.) 1105 1110 1115 SAMPLE ID	? <u>NC</u> If Volume (gal.) <u>2.5</u> <u>5.0</u> <u>1.0</u> (#) CONTAINER	yes, Time:	Volur Conductivity Imhos/cm - µS) 406 412 420 BORATORY IN PRESERV. TYPE	ne: Temperature (C/F) 21.2 20.9 20.4 FORMATION LABORATORY	gal. DTW @ \$ D.O. (mg/L)	Sampling: ORP (mV)	
Time (2400 hr.) 1105 1110 1115 SAMPLE ID	? <u>NC</u> If Volume (gal.) <u>2.5</u> <u>5.0</u> <u>1.0</u> (#) CONTAINER	yes, Time:	Volur Conductivity Imhos/cm - µS) 406 412 420 BORATORY IN PRESERV. TYPE	ne: Temperature (C/F) 21.2 20.9 20.4 FORMATION LABORATORY	gal. DTW @ \$ D.O. (mg/L)	Sampling: ORP (mV)	

INSTALLED NEW WELL COVEN. COMMENTS:

Add/Replaced Lock: _____

Add/Replaced Plug: _____

Add/Replaced Bolt: _____

Chevro	on Califoi	rnia Reg	ion An	alysis	Request/0	Chain of Custody
Lancaster Laboratories /////					ister Laboratories use 31596-99	·
Subditions	CRA MTI Proje	ct # 61-1974		Analyses F	Requested	Grp #1219624
Facility #: SS#9-2029 G-R#386911 Global ID#T0600 Site Address: 890 WEST MACARTHUR BLVD., OAKLAN Chevron PM: MTI Lead Consultant: CR Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, D	ID, CA	Matrix	Cleerrup	Preservati	on Codes	Preservative Codes $H = HCI$ $T = Thiosulfate$ $N = HNO_3$ $B = NaOH$ $S = H_2SO_4$ $O = Other$
Consultant Prj. Mgr.: Deanna L. Harding (deanna@grinc. Consultant Phorie #: 925-551-7555 Fax #: 925-5 Sampler: FIANK TRUNOVI	.com)	Soil Water Mater OII Air Total Number of Containers	BTEX CALLER S260 1 8021 C	8260 full scan Sovygenates (82.60 Total Lead Method	Dissolved Lead Method	J value reporting needed Must meet lowest detection limits possible for 8260 compounds 8021 MTBE Confirmation Confirm highest hit by 8260 Confirm all hits by 8260 Run oxy's on highest hit Run oxy's on all hits
	000 X 045 X 900 X 130 X					Comments / Remarks
Turnaround Time Requested (TAT) (please circle)STD. TAT72 hour24 hour4 day5 day		1- i	11 3.1 \$3 Nov		Received by:	Date Time Date Time (3) 1243 Date Time
Data Package Options (please circle if required) QC Summary Type I - Futt Type VI (Raw Data) □ Coelt Deliverable not needed WIP (RWQCB) □isk		Commercial Carrier:	Dat	ite Time	Received by: Received by: Custody Sydis Internet	Date Time Date Time Mula 9845

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.



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2428 - 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

November 12, 2010

Project: 92029

Submittal Date: 11/04/2010 Group Number: 1219624 PO Number: 92029 Release Number: MTI State of Sample Origin: CA

Client Sample Description MW-5-W-101103 Grab Water MW-6-W-101103 Grab Water MW-7-W-101103 Grab Water MW-8-W-101103 Grab Water Lancaster Labs (LLI) # 6131596 6131597 6131598 6131599

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

ELECTRONICGettler-Ryan, Inc.COPY TOELECTRONICELECTRONICChevron c/o CRACOPY TOELECTRONICCOPY TOChevron

Attn: Rachelle Munoz Attn: Report Contact Attn: Anna Avina



KOV 15 2010

GETTLER-RYAN INC. GENERAL CONTRACTORS



Analysis Report

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

Respectfully Submitted,

Lawrence M. Taylor Senior Specialist



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Page 1 of 1

Sample Description: MW-5-W-101103 Grab Water LLI Sample # WW 6131596 Facility# 92029 Job# 386911 MTI# 61-1974 GRD LLI Group # 1219624 890 W MacArthur-Oakland T0600173887 MW-5 Account # 12099

Chevron c/o CRA

10969 Trade Center Dr

Rancho Cordova CA 95670

Suite 107

Project Name: 92029

Collected: 11/03/2010 10:00 by FT

Submitted: 11/04/2010 08:45 Reported: 11/12/2010 10:36

MOMW5

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	t-Amyl methyl ether	994-05-8	N.D.	0.5	1
10943	Benzene	71-43-2	13	0.5	1
10943	t-Butyl alcohol	75-65-0	N.D.	2	1
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	8	0.5	1
10943	di-Isopropyl ether	108-20-3	N.D.	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	0.9	0.5	1
10943	Toluene	108-88-3	4	0.5	1
10943	Xylene (Total)	1330-20-7	3	0.5	1
GC Vol	latiles SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	5,000	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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D103121AA	11/08/2010 14:47	Daniel H Heller	l
10943	BTEX + 5 Oxygenates 8260 Water	SW-846 8260B	l	D103121AA	11/08/2010 14:47	Daniel H Heller	l
01146 01728	GC VOA Water Prep TPH-GRO N. CA water C6-C12	SW-846 5030B SW-846 8015B	1	10312A20B 10312A20B	11/09/2010 13:07	Carrie E Miller	5
01/20	TIM-GRO W. CA WALCI CO-CIZ	24-040 COT2B	T	103124208	11/09/2010 13:07	Carrie E Miller	5



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Page 1 of 1

Sample Description: MW-6-W-101103 Grab Water LLI Sample # WW 6131597 Facility# 92029 Job# 386911 MTI# 61-1974 GRD LLI Group # 1219624 890 W MacArthur-Oakland T0600173887 MW-6 Account # 12099

Chevron c/o CRA

10969 Trade Center Dr

Rancho Cordova CA 95670

Suite 107

Project Name: 92029

Collected: 11/03/2010 10:45 by FT

Submitted: 11/04/2010 08:45 Reported: 11/12/2010 10:36

MOMW6

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	t-Amyl methyl ether	994-05-8	3	3	5
10943	Benzene	71-43-2	1,100	25	50
10943	t-Butyl alcohol	75-65-0	98	10	5
10943	Ethyl t-butyl ether	637-92-3	N.D.	3	5
10943	Ethylbenzene	100-41-4	670	3	5
10943	di-Isopropyl ether	108-20-3	N.D.	3	5
10943	Methyl Tertiary Butyl Ether	1634-04-4	160	3	5
10943	Toluene	108-88-3	8	3	5
10943	Xylene (Total)	1330-20-7	58	3	5
GC Vol	atiles SW-846	8015B	ug/l	ug/1	
01728	TPH-GRO N. CA water C6-C12	n.a.	13,000	500	10

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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D103121AA	11/08/2010 15:09	Daniel H Heller	5
01163	GC/MS VOA Water Prep	SW-846 5030B	2	D103121AA	11/08/2010 15:32	Daniel H Heller	50
10943	BTEX + 5 Oxygenates 8260 Water	SW-846 8260B	1	D103121AA	11/08/2010 15:09	Daniel H Heller	5
10943	BTEX + 5 Oxygenates 8260 Water	SW-846 8260B	1	D103121AA	11/08/2010 15:32	Daniel H Heller	50
01146 01728	GC VOA Water Prep TPH-GRO N. CA water C6-C12	SW-846 5030B SW-846 8015B	1 1	10312A20A 10312A20A	11/08/2010 19:27 11/08/2010 19:27	Elizabeth J Marin Elizabeth J Marin	



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Sample Description: MW-7-W-101103 Grab Water LLI Sample # WW 6131598 Facility# 92029 Job# 386911 MTI# 61-1974 GRD LLI Group # 1219624 890 W MacArthur-Oakland T0600173887 MW-7 Account # 12099

Chevron c/o CRA

10969 Trade Center Dr

Rancho Cordova CA 95670

Suite 107

Project Name: 92029

Collected: 11/03/2010 09:00 by FT

Submitted: 11/04/2010 08:45 Reported: 11/12/2010 10:36

MOMW 7

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles SW-840	5 8260B	ug/l	ug/l	
10943	t-Amyl methyl ether	994-05-8	N.D.	0.5	1
10943	Benzene	71-43-2	150	5	10
10943	t-Butyl alcohol	75-65-0	6	2	1
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	45	0.5	1
10943	di-Isopropyl ether	108-20-3	N.D.	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	4	0.5	1
10943	Toluene	108-88-3	0.7	0.5	1
10943	Xylene (Total)	1330-20-7	2	0.5	1
GC Vol	atiles SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	5,700	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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D103121AA	11/08/2010 15:55	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	D103121AA	11/08/2010 16:18	Daniel H Heller	10
10943	BTEX + 5 Oxygenates 8260 Water	SW-846 8260B	1	D103121AA	11/08/2010 15:55	Daniel H Heller	1
10943	BTEX + 5 Oxygenates 8260 Water	SW-846 8260B	1	D103121AA	11/08/2010 16:18	Daniel H Heller	10
	GC VOA Water Prep	SW-846 5030B	1	10312A20A	11/08/2010 19:49	Elizabeth J Marin	-
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	10312A20A	11/08/2010 19:49	Elizabeth J Marin	5



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Page 1 of 1

Sample Description: MW-8-W-101103 Grab Water Facility# 92029 Job# 386911 MTI# 61-1974 GRD 890 W MacArthur-Oakland T0600173887 MW-8

LLI Sample # WW 6131599 LLI Group # 1219624 Account # 12099

Project Name: 92029

Collected: 11/03/2010 11:30 by FT

Submitted: 11/04/2010 08:45 Reported: 11/12/2010 10:36

MOMW8

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	t-Amyl methyl ether	994-05-8	N.D.	0.5	1
10943	Benzene	71-43-2	N.D.	0.5	-
10943	t-Butyl alcohol	75-65-0	N.D.	2	-
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	-
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	di-Isopropyl ether	108-20-3	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	N.D.	0.5	ī
GC Vol	latiles SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1

Chevron c/o CRA

10969 Trade Center Dr

Rancho Cordova CA 95670

Suite 107

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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
		SW-846 5030B SW-846 8260B	1 1	D103121AA D103121AA	11/08/2010 16:40 11/08/2010 16:40	Daniel H Heller Daniel H Heller	1 1
	GC VOA Water Prep TPH-GRO N. CA water C6-C12	SW-846 5030B SW-846 8015B	1 1	10312A20A 10312A20A	11/08/2010 15:06 11/08/2010 15:06	Elizabeth J Marin Elizabeth J Marin	-



Group Number: 1219624

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Quality Control Summary

Client Name: Chevron c/o CRA Reported: 11/12/10 at 10:36 AM

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

Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS %REC	LCSD <u>%REC</u>	LCS/LCSD Limits	<u>RPD</u>	RPD Max
Batch number: D103121AA	Sample numbe	er(s): 613	1596-6131	599				
t-Amyl methyl ether	N.D.	0.5	ug/l	85		77-120		
Benzene	N.D.	0.5	ug/l	94		79-120		
t-Butyl alcohol	N.D.	2.	ug/l	94		62-129		
Ethyl t-butyl ether	N.D.	0.5	ug/l	86		76-120		
Ethylbenzene	N.D.	0.5	ug/l	97		79-120		
di-Isopropyl ether	N.D.	0.5	ug/l	87		71-124		
Methyl Tertiary Butyl Ether	N.D.	0.5	uq/l	87		76-120		
Toluene	N.D.	0.5	ug/l	99		79-120		
Xylene (Total)	N.D.	0.5	ug/l	102		80-120		
Batch number: 10312A20A	Sample numbe	r(s): 613	1597-6131!	599				
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	109	91	75-135	18	30
Batch number: 10312A20B	Sample numbe	$r(s) \cdot 613$	1596					
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	109	91	75-135	18	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 <u>%REC</u>	MS/MSD <u>Limits</u>	<u>RPD</u>	RPD <u>MAX</u>	BKG <u>Conc</u>	DUP Conc	DUP <u>RPD</u>	Dup RPD <u>Max</u>
Batch number: D103121AA	Sample	number(s)	: 6131596	-61315	99 UNSPI	K: P131462			
t-Amyl methyl ether	81	83	75-122	2	30				
Benzene	95	95	80-126	0	30				
t-Butyl alcohol	86	89	67-119	4	30				
Ethyl t-butyl ether	82	84	74-122	2	30				
Ethylbenzene	99	99	71-134	1	30				
di-Isopropyl ether	85	86	70-129	1	30				
Methyl Tertiary Butyl Ether	85	86	72-126	0	30				
Toluene	101	100	80-125	0	30				
Xylene (Total)	103	103	79-125	0	30				
Batch number: 10312A20A TPH-GRO N. CA water C6-C12	Sample 100	number(s)	: 6131597 63-154	-613159	99 UNSPI	K: P132947			
Batch number: 10312A20B TPH-GRO N. CA water C6-C12	Sample 100	number(s)	: 6131596 63-154	UNSPK	: P13294	17			

*- 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: 11/12/10 at 10:36 AM

Group Number: 1219624

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: D103121AA

Daten nu	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
6131596	89	93	101	106	
6131597	88	93	100	97	
6131598	88	93	100	99	
6131599	89	95	99	93	
Blank	93	95	100	94	
LCS	90	95	98	96	
MS	91	95	99	97	
MSD	90	97	99	96	
Limits:	80-116	77-113	80-113	78-113	·····
Analysis Batch nur	Name: TPH-GRO N. nber: 10312A20A Trifluorotoluene-F	CA water C6-C12			
6131597	108				· · · · · · · · · · · · · · · · · · ·
6131598	110				
6131599	87				
Blank	88				
LCS	111				
LCSD	109				
MS	111				
Limits:	63-135	·			······································
	Name: TPH-GRO N. ber: 10312A20B Trifluorotoluene-F	CA water C6-C12			
6131596	108				
Blank	90				
LCS	111				
LCSD	109				
MS	111				
Limits:	63-135				<u> </u>

*- 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	Ĕ	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)		liter(s)
m3	cubic meter(s)	ul	microliter(s)
	less them. The number following 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

- 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 quantitated on a diluted sample
- E Concentration exceeds the calibration range of the instrument
- 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 ≥IDL
- **E** Estimated due to interference
- M Duplicate injection precision not met
- N Spike sample 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 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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