Chevron

Olivia Skance
Team Lead
Marketing Business Unit

Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 790-6521

August 11, 2011

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 *First Semi-Annual 2011 Groundwater Monitoring Report* and dated August 11, 2011.

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,

Liv Skance

Olivia Skance
Project Manager

Enclosure: Report

CONESTOGA-ROVERS
& ASSOCIATES

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

August 11, 2011 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: First Semi-Annual 2011 Groundwater Monitoring Report
Former Chevron Service Station 9-2029
890 West MacArthur Boulevard
Oakland, California
LOP Case No. 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 May 27, 2011) presents the results of the sampling of wells MW-5 through MW-8 during second quarter 2011. Wells MW-5 through MW-8 are sampled semi-annually during the second and fourth quarters. Also attached are Figure 1 (Vicinity Map) showing the site location, and Figure 2 (Concentration Map) presenting the second quarter 2011 analytical results along with a rose diagram.

CONESTOGA-ROVERS
& ASSOCIATES

August 11, 2011 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

James P. Kiernan, P.E.

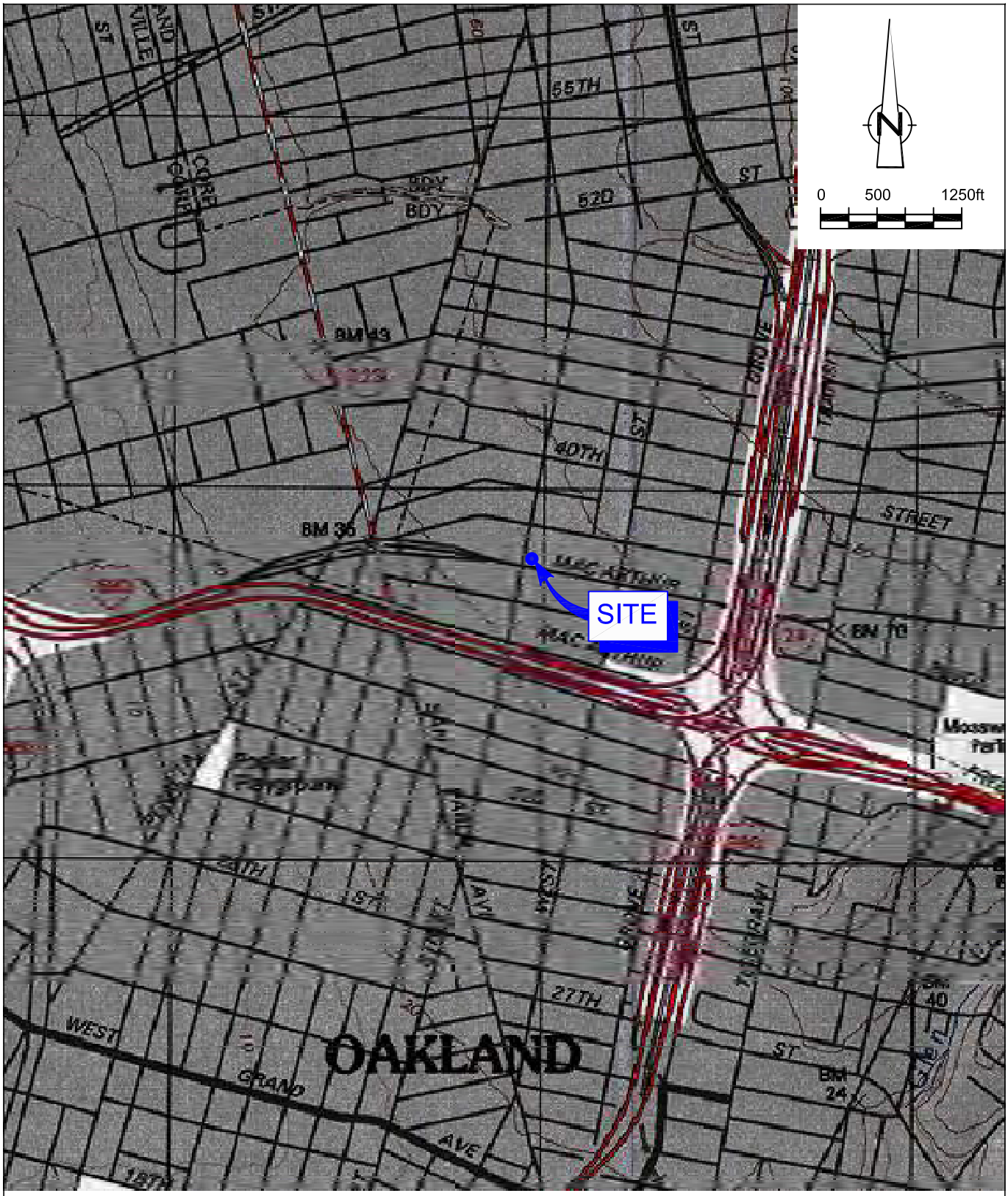
JK/aa/13
Encl.

Figure 1 Vicinity Map
Figure 2 Concentration Map

Attachment A Groundwater Monitoring and Sampling Report

cc: Ms. Olivia Skance, Chevron (*electronic copy*)
Mr. Stephen O'Kane, Westmac, LLC

FIGURES



SOURCE: TOPO! MAPS.

Figure 1

VICINITY MAP
CHEVRON SERVICE STATION 9-2029
890 WEST MACARTHUR BOULEVARD
Oakland, California

611974-95(013)GN-EM001 JUN 29/2011

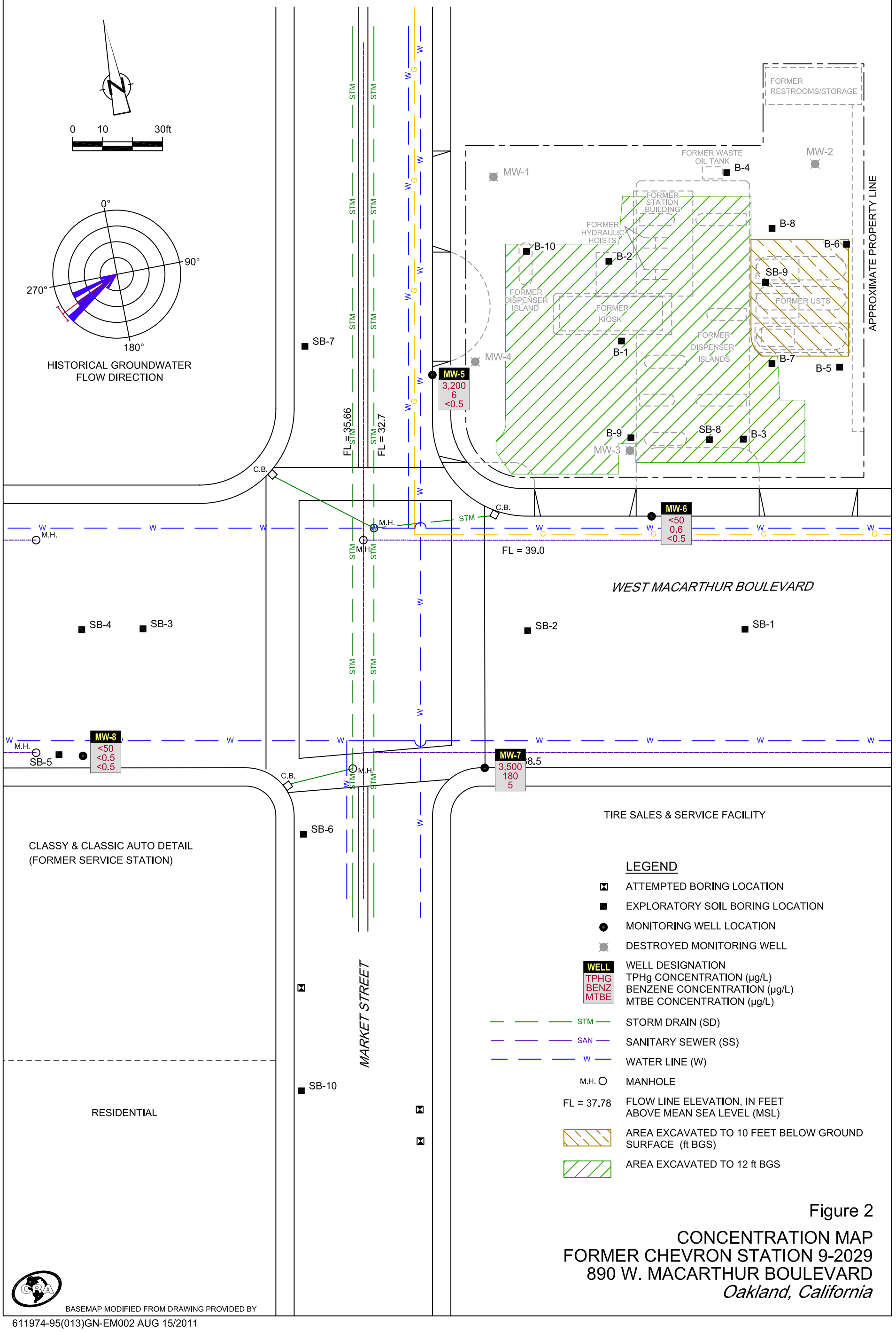


Figure 2

CONCENTRATION MAP
FORMER CHEVRON STATION 9-2029
890 W. MACARTHUR BOULEVARD
Oakland, California

BASEMAP MODIFIED FROM DRAWING PROVIDED BY

611974-95(013)GN-EM002 AUG 15/2011

ATTACHMENT A

GROUNDWATER MONITORING AND SAMPLING REPORT

GETTLER-RYAN INC.

May 27, 2011
G-R Job #386911

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

RE: First Semi-Annual Event of May 10, 2011
Groundwater Monitoring & Sampling Report
Former Chevron Service Station #9-2029
890 West MacArthur Boulevard
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.

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

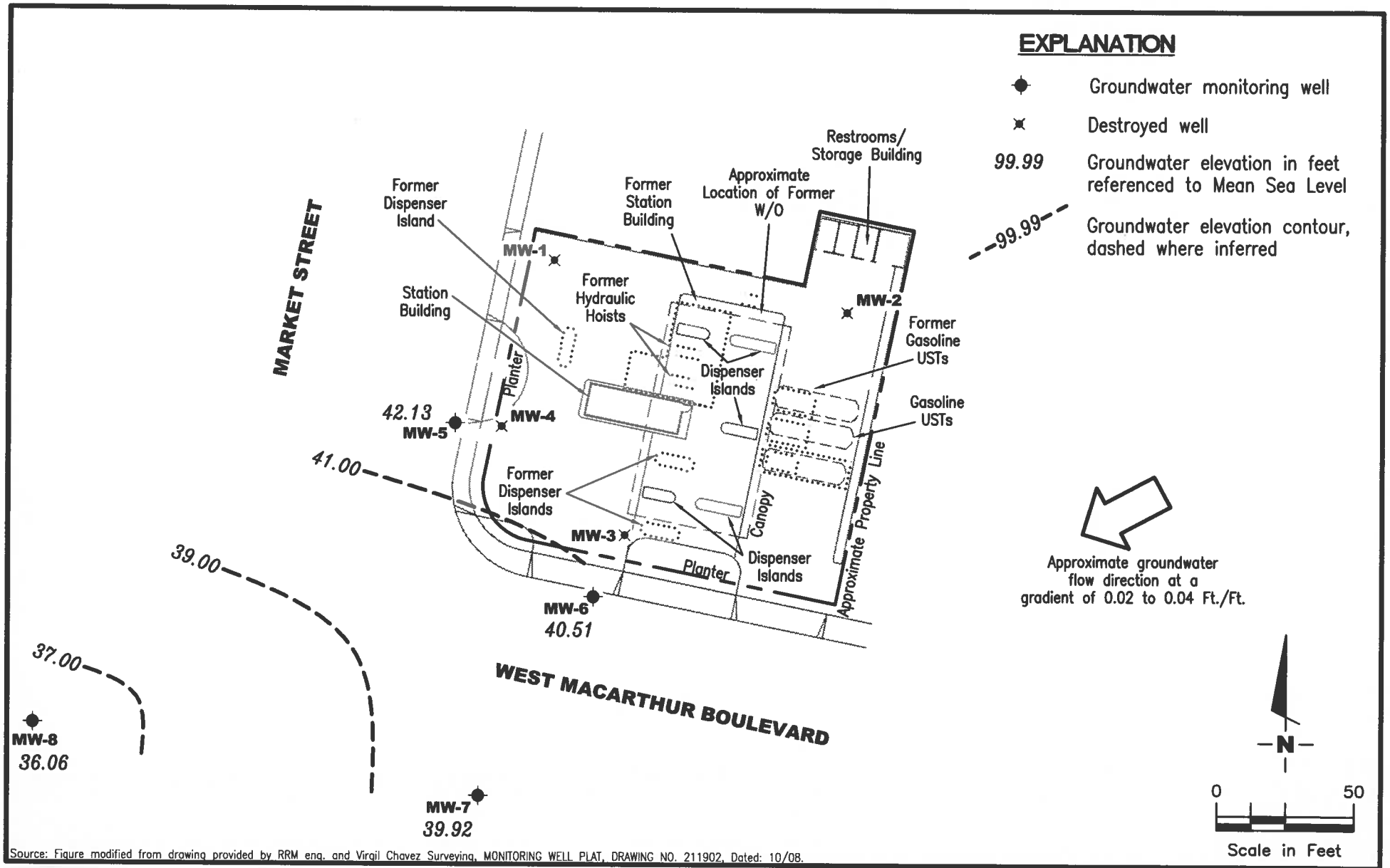
Sincerely,

Deanna L. Harding
Project Coordinator

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

PROFESSIONAL GEOLOGIST
DOUGLAS J. LEE
No. 6882
STATE OF CALIFORNIA

Figure 1: Potentiometric Map
Table 1: Groundwater Monitoring Data and Analytical Results
Table 2: Groundwater Analytical Results - Oxygenate Compounds
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports



Source: Figure modified from drawing provided by RRM eng. and Virgil Chavez Surveying, MONITORING WELL PLAT, DRAWING NO. 211902, Dated: 10/08.

GETTLER - RYAN INC.
6747 Sierra Court, Suite J
Dublin, CA 94568 (925) 551-7555

POTENTIOMETRIC MAP
Former Chevron Service Station #9-2029
890 West MacArthur Boulevard
Oakland, California

FIGURE
1

PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
386911		May 10, 2011	

FILE NAME: P:\Enviro\Chevron\9-2029\Q11-9-2029.OWG | Layout Tab: Pot2

Table 1

Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #9-2029

890 West MacArthur Blvd.

Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (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	10
11/21/08[3]	49.39	8.42	40.97	6,000	93	6	37	6	8
02/13/09[3]	49.39	7.11	42.28	5,100	31	5	20	3	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
05/10/11[5]	**49.39**	**7.26**	**42.13**	**3,200**	**6**	**4**	**7**	**0.9**	**<0.5**
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
05/10/11[4,5]	**49.07**	**8.56**	**40.51**	**<50**	**0.6**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-7									
08/22/08[1]	48.74	10.20	38.54	--	--	--	--	--	--
08/27/08[3]	48.74	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
05/10/11[5]	**48.74**	**8.82**	**39.92**	**3,500**	**180**	**<0.5**	**150**	**2**	**5**

Table 1

Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #9-2029

890 West MacArthur Blvd.

Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
MW-8									
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
11/03/10[5]	47.61	11.37	36.24	<50	<0.5	<0.5	<0.5	<0.5	<0.5
05/10/11[5]	**47.61**	**11.55**	**36.06**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<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	--	--	--	--	--	--
DESTROYED									

Table 1

Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #9-2029

890 West MacArthur Blvd.

Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
MW-2									
03/12/02[1]	52.57	6.09	46.48	<50	<0.50	<0.50	<0.50	<1.5	<2.5/3[2]
06/07/02	52.57	8.65	43.92	<50	<0.50	<0.50	<0.50	<1.5	<2.5/<2[2]
09/13/02	52.57	9.58	42.99	<50	<0.50	<0.50	<0.50	<1.5	<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]
03/01/03	52.57	7.00	45.57	<50	<0.50	<0.50	<0.50	<1.5	<2.5/<0.5[2]
06/27/03[3]	52.57	9.59	42.98	<50	<0.5	<0.5	<0.5	<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
12/29/04[3]	52.57	2.29	50.28	<50	<0.5	<0.5	<0.5	<0.5	<0.5
03/23/05[3]	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	--	--	--	--	--	--
03/20/06	52.57	2.70	49.87	--	--	--	--	--	--
06/01/06	51.57	6.51	45.06	--	--	--	--	--	--
09/11/06	51.57	10.06	41.51	--	--	--	--	--	--
DESTROYED									
MW-3									
03/12/02[1]	50.31	6.50	43.81	12,000	600	8.5	1,100	370	700/650[2]
06/07/02	50.31	7.74	42.57	14,000	630	8.8	1,200	160	520/490[2]
09/13/02	50.31	9.73	40.58	3,000	270	3.2	200	11	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	470
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
12/29/04[3]	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/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
MW-3 (cont)									
09/02/05[3]	50.31	9.41	40.90	8,400	380	4	510	41	440
12/02/05[3]	50.31	7.97	42.34	16,000	490	6	1,200	32	170
03/20/06[3]	50.31	5.32	44.99	4,200	79	0.8	2	10	34
06/01/06[3]	50.31	7.07	43.24	5,400	67	1	26	3	28
09/11/06[3]	50.31	9.07	41.24	14,000	270	5	240	38	97
DESTROYED									
MW-4									
03/12/02[1]	49.93	5.34	44.59	9,700	360	5.3	1,100	150	170/170[2]
06/07/02	49.93	8.52	41.41	7,300	170	2.7	280	21	200/120[2]
09/13/02	49.93	9.86	40.07	5,800	92	4.5	80	14	190/160[2]
12/13/02	49.93	9.42	40.51	10,000	250	2.2	330	19	170/200[2]
03/01/03	49.93	7.33	42.60	12,000	300	4.6	900	110	160/100[2]
06/27/03[3]	49.93	9.62	40.31	7,500	110	2	200	58	130
09/30/03[3]	49.93	11.13	38.80	3,600	18	<1	16	7	520
12/03/03[3]	49.93	7.80	42.13	16,000	1,000	6	720	52	73
03/10/04[3]	49.93	6.69	43.24	2,200	230	3	610	71	55
06/30/04[3]	49.93	10.33	39.60	7,700	59	<1	78	17	110
09/30/04[3]	49.93	10.75	39.18	4,800	100	1	33	10	400
12/29/04[3]	49.93	3.34	46.59	13,000	250	3	480	27	42
03/23/05[3]	49.93	4.24	45.69	12,000	130	2	280	16	24
06/22/05[3]	49.93	7.95	41.98	6,400	290	2	11	11	18
09/02/05[3]	49.93	9.46	40.47	3,700	180	1	13	7	18
12/02/05[3]	49.93	7.60	42.33	11,000	840	5	480	24	34
03/20/06[3]	49.93	4.50	45.43	790	14	<0.5	1	0.6	2
06/01/06[3]	49.93	7.30	42.63	5,100	48	0.8	42	4	2
09/11/06[3]	49.93	9.38	40.55	6,700	64	3	44	3	4
DESTROYED									
TRIP BLANK									
QA									
03/12/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
06/07/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
09/13/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
12/13/02	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5

Table 1

Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #9-2029

890 West MacArthur Blvd.

Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
QA (cont)									
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
09/30/03[3]	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
12/03/03[3]	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
03/10/04[3]	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
06/30/04[3]	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
09/30/04[3]	--	--	--	<50	<0.5	<0.7	<0.8	<0.8	<0.5
12/29/04[3]	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
03/23/05[3]	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
06/22/05[3]	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
09/02/05[3]	--	--	--	<50	<0.5	1[4]	<0.5	1[4]	<0.5
12/02/05[3]	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
03/20/06[3]	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
06/01/06[3]	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
09/11/06[3]	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/27/08[3]	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
11/21/08[5]	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
02/13/09[5]	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
05/08/09[5]	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
08/07/09[5]	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--
DISCONTINUED									

Table 1

Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #9-2029

890 West MacArthur Blvd.

Oakland, California

EXPLANATIONS:

TOC = Top of Casing
(ft.) = Feet
DTW = Depth to Water
GWE = Groundwater Elevation
(msl) = Mean sea level

TPH = Total Petroleum Hydrocarbons
GRO = Gasoline Range Organics
B = Benzene
T = Toluene
E = Ethylbenzene

X = Xylenes
MTBE = Methyl Tertiary Butyl Ether
(µg/L) = Micrograms per liter
-- = Not Measured/Not Analyzed
QA = Quality Assurance/Trip Blank

* TOC elevations 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] Laboratory confirmed analytical result.
[5] BTEX by EPA Method 8260.

Table 2

Groundwater Analytical Results - Oxgenate Compounds

Former Chevron Service Station #9-2029

890 West MacArthur Blvd.

Oakland, California

WELL ID	DATE	ETHANOL (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (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	--	--
	05/10/11	--	**<2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	--	--
MW-6	08/27/08	--	390	440	<0.5	<0.5	6	--	--
	11/21/08	--	320	300	<13	<13	<13	--	--
	02/13/09	--	100	180	<1	<1	4	--	--
	05/08/09	--	16	38	<0.5	<0.5	0.9	--	--
	08/07/09	--	190	330	<3	<3	5	--	--
	11/05/09	--	86	160	<1	<1	4	--	--
	05/06/10	--	2	9	<0.5	<0.5	<0.5	--	--
	11/03/10	--	98	160	<3	<3	3	--	--
	05/10/11[1]	--	**<2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	--	--
MW-7	08/27/08	--	<2	6	<0.5	<0.5	<0.5	--	--
	11/21/08	--	5	6	<0.5	<0.5	<0.5	--	--
	02/13/09	--	<2	7	<0.5	<0.5	<0.5	--	--
	05/08/09	--	<2	8	<0.5	<0.5	<0.5	--	--
	08/07/09	--	4	5	<0.5	<0.5	<0.5	--	--
	11/05/09	--	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	--	--
	05/10/11	--	**3**	**5**	**<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	<0.5	--	--
	05/08/09	--	<2	<0.5	<0.5	<0.5	<0.5	--	--

Table 2

Groundwater Analytical Results - Oxgenate Compounds

Former Chevron Service Station #9-2029

890 West MacArthur Blvd.

Oakland, California

WELL ID	DATE	ETHANOL (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-8 (cont)	08/07/09	--	<2	<0.5	<0.5	<0.5	<0.5	--	--
	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	<0.5	<0.5	<0.5	<0.5	--	--
	05/10/11	**--**	**<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	--	<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 - Oxgenate Compounds

Former Chevron Service Station #9-2029

890 West MacArthur Blvd.

Oakland, California

WELL ID	DATE	ETHANOL (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (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								
MW-3	03/12/02	--	<100	650	<2	<2	18	<2	<2
	06/07/02	--	230	490	<5.0	<5.0	11	<5.0	<5.0
	09/13/02	--	170	640	<2	<2	8	<2	<2
	12/13/02	--	240	540	<2	<2	29	31	<2
	03/01/03	--	160	330	<0.5	<0.5	10	<0.5	<0.5
	06/27/03	--	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								
MW-4	03/12/02	--	<100	170	<2	<2	13	<2	<2
	06/07/02	--	<100	120	<2	<2	14	<2	<2
	09/13/02	--	<100	160	<2	<2	14	<2	<2
	12/13/02	--	<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 - Oxgenate Compounds

Former Chevron Service Station #9-2029

890 West MacArthur Blvd.

Oakland, California

WELL ID	DATE	ETHANOL (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (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
	DESTROYED								

Table 2

Groundwater Analytical Results - Oxgenate Compounds

Former Chevron Service Station #9-2029

890 West MacArthur Blvd.

Oakland, California

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

[1] Laboratory confirmed analytical result.

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.

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #9-2029 Job Number: 386911
Site Address: 890 West Macarthur Blvd. Event Date: 5-10-11 (inclusive)
City: Oakland, CA Sampler: Joe

Well ID MW-5 Date Monitored: 5-10-11
Well Diameter 2 in.
Total Depth 25.00 ft.
Depth to Water 7.26 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

17.74 xVF 0.17 = 3.02 x3 case volume = Estimated Purge Volume: 9.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.80

Purge Equipment:
Disposable Bailer ✓
Stainless Steel Bailer
Stack Pump
Suction Pump
Grundfos
Peristaltic Pump
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer ✓
Pressure Bailer
Discrete Bailer
Peristaltic Pump
QED Bladder Pump
Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 0935 Weather Conditions: clear
Sample Time/Date: 1005 / 5-10-11 Water Color: clear Odor: Y / N strong
Approx. Flow Rate: — gpm. Sediment Description: none
Did well de-water? no If yes, Time: — Volume: — gal. DTW @ Sampling: 7.53

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0941	3	6.72	598	18.9		
0946	6	6.71	610	19.0		
0952	9.5	6.77	614	19.2		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)/ 5 OXYS (8260)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #9-2029** Job Number: **386911**

Site Address: **890 West Macarthur Blvd.** Event Date: 5-10-11 (inclusive)

City: **Oakland, CA** Sampler: Joe

Well ID **MW-6** Date Monitored: 5-10-11

Well Diameter **2** in.

Total Depth 24.97 ft.

Depth to Water 8.56 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

16.41 xVF 0.17 = 2.79 x3 case volume = Estimated Purge Volume: 8.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.84

Purge Equipment:

Disposable Bailer	✓
Stainless Steel Bailer	
Stack Pump	
Suction Pump	
Grundfos	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

Disposable Bailer	✓
Pressure Bailer	
Discrete Bailer	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 0905 Weather Conditions: clear

Sample Time/Date: 0930 5-10-11 Water Color: clear Odor: Y / N strong

Approx. Flow Rate: ~ gpm. Sediment Description: none

Did well de-water? no If yes, Time: — Volume: — gal. DTW @ Sampling: 9.10

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0910	3.5	6.84	791	19.0		
0914	5	6.83	783	19.2		
0920	8.5	6.80	780	19.3		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 6	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)/ 5 OXYS (8260)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #9-2029** Job Number: **386911**

Site Address: **890 West Macarthur Blvd.** Event Date: 5-10-11 (inclusive)

City: **Oakland, CA** Sampler: Joe

Well ID **MW-7** Date Monitored: 5-10-11

Well Diameter **2** in.

Total Depth 24.91 ft.

Depth to Water 8.82 ft. ☐ Check if water column is less then 0.50 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

16.09 xVF 0.17 = 2.74 x3 case volume = Estimated Purge Volume: 8.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.03

Purge Equipment:

Disposable Bailer	✓
Stainless Steel Bailer	
Stack Pump	
Suction Pump	
Grundfos	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

Disposable Bailer	✓
Pressure Bailer	
Discrete Bailer	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 0828 Weather Conditions: clear

Sample Time/Date: 0855 5-10-11 Water Color: clear Odor: Y / N strong

Approx. Flow Rate: — gpm. Sediment Description: none

Did well de-water? no If yes, Time: — Volume: — gal. DTW @ Sampling: 9.16

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0834	3	7.10	802	19.0		
0840	5	6.95	790	19.4		
0846	8.5	6.88	783	19.7		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-7	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)/ 5 OXYS (8260)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #9-2029** Job Number: **386911**

Site Address: **890 West Macarthur Blvd.** Event Date: 5-10-11 (inclusive)

City: **Oakland, CA** Sampler: Soc

Well ID **MW-8** Date Monitored: 5-10-11

Well Diameter **2** in.

Total Depth 24.96 ft.

Depth to Water 11.55 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

13.41 xVF 0.17 = 2.28 x3 case volume = Estimated Purge Volume: 7 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 14.23

Purge Equipment:

Disposable Bailer	✓
Stainless Steel Bailer	
Stack Pump	
Suction Pump	
Grundfos	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

Disposable Bailer	✓
Pressure Bailer	
Discrete Bailer	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 0745 Weather Conditions: clear

Sample Time/Date: 0815 15-10-11 Water Color: clear Odor: Y / (N)

Approx. Flow Rate: — gpm. Sediment Description: none

Did well de-water? no If yes, Time: — Volume: — gal. DTW @ Sampling: 12.31

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0752	2.5	7.34	1061	19.1		
0800	5	7.38	1047	19.6		
0806	7	7.36	1042	19.5		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-8	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)/ 5 OXYS (8260)

COMMENTS:

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

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories

051011-01

For Lancaster Laboratories use only

Acct. #: 12099 Sample #: 6282838-41 Group #: 006213

G# 1246295

CRA MTI Project #: 61-1974

Facility #: SS#9-2029 G-R#386911 Global ID#T0600173887

Site Address: 890 WEST MACARTHUR BLVD., OAKLAND, CA

Chevron PM: MTI Lead Consultant: CRAKJ Kiernan

Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568

Consultant Prj. Mgr.: Deanna L. Harding (deanna@grinc.com)

Consultant Phone #: 925-551-7555 Fax #: 925-551-7899

Sampler: JOE AJEMIAN

Analyses Requested

Preservation Codes

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

- ☐ 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

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water	Matrix: Oil ☐ Air	Total Number of Containers	BTEX + 8260 ☐ 8021 ☒	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	5 Oxygenates (8260)	Total Lead Method ____	Dissolved Lead Method ____
MW-5	5-10-11	1005	✓			✓		6	✓	✓			✓		
MW-6	↓	0930	↓			↓		6	✓	✓			✓		
MW-7		0855						6	✓	✓			✓		
MW-8	↓	0815	↓			↓		6	✓	✓			✓		

Comments / Remarks

Turnaround Time Requested (TAT) (please circle)
STD. TAT | 72 hour | 48 hour
24 hour | 4 day | 5 day

Data Package Options (please circle if required) **EDF/EDD**
QC Summary | Type I - Full
Type VI (Raw Data) | ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

	Date	Time		Date	Time
Relinquished by:	5-10-11	1110	Received by:	5/10/11	1110
Relinquished by:	16 MAY 11	1620	Received by: FEDEX		
Relinquished by:			Received by:		
Relinquished by Commercial Carrier: UPS FedEx Other			Received by:	5/11/11	0830
Temperature Upon Receipt 2.0-2.2 C°			Custody Seals Intact? Yes No		

Lancaster Laboratories

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Analysis Report

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

May 20, 2011

Project: 92029

Submittal Date: 05/11/2011
Group Number: 1246295
PO Number: 92029
Release Number: MTI
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
MW-5-W-110510 Grab Water	6282838
MW-6-W-110510 Grab Water	6282839
MW-7-W-110510 Grab Water	6282840
MW-8-W-110510 Grab Water	6282841

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

ELECTRONIC COPY TO	Gettler-Ryan, Inc.	Attn: Rachelle Munoz
ELECTRONIC COPY TO	Chevron c/o CRA	Attn: Report Contact
ELECTRONIC COPY TO	Chevron	Attn: Anna Avina

Lancaster Laboratories

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Analysis Report

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

Respectfully Submitted,

Sarah M. Snyder
Senior Specialist

Lancaster Laboratories

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Analysis Report

Sample Description: MW-5-W-110510 Grab Water
Facility# 92029 Job# 386911 MTI# 61-1974 GRD
890 West MacArthur-Oakland T0600173887 MW-5

LLI Sample # WW 6282838
LLI Group # 1246295
Account # 12099

Project Name: 92029

Collected: 05/10/2011 10:05 by JA

Submitted: 05/11/2011 09:30
Reported: 05/20/2011 13:32

Chevron c/o CRA
Suite 107
10969 Trade Center Dr
Rancho Cordova CA 95670

WMO05

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	6	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	7	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	4	0.5	1
10943	Xylene (Total)	1330-20-7	0.9	0.5	1
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	3,200	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 + 5 Oxygenates 8260 Water	SW-846 8260B	1	F111331AA	05/13/2011 16:46	Nicholas R Rossi	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F111331AA	05/13/2011 16:46	Nicholas R Rossi	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11132A20A	05/13/2011 22:49	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	11132A20A	05/13/2011 22:49	Laura M Krieger	1

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Analysis Report

Sample Description: MW-6-W-110510 Grab Water
Facility# 92029 Job# 386911 MTI# 61-1974 GRD
890 West MacArthur-Oakland T0600173887 MW-6

LLI Sample # WW 6282839
LLI Group # 1246295
Account # 12099

Project Name: 92029

Collected: 05/10/2011 09:30 by JA

Submitted: 05/11/2011 09:30
Reported: 05/20/2011 13:32

Chevron c/o CRA
Suite 107
10969 Trade Center Dr
Rancho Cordova CA 95670

WMO06

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	0.6	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	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	1
GC Volatiles	**SW-846 8015B**		ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	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 + 5 Oxygenates 8260 Water	SW-846 8260B	1	F111331AA	05/13/2011 17:29	Nicholas R Rossi	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F111331AA	05/13/2011 17:29	Nicholas R Rossi	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11132A20A	05/13/2011 20:39	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	11132A20A	05/13/2011 20:39	Laura M Krieger	1

Lancaster Laboratories

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Analysis Report

Sample Description: MW-7-W-110510 Grab Water
Facility# 92029 Job# 386911 MTI# 61-1974 GRD
890 West MacArthur-Oakland T0600173887 MW-7

LLI Sample # WW 6282840
LLI Group # 1246295
Account # 12099

Project Name: 92029

Collected: 05/10/2011 08:55 by JA

Submitted: 05/11/2011 09:30
Reported: 05/20/2011 13:32

Chevron c/o CRA
Suite 107
10969 Trade Center Dr
Rancho Cordova CA 95670

WMO07

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	180	5	10
10943	t-Butyl alcohol	75-65-0	3	2	1
10943	Ethyl t-butyl ether	637-92-3	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	150	5	10
10943	di-Isopropyl ether	108-20-3	N.D.	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	5	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	2	0.5	1
GC Volatiles	**SW-846 8015B**		ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	3,500	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 + 5 Oxygenates 8260 Water	SW-846 8260B	1	F111331AA	05/13/2011 17:51	Nicholas R Rossi	1
10943	BTEX + 5 Oxygenates 8260 Water	SW-846 8260B	1	F111331AA	05/13/2011 18:13	Nicholas R Rossi	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F111331AA	05/13/2011 17:51	Nicholas R Rossi	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	F111331AA	05/13/2011 18:13	Nicholas R Rossi	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11132A20A	05/13/2011 23:33	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	11132A20A	05/13/2011 23:33	Laura M Krieger	1

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Analysis Report

Sample Description: MW-8-W-110510 Grab Water
Facility# 92029 Job# 386911 MTI# 61-1974 GRD
890 West MacArthur-Oakland T0600173887 MW-8

LLI Sample # WW 6282841
LLI Group # 1246295
Account # 12099

Project Name: 92029

Collected: 05/10/2011 08:15 by JA

Submitted: 05/11/2011 09:30
Reported: 05/20/2011 13:32

Chevron c/o CRA
Suite 107
10969 Trade Center Dr
Rancho Cordova CA 95670

WMO08

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	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	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	1
GC Volatiles	**SW-846 8015B**		ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	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 + 5 Oxygenates 8260 Water	SW-846 8260B	1	F111331AA	05/13/2011 18:34	Nicholas R Rossi	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F111331AA	05/13/2011 18:34	Nicholas R Rossi	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11136B07A	05/17/2011 16:11	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	11136B07A	05/17/2011 16:11	Laura M Krieger	1

Lancaster Laboratories

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Analysis Report

Quality Control Summary

Client Name: Chevron c/o CRA
Reported: 05/20/11 at 01:32 PM

Group Number: 1246295

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 Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: F111331AA	Sample number(s): 6282838-6282841							
t-Amyl methyl ether	N.D.	0.5	ug/l	80		77-120		
Benzene	N.D.	0.5	ug/l	93		79-120		
t-Butyl alcohol	N.D.	2.	ug/l	83		62-129		
Ethyl t-butyl ether	N.D.	0.5	ug/l	83		76-120		
Ethylbenzene	N.D.	0.5	ug/l	89		79-120		
di-Isopropyl ether	N.D.	0.5	ug/l	86		71-124		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	82		76-120		
Toluene	N.D.	0.5	ug/l	91		79-120		
Xylene (Total)	N.D.	0.5	ug/l	90		80-120		
Batch number: 11132A20A	Sample number(s): 6282838-6282840							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	118	118	75-135	0	30
Batch number: 11136B07A	Sample number(s): 6282841							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	109	109	75-135	0	30

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: F111331AA	Sample number(s): 6282838-6282841 UNSPK: P282849								
t-Amyl methyl ether	82	84	75-122	3	30				
Benzene	97	99	80-126	2	30				
t-Butyl alcohol	85	90	67-119	6	30				
Ethyl t-butyl ether	85	88	74-122	3	30				
Ethylbenzene	89	91	71-134	3	30				
di-Isopropyl ether	90	92	70-129	2	30				
Methyl Tertiary Butyl Ether	81	88	72-126	8	30				
Toluene	95	96	80-125	1	30				
Xylene (Total)	89	90	79-125	1	30				

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

*- 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.

Quality Control Summary

Client Name: Chevron c/o CRA
Reported: 05/20/11 at 01:32 PM

Group Number: 1246295

Surrogate Quality Control

Batch number: F111331AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6282838	95	97	97	102
6282839	97	98	99	89
6282840	96	98	98	98
6282841	97	103	97	90
Blank	98	100	99	91
LCS	97	100	98	97
MS	95	100	97	97
MSD	96	102	97	95
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 11132A20A

	Trifluorotoluene-F
6282838	115
6282839	76
6282840	115
Blank	75
LCS	117
LCSD	115
Limits:	63-135

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 11136B07A

	Trifluorotoluene-F
6282841	80
Blank	86
LCS	95
LCSD	91
Limits:	63-135

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Explanation of Symbols and Abbreviations

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

RL	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)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, 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.

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