Carryl MacLeod
Project Manager
Marketing Business Unit

Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 790-6506
cmacleod@chevron.com

RECEIVED
By Alameda County Environmental Health at 3:11 pm, Aug 18, 2014

January 29, 2013

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

Re: Former Texaco Service Station 307233
2259 First Street
Livermore, California
ACEHS Case RO2908

I accept the Fourth Quarter 2012 Groundwater Monitoring and Sampling Report.

I agree with the conclusions and recommendations presented in this document. The information included is accurate to the best of my knowledge, and appears to meet local agency and Regional Board guidelines. This Fourth Quarter 2012 Groundwater Monitoring and Sampling 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 to the best of my knowledge.

Sincerely,

Carryl MacLeod
Project Manager

Attachment: Fourth Quarter 2012 Groundwater Monitoring and Sampling Report

CONESTOGA-ROVERS
& ASSOCIATES

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

January 29, 2013 Reference No. 312264

Mr. Jerry Wickham
Alameda County Environmental Health Services (ACEHS)
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Fourth Quarter 2012
Groundwater Monitoring and Sampling Report
Former Texaco Service Station 307233
2259 First Street
Livermore, California
ACEHS Case RO0002908

Dear Mr. Wickham:

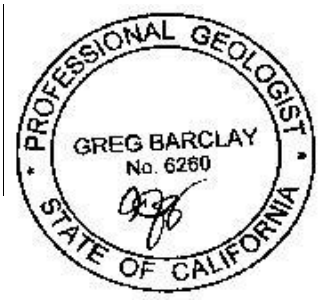
Conestoga-Rovers & Associates (CRA) is submitting this *Fourth Quarter 2012 Groundwater Monitoring and Sampling Report* for the site referenced above (Figure 1) on behalf of Chevron Environmental Management Company (Chevron). Groundwater monitoring and sampling was performed by Gettler-Ryan, Inc. (G-R) of Dublin, California. G-R's *Groundwater Monitoring and Sampling Data Package* is included as Attachment A. Eurofins Lancaster Laboratories' *Analytical Results Reports* are included as Attachment B. Current groundwater monitoring and sampling data for the shallow zone wells are presented in Table 1 and shown on Figure 2. Deep zone groundwater monitoring wells are monitored and sampled during the first and third quarters. Historical monitoring and sampling data for shallow zone and deep zone wells are presented in Table 1.

CONESTOGA-ROVERS
& ASSOCIATES

Please contact Brian Silva at (916) 889-8908 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES



Brian Silva

Greg Barclay, PG 6260

JG/cw/21
Encl.

Figure 1	Vicinity Map
Figure 2	Shallow Zone Groundwater Elevation Contour and Hydrocarbon Concentration Map
Table 1	Groundwater Monitoring and Sampling Data
Attachment A	Monitoring Data Package
Attachment B	Laboratory Analytical Report

cc: Ms. Carryl MacLeod, Chevron *(electronic copy)*
Mr. Eric Uranaga, City of Livermore Community Development

FIGURES

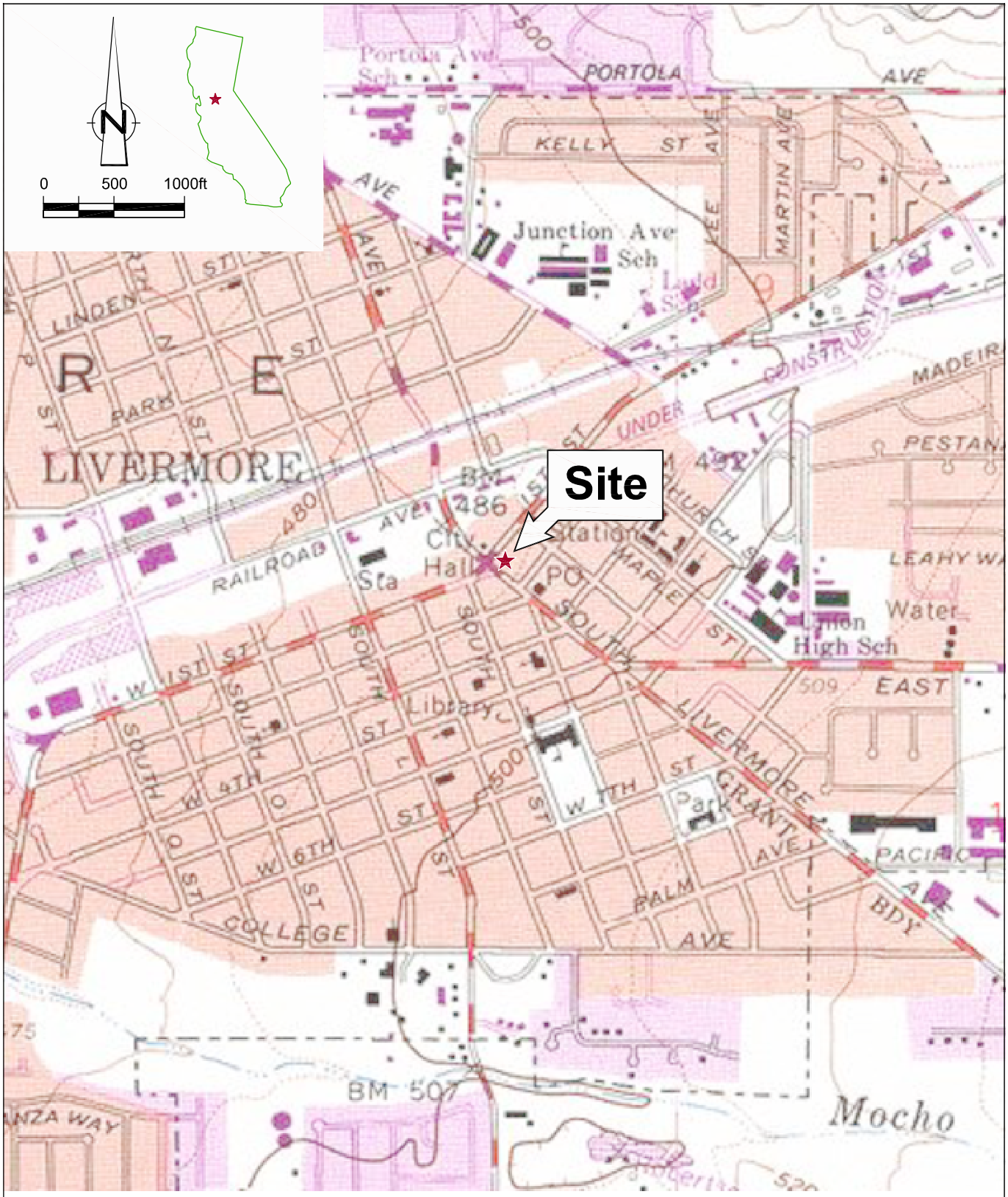


Figure 1

VICINITY MAP
FORMER TEXACO STATION (CHEVRON SITE 307233)
2259 FIRST STREET
Livermore, California

312264-95(021)GN-EM001 JAN 3/2012

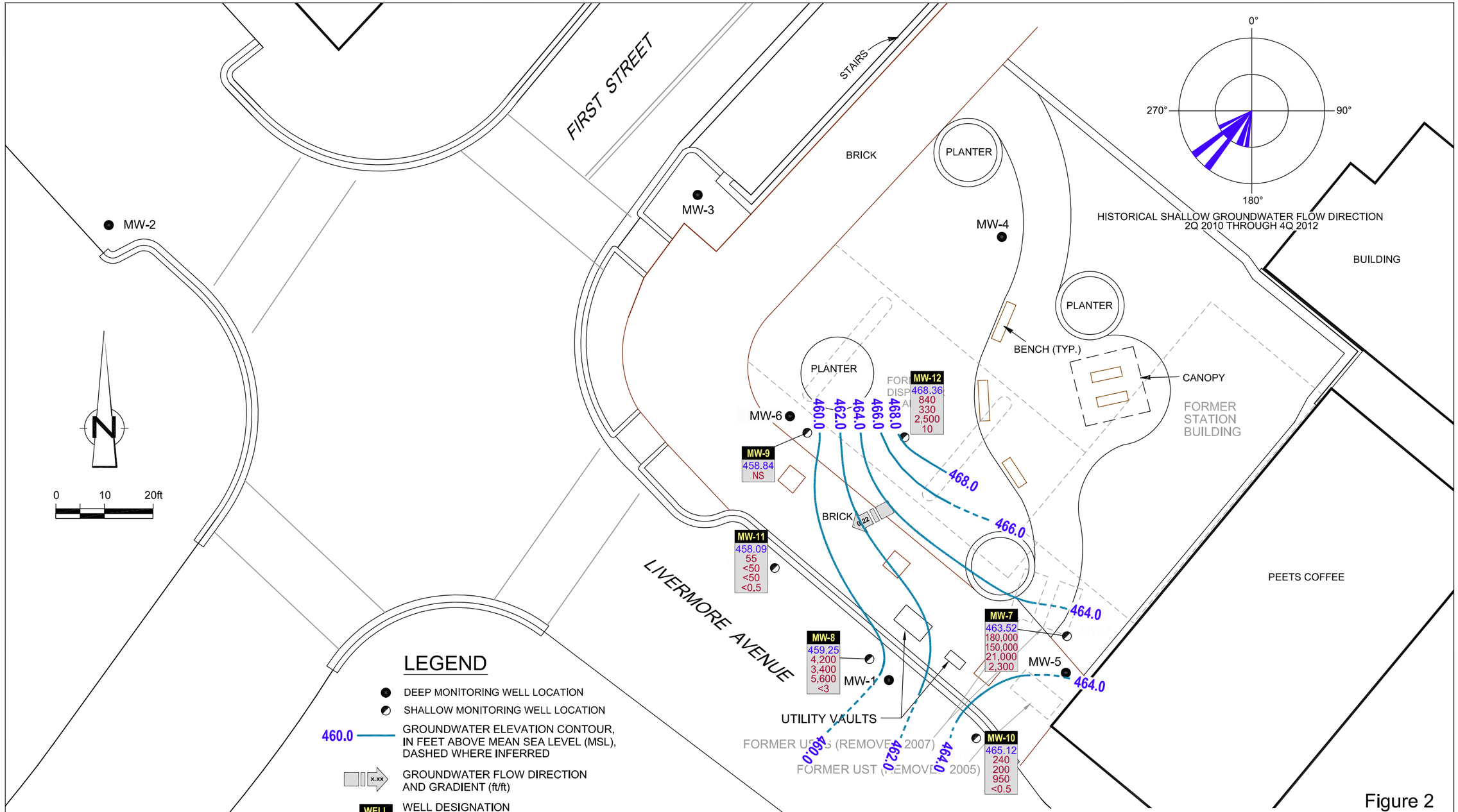


Figure 2

SHALLOW ZONE GROUNDWATER ELEVATION CONTOUR
AND HYDROCARBON CONCENTRATION MAP
FORMER TEXACO STATION (CHEVRON SITE 307233)
2259 FIRST STREET
Livermore, California
December 10, 2012

312264-95(021)GN-EM002 JAN 24/2012

TABLE

TABLE 1

GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 307233
2259 FIRST STREET
LIVERMORE, CALIFORNIA

							HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY							
Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ug/L	µg/L	ug/L	ug/L	ug/L	ug/L
MW-1	5/25/2010[1]	490.86	30.62	460.24	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	5/27/2010	490.86	30.65	460.21	0.00	0.00	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-1	9/13/2010	490.86	36.49	454.37	0.00	0.00	51	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-1	12/20/2010	490.86	32.24	458.62	0.00	0.00	-	79	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-1	3/7/2011	490.86	27.86	463.00	0.00	0.00	-	<50	<50	<0.5	<0.5	<0.5	<0.5	6,900	73,600	-	<10	-	-	-	-
MW-1	6/6/2011	490.86	27.10	463.76	0.00	0.00	-	220	<50	<0.5	<0.5	<0.5	<0.5	7,000	71,000	-	<10	-	-	-	-
MW-1	9/19/2011	490.86	31.26	459.60	0.00	0.00	-	450/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-1	3/9/2012[7]	490.86	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	3/12/2012[4]	490.86	41.35	449.51	0.00	0.00	-	<50/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-1	6/4/2012[7]	490.86	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	9/10/2012[4]	490.86	40.67	450.19	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-1	**12/10/2012[7]**	490.86	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	5/25/2010[1]	489.43	31.18	458.25	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	5/27/2010	489.43	31.11	458.32	0.00	0.00	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-2	9/13/2010	489.43	36.96	452.47	0.00	0.00	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-2	12/20/2010	489.43	32.62	456.81	0.00	0.00	-	52	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-2	3/7/2011	489.43	28.26	461.17	0.00	0.00	-	<50	<50	<0.5	<0.5	<0.5	<0.5	3,600	45,900	-	20	-	-	-	-
MW-2	6/6/2011	489.43	27.73	461.70	0.00	0.00	-	220	<50	<0.5	<0.5	<0.5	<0.5	2,900	43,600	-	<10	-	-	-	-
MW-2	9/19/2011	489.43	31.92	457.51	0.00	0.00	-	230/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-2	3/9/2012[7]	489.43	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	3/12/2012[4]	489.43	41.84	447.59	0.00	0.00	-	<50/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-2	6/4/2012[7]	489.43	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	9/10/2012[4]	489.43	41.32	448.11	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-2	**12/10/2012[7]**	489.43	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	5/25/2010[1]	490.38	30.17	460.21	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	5/27/2010	490.38	30.98	459.40	0.00	0.00	610	-	2,100	2	<0.5	<0.5	0.9	-	-	-	-	-	-	-	-
MW-3	9/13/2010	490.38	36.77	453.61	0.00	0.00	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-3	12/20/2010	490.38	32.41	457.97	0.00	0.00	-	97	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-3	3/7/2011	490.38	28.06	462.32	0.00	0.00	-	<50	<50	<0.5	<0.5	<0.5	<0.5	4,300	70,400	-	53	-	-	-	-

TABLE 1

GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 307233
2259 FIRST STREET
LIVERMORE, CALIFORNIA

							HYDROCARBONS			*PRIMARY VOCS*				*GENERAL CHEMISTRY*							
Location	Date	*TOC*	*DTW*	*GWE*	*LNAPLT*	*LNAPL REMOVED*	*TPH-DRO*	*TPH-DRO w/ Si Gel*	*TPH-GRO*	*B*	*T*	*E*	*X*	*Nitrate Nitrogen*	*Sulfate*	*Total sulfide (dissolved)*	*Ferrous Iron*	*Alkalinity, total (as CaCO3)*	*Alkalinity, phenolphthalein*	*Methane*	*Calcium*
	Units	*ft*	*ft*	*ft-amsl*	*ft*	*gal*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*ug/L*	*µg/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*
MW-3	6/6/2011	490.38	27.28	463.10	0.00	0.00	-	110	<50	<0.5	<0.5	<0.5	<0.5	3,900	66,400	-	17	-	-	-	-
MW-3	9/19/2011	490.38	31.21	459.17	0.00	0.00	-	170/230	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-3	3/9/2012[7]	490.38	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	3/12/2012[4]	490.38	41.66	448.72	0.00	0.00	-	<50/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-3	6/4/2012[7]	490.38	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	9/10/2012[4]	490.38	41.02	449.36	0.00	0.00	-	<50 / <50	<50	<5	<5	<5	<5	-	-	-	-	-	-	-	-
MW-3	**12/10/2012[7]**	490.38	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	5/25/2010[1]	492.27	32.21	460.06	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	5/27/2010	492.27	32.26	460.01	0.00	0.00	230	-	1,800	1	<0.5	<0.5	0.7	-	-	-	-	-	-	-	-
MW-4	9/13/2010	492.27	38.14	454.13	0.00	0.00	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-4	12/20/2010	492.27	33.80	458.47	0.00	0.00	-	180	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-4	3/7/2011	492.27	29.42	462.85	0.00	0.00	-	<50	<50	<0.5	<0.5	<0.5	<0.5	7,900	72,300	-	15	-	-	-	-
MW-4	6/6/2011	492.27	28.52	463.75	0.00	0.00	-	87	<50	<0.5	<0.5	<0.5	<0.5	7,500	67,700	-	<10	-	-	-	-
MW-4	9/19/2011	492.27	32.78	459.49	0.00	0.00	-	330/140	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-4	3/9/2012[7]	492.27	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	3/12/2012[4]	492.27	42.99	449.28	0.00	0.00	-	130/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-4	6/4/2012[7]	492.27	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	9/10/2012[4]	492.27	42.30	449.97	0.00	0.00	-	580 / 310	2,400	2	0.7	2	2	-	-	-	-	-	-	-	-
MW-4	**12/10/2012[7]**	492.27	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	5/25/2010[1]	491.99	31.39	460.60	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	5/27/2010	491.99	31.42	460.57	0.00	0.00	120	-	420	2	<0.5	<0.5	1	-	-	-	-	-	-	-	-
MW-5	9/13/2010	491.99	37.25	454.74	0.00	0.00	700	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	12/20/2010	491.99	33.01	458.98	0.00	0.00	-	74	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	3/7/2011	491.99	28.60	463.39	0.00	0.00	-	93	<50	<0.5	<0.5	<0.5	<0.5	7,900	70,100	-	23	-	-	-	-
MW-5	6/6/2011	491.99	27.71	464.28	0.00	0.00	-	<50	18,000	1,500	45	450	1,700	<250	2,700	-	11	-	-	-	-
MW-5	6/22/2011[2]	491.99	28.90	463.09	0.00	0.00	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	9/19/2011	491.99	31.94	460.05	0.00	0.00	-	240/410	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	3/9/2012[7]	491.99	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	3/12/2012[4]	491.99	42.15	449.84	0.00	0.00	-	95/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-

TABLE 1

GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 307233
2259 FIRST STREET
LIVERMORE, CALIFORNIA

							HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY							
Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ug/L	µg/L	ug/L	ug/L	ug/L	ug/L
MW-5	6/4/2012[7]	491.99	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	9/10/2012[4]	491.99	41.39	450.60	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	**12/10/2012[7]**	491.99	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	5/25/2010[1]	491.52	31.63	459.89	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	5/27/2010	491.52	31.79	459.73	0.00	0.00	1,000	-	3,700	4	<0.5	<0.5	1	-	-	-	-	-	-	-	-
MW-6	9/13/2010	491.52	37.64	453.88	0.00	0.00	68	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-6	12/20/2010	491.52	33.32	458.20	0.00	0.00	-	140	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-6	3/7/2011	491.52	28.96	462.56	0.00	0.00	-	63	<50	<0.5	<0.5	<0.5	<0.5	360	55,400	-	33	-	-	-	-
MW-6	6/6/2011	491.52	28.08	463.44	0.00	0.00	-	<50	<50	<0.5	<0.5	<0.5	<0.5	5,300	54,000	-	<10	-	-	-	-
MW-6	9/19/2011	491.52	32.38	459.14	0.00	0.00	-	<50/380	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-6	3/9/2012[7]	491.52	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	3/12/2012[4]	491.52	42.50	449.02	0.00	0.00	-	54/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-6	6/4/2012[7]	491.52	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	9/10/2012[4]	491.52	41.82	449.70	0.00	0.00	-	86/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-6	**12/10/2012[7]**	491.52	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	5/25/2010[1]	492.29	28.69	463.60	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	5/27/2010	492.29	28.61	463.68	0.00	0.00	2,800	-	14,000	1,800	35	320	660	-	-	-	-	-	-	-	-
MW-7	9/13/2010	492.29	31.75	460.54	0.00	0.00	40,000	-	16,000	1,700	33	460	600	-	-	-	-	-	-	-	-
MW-7	12/20/2010	492.29	27.96	464.33	0.00	0.00	-	6,200	15,000	2,800	59	450	530	-	-	-	-	-	-	-	-
MW-7	3/7/2011	492.29	24.98	467.31	0.00	0.00	-	55,000	16,000	1,500	50	470	2,100	<250	2,600	-	2,800	-	-	-	-
MW-7	6/6/2011	492.29	24.12	468.17	0.00	0.00	-	24,000	<50	<0.5	<0.5	<0.5	<0.5	8,000	70,300	-	4,300	-	-	-	-
MW-7	6/22/2011[2]	492.29	26.71	465.58	0.00	0.00	-	-	19,000	1,800	47	490	2,200	-	-	-	-	-	-	-	-
MW-7	9/19/2011[3]	492.29	28.85	463.44	0.12	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	**3/9/2012**	**492.29**	**-**	**-**	**0.00**	**0.00**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
MW-7	3/12/2012[5]	492.29	32.38	459.91	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	6/4/2012[5,6]	492.29	32.38	459.91	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	9/10/2012[5,9]	492.29	32.62	459.67	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	**12/10/2012[4,9]**	**492.29**	**28.77**	**463.52**	**0.00**	**0.00**	**-**	**180,000 / 150,000**	**21,000**	**2,300**	**47**	**400**	**550**	**-**	**250,000**	**<54**	**6,000**	**573,000**	**-**	**12,000**	**179,000**
MW-8	5/25/2010[1]	490.89	30.62	460.27	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 1

GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 307233
2259 FIRST STREET
LIVERMORE, CALIFORNIA

							HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY							
Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ug/L	µg/L	ug/L	ug/L	ug/L	ug/L
MW-8	5/27/2010	490.89	30.78	460.11	0.00	0.00	750	-	3,100	36	3	<0.5	2	-	-	-	-	-	-	-	-
MW-8	9/13/2010	490.89	36.55	454.34	0.00	0.00	590	-	3,400	5	2	<0.5	1	-	-	-	-	-	-	-	-
MW-8	12/20/2010	490.89	31.60	459.29	0.00	0.00	-	750	4,000	0.8	0.7	19	3	-	-	-	-	-	-	-	-
MW-8	3/7/2011	490.89	28.20	462.69	0.00	0.00	-	1,300	2,800	0.9	0.7	12	2	<250	7,000	-	820	-	-	-	-
MW-8	6/6/2011	490.89	27.38	463.51	0.00	0.00	-	4,300	3,100	0.9	0.7	5	1	<250	2,400	-	2,000	-	-	-	-
MW-8	9/19/2011	490.89	31.81	459.08	0.00	0.00	-	6,800/720	4,600	1	0.8	0.5	0.8	-	-	-	-	-	-	-	-
MW-8	**3/9/2012**	**490.89**	**-**	**-**	**0.00**	**0.00**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
MW-8	3/12/2012[5]	490.89	38.48	452.41	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	6/4/2012[4,8]	490.89	37.66	453.23	0.00	0.00	-	73,000/68,000	5,700	1	0.8	2	3	-	<1,500	<54	27,100	259,000	<700	2,000	31,200
MW-8	9/10/2012[5]	490.89	38.73	452.16	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	**12/10/2012[4]**	**490.89**	**31.64**	**459.25**	**0.00**	**0.00**	**-**	**4,200 / 3,400**	**5,600**	**<3**	**<3**	**11**	**<3**	**-**	**<1,500**	**130**	**1,600**	**220,000**	**-**	**2,600**	**18,900**
MW-9	5/25/2010[1]	491.64	29.23	462.41	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-9	5/27/2010	491.64	28.96	462.68	0.00	0.00	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-9	9/13/2010	491.64	31.85	459.79	0.00	0.00	30,000	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-9	12/20/2010	491.64	28.95	462.69	0.00	0.00	-	56	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-9	3/7/2011	491.64	25.67	465.97	0.00	0.00	-	<50	<50	<0.5	<0.5	<0.5	<0.5	<250	172,000	-	48	-	-	-	-
MW-9	6/6/2011	491.64	24.67	466.97	0.00	0.00	-	<50	<50	<0.5	<0.5	<0.5	<0.5	<250	228,000	-	<10	-	-	-	-
MW-9	9/19/2011	491.64	29.46	462.18	0.00	0.00	-	250/<50*	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-9	3/9/2012[7]	491.64	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-9	3/12/2012[4]	491.64	34.27	457.37	0.00	0.00	-	<50/<50*	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-9	6/4/2012[7]	491.64	35.80	455.84	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-9	9/10/2012[4]	491.64	36.53	455.11	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-9	**12/10/2012[10]**	**491.64**	**32.80**	**458.84**	**0.00**	**0.00**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
MW-10	3/9/2012[1]	491.15	28.00	463.15	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	3/12/2012[4]	491.15	28.11	463.04	0.00	0.00	-	440/260	3,100	<1	<1	36	16	-	-	-	-	-	-	-	-
MW-10	6/4/2012[4]	491.15	29.49	461.66	0.00	0.00	-	750/640	3,300	0.7	1	36	12	-	-	-	-	-	-	-	-
MW-10	9/10/2012[5]	491.15	32.10	459.05	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	**12/10/2012[4]**	**491.15**	**26.03**	**465.12**	**0.00**	**0.00**	**-**	**240 / 200**	**950**	**<0.5**	**<0.5**	**2**	**2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
MW-11	3/9/2012[1]	490.59	31.48	459.11	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 1

GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 307233
2259 FIRST STREET
LIVERMORE, CALIFORNIA

							HYDROCARBONS			*PRIMARY VOCS*				*GENERAL CHEMISTRY*							
Location	Date	*TOC*	*DTW*	*GWE*	*LNAPLT*	*LNAPL REMOVED*	*TPH-DRO*	*TPH-DRO w/ Si Gel*	*TPH-GRO*	*B*	*T*	*E*	*X*	*Nitrate Nitrogen*	*Sulfate*	*Total sulfide (dissolved)*	*Ferrous Iron*	*Alkalinity, total (as CaCO3)*	*Alkalinity, phenolphthalein*	*Methane*	*Calcium*
	Units	*ft*	*ft*	*ft-amsl*	*ft*	*gal*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*ug/L*	*µg/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*
MW-11	3/12/2012[4]	490.59	33.35	457.24	0.00	0.00	-	160/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-11	6/4/2012[5]	490.59	34.22	456.37	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	9/10/2012[5]	490.59	34.48	456.11	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	**12/10/2012[4]**	**490.59**	**32.50**	**458.09**	**0.00**	**0.00**	**-**	**55 / <50**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
MW-12	3/9/2012[1]	493.72	25.43	468.29	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-12	3/12/2012[4]	493.72	26.97	466.75	0.00	0.00	-	1,100/310	3,000	10	1	19	38	-	-	-	-	-	-	-	-
MW-12	6/4/2012[4]	493.72	26.54	467.18	0.00	0.00	-	990/510	4,200	15	2	12	23	-	-	-	-	-	-	-	-
MW-12	9/10/2012[4]	493.72	28.80	464.92	0.00	0.00	-	1,000 / 290	2,500	30	2	2	2	-	-	-	-	-	-	-	-
MW-12	**12/10/2012[4]**	**493.72**	**25.36**	**468.36**	**0.00**	**0.00**	**-**	**840 / 330**	**2,500**	**10**	**<3**	**<3**	**<3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
QA	5/27/2010	-	-	-			-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	9/13/2010	-	-	-			-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	12/20/2010	-	-	-			-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	3/7/2011	-	-	-			-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	6/6/2011	-	-	-			-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	6/22/2011	-	-	-			-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	9/19/2011	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	**3/12/2012**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Abbreviations and Notes:

TOC = Top of casing
DTW = Depth to water
GWE = Groundwater elevation
(ft-amsl) = Feet above mean sea level
TOC elevations were surveyed on April 19, 2010 by Morrow Surveying. Vertical datum is NAVD 88 from GPS observations
ft = Feet
µg/L = Micrograms per liter
TPH-DRO = Total petroleum hydrocarbons - diesel range organics
TPH-GRO = Total petroleum hydrocarbons - gasoline range organics
VOCS = Volatile organic compounds
B = Benzene
T = Toluene

TABLE 1

GROUNDWATER MONITORING AND SAMPLING DATA
FORMER CHEVRON SERVICE STATION 307233
2259 FIRST STREET
LIVERMORE, CALIFORNIA

							HYDROCARBONS			*PRIMARY VOCS*				*GENERAL CHEMISTRY*							
Location	Date	*TOC*	*DTW*	*GWE*	*LNAPLT*	*LNAPL REMOVED*	*TPH-DRO*	*TPH-DRO w/Si Gel*	*TPH-GRO*	*B*	*T*	*E*	*X*	*Nitrate Nitrogen*	*Sulfate*	*Total sulfide (dissolved)*	*Ferrous Iron*	*Alkalinity, total (as CaCO3)*	*Alkalinity, phenolphthalein*	*Methane*	*Calcium*
	Units	*ft*	*ft*	*ft-amsl*	*ft*	*gal*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*ug/L*	*µg/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*

E = Ethylbenzene
X = Xylenes (Total)
-- = Not available / not applicable
<x = Not detected at or above laboratory method detection limit

1 Well development performed.
2 Second quarter 2011 resampling event because MW-5 and MW-7 bottles for TPHg and BTEX analysis were switched during the original 6/6/2011 sampling event.
3 Monitored only due to the presence of NAPL.
4 Silica Gel Cleanup / 10 gram Column Silica Gel Cleanup with Capric Acid Reverse Surrogate.
5 Insufficient water to sample.
6 Sulfate canister in well
7 Monitoring and sampled during the first and third quartes only
8 Insufficient water for purging, so a grab-groundwater samples was collected
9 Skimmer in well
10 Monitored only

ATTACHMENT A

MONITORING DATA PACKAGE

GETTLER-RYAN INC.

TRANSMITTAL

December 18, 2012
G-R #385876

TO: Mr. Brian Silva
Conestoga-Rovers & Associates
10969 Trade Center Drive, Suite 107
Rancho Cordova, California 95670

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6747 Sierra Court, Suite J
Dublin, California 94568

RE: Former Chevron Service Station #307233
2259 First Street
Livermore, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package **Fourth Quarter Event of December 10, 2012**

COMMENTS:

Pursuant to your request, we are providing you with copies of the above referenced data for your use.

Please provide us the updated historical data prior to the next monitoring and sampling event for our field use.

Please feel free to contact me if you have any comments/questions.

trans/9-0271

WELL CONDITION STATUS SHEET

Client/Facility #: **Chevron #307233**
Site Address: **2259 First Street**
City: **Livermore, CA**

Job #: **385876**
Event Date: 12-10-12
Sampler: FT

WELL ID	Vault Frame Condition	Gasket/O-Ring (M) Missing (R) Replaced	BOLTS (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y (N)	REPLACE CAP Y (N)	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y (N)
MW-7	OK	→	→	→	→	→	→	↓	↓	MORRISON | 6" | 2	
MW-8	OK	→	→	→	→	→	→			EMCO | 12" | 2	
MW-9	OK	→	→	→	→	→	→			MORRISON | 6" | 2	
MW-10	OK	→	→	→	→	→	→			CHINA | 8" | 2	
MW-11	OK	→	→	→	→	→	→			↓ ↓	
MW-12	OK	→	→	B=1	OK	→	→				

Comments

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

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

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

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, peristaltic or Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging (additional parameters such as dissolved oxygen, oxidation reduction potential, turbidity may also be measured, depending on specific scope of work.). Purging continues until these parameters stabilize.

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

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

A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876
Site Address: 2259 First Street Event Date: 12.10.12 (inclusive)
City: Livermore, CA Sampler: FT

Well ID MW-7 Date Monitored: 12.10.12
Well Diameter 2
Total Depth 32.83 ft.
Depth to Water 28.77 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.

4.06 xVF .17 = .69 x3 case volume = Estimated Purge Volume: 2.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 29.58

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

Start Time (purge): 1430 Weather Conditions: SUNNY
Sample Time/Date: 1455 /12.10.12 Water Color: CLOUDY Odor: Y / N STRONG
Approx. Flow Rate: ✓ gpm. Sediment Description: NONE
Did well de-water? NO If yes, Time: Volume: gal. DTW @ Sampling: 28.92

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm (µS))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1433	.75	7.17	715	18.7		
1436	1.5	7.14	721	18.9		
1439	2.0	7.12	727	19.0		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-7	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	2 x voa vial	YES	NP	LANCASTER	SULFATE (EPA 300.0)
	1 x 500ml clear glass	YES	NaOH	LANCASTER	DISSOLVED SULFIDE (SM20 4500 S2D)
	1 x 250ml poly	YES	NP	LANCASTER	TOTAL ALKALINITY (SM20 2320 B)
	1 x 250ml poly	YES	HNO3	LANCASTER	CALCIUM (6010)
	1 x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	3 x voa vial	YES	HCL	LANCASTER	DISSOLVED METHANE (RSK-175)

COMMENTS: SKIMMER IN WELL.

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876
Site Address: 2259 First Street Event Date: 12.10.12 (inclusive)
City: Livermore, CA Sampler: FT

Well ID MW-8 Date Monitored: 12.10.12
Well Diameter 2
Total Depth 38.89 ft.
Depth to Water 31.64 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.

7.25 xVF .17 = 1.23 x3 case volume = Estimated Purge Volume: 3.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 33.09

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

Sampling Equipment:
Disposable Bailer ✓
Pressure Bailer
Metal Filters
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:

Start Time (purge): 1310 Weather Conditions: SUNNY
Sample Time/Date: 1335 /12.10.12 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: 31.82

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm (µS))	Temperature ((C) / F)	D.O. (mg/L)	ORP (mV)
1313	1.0	7.30	562	18.4		
1316	2.0	7.27	569	18.6		
1320	3.5	7.25	573	18.8		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-8	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	2 x voa vial	YES	NP	LANCASTER	SULFATE (EPA 300.0)
	1 x 500ml clear glass	YES	NaOH	LANCASTER	DISSOLVED SULFIDE (SM20 4500 S2D)
	1 x 250ml poly	YES	NP	LANCASTER	TOTAL ALKALINITY (SM20 2320 B)
	1 x 250ml poly	YES	HNO3	LANCASTER	CALCIUM (6010)
	1 x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	3 x voa vial	YES	HCL	LANCASTER	DISSOLVED METHANE (RSK-175)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: **Chevron #307233** Job Number: **385876**

Site Address: **2259 First Street** Event Date: 12.10.12 (inclusive)

City: **Livermore, CA** Sampler: FT

Well ID **MW-9** Date Monitored: 12.10.12

Well Diameter **2**

Total Depth **39.85** ft.

Depth to Water **32.80** 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.

7.05 xVF ___ = ___ x3 case volume = Estimated Purge Volume: ___ gal.

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

Purge Equipment:

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

Sampling Equipment:

Disposable Bailer ___
Pressure Bailer ___
Metal Filters ___
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: ___

Start Time (purge): ___ Weather Conditions: ___

Sample Time/Date: ___ / ___ Water Color: ___ Odor: **Y / N** ___

Approx. Flow Rate: ___ gpm. Sediment Description: ___

Did well de-water? ___ If yes, Time: ___ Volume: ___ gal. DTW @ Sampling: ___

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/
					TPH-DRO w/sgc(8015)
	x voa vial	YES	NP	LANCASTER	SULFATE (EPA 300.0)
	x 500ml clear glass	YES	NaOH	LANCASTER	DISSOLVED SULFIDE (SM20 4500 S2D)
	x 250ml poly	YES	NP	LANCASTER	TOTAL ALKALINITY (SM20 2320 B)
	x 250ml poly	YES	HNO3	LANCASTER	CALCIUM (6010)
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	x voa vial	YES	HCL	LANCASTER	DISSOLVED METHANE (RSK-175)

COMMENTS: M/O

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876
Site Address: 2259 First Street Event Date: 12.10.12 (inclusive)
City: Livermore, CA Sampler: FT

Well ID MW-10 Date Monitored: 12.10.12
Well Diameter 2
Total Depth 32.38 ft.
Depth to Water 26.03 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.

6.35 xVF .17 = 1.07 x3 case volume = Estimated Purge Volume: 3.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 27.30

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

Start Time (purge): 1145 Weather Conditions: SUNNY
Sample Time/Date: 1210 / 12.10.12 Water Color: LT. BRN. Odor: Y / (N)
Approx. Flow Rate: ~ gpm. Sediment Description: S. SILTY
Did well de-water? NO If yes, Time: Volume: gal. DTW @ Sampling: 26.25

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm (uS))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1148	1.0	7.40	542	18.6		
1151	2.0	7.38	540	18.7		
1154	3.0	7.36	537	18.9		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-10	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	x voa vial	YES	NP	LANCASTER	SULFATE (EPA 300.0)
	x 500ml clear glass	YES	NaOH	LANCASTER	DISSOLVED SULFIDE (SM20 4500 S2D)
	x 250ml poly	YES	NP	LANCASTER	TOTAL ALKALINITY (SM20 2320 B)
	x 250ml poly	YES	HNO3	LANCASTER	CALCIUM (6010)
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	x voa vial	YES	HCL	LANCASTER	DISSOLVED METHANE (RSK-175)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876
Site Address: 2259 First Street Event Date: 12.10.12 (inclusive)
City: Livermore, CA Sampler: FT

Well ID MW-11 Date Monitored: 12.10.12
Well Diameter 2
Total Depth 34.70 ft.
Depth to Water 32.50 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

☐ Check if water column is less then 0.50 ft.

2.20 xVF .17 = .37 x3 case volume = Estimated Purge Volume: 1.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 32.94

Purge Equipment:

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

Sampling Equipment:

Disposable Bailer	✓
Pressure Bailer	
Metal Filters	
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:

Start Time (purge): 1230 Weather Conditions: SUNNY
Sample Time/Date: 1250 / 12.10.12 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: 32.85

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1232	.25	7.48	535	18.9		
1234	.50	7.47	533	19.0		
1237	1.0	7.46	531	19.1		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-11	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	x voa vial	YES	NP	LANCASTER	SULFATE (EPA 300.0)
	x 500ml clear glass	YES	NaOH	LANCASTER	DISSOLVED SULFIDE (SM20 4500 S2D)
	x 250ml poly	YES	NP	LANCASTER	TOTAL ALKALINITY (SM20 2320 B)
	x 250ml poly	YES	HNO3	LANCASTER	CALCIUM (6010)
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	x voa vial	YES	HCL	LANCASTER	DISSOLVED METHANE (RSK-175)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876
Site Address: 2259 First Street Event Date: 12.10.12 (inclusive)
City: Livermore, CA Sampler: FT

Well ID MW-12 Date Monitored: 12.10.12
Well Diameter 2
Total Depth 34.49 ft.
Depth to Water 25.36 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.

9.13 xVF .17 = 1.55 x3 case volume = Estimated Purge Volume: 4.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 27.18

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

Sampling Equipment:
Disposable Bailer ✓
Pressure Bailer
Metal Filters
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:

Start Time (purge): 1355 Weather Conditions: SUNNY
Sample Time/Date: 1415 /12.10.12 Water Color: CLEAR Odor: Y / N MODERATE
Approx. Flow Rate: ✓ gpm. Sediment Description: NONE
Did well de-water? NO If yes, Time: Volume: gal. DTW @ Sampling: 25.76

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm (µS))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1358	1.5	7.27	626	18.7		
1401	3.0	7.24	631	19.0		
1404	4.5	7.22	637	19.3		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-12	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	x voa vial	YES	NP	LANCASTER	SULFATE (EPA 300.0)
	x 500ml clear glass	YES	NaOH	LANCASTER	DISSOLVED SULFIDE (SM20 4500 S2D)
	x 250ml poly	YES	NP	LANCASTER	TOTAL ALKALINITY (SM20 2320 B)
	x 250ml poly	YES	HNO3	LANCASTER	CALCIUM (6010)
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	x voa vial	YES	HCL	LANCASTER	DISSOLVED METHANE (RSK-175)

COMMENTS:

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

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories

12 11 12-02

Please forward the lab results directly to the Lead Consultant and cc: G-R.

For Lancaster Laboratories use only

Acct. #: _____ Sample # _____ Group #: 010648

Facility #: SS#307233-OML G-R#385876 Global ID#T0600196622

Site Address: 2259 FIRST STREET, LIVERMORE, CA

Chevron PM: CM Lead Consultant: CRATH Hariu

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: FRANK TERRONI

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	Matrix: Grab	Composite	Soil	Water	Oil ☐ Air	Total Number of Containers	BTEX ☒ 8260 ☐ 8021	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	Oxygenates ____ Method	Total Lead ____ Method	Dissolved Lead ____ Method	SULFHT & (EPA 300.0) (RSK 175) DISSOLVED METHANE
QA	12.10.12					☒		2	X	X						
MW-7		1455	X					11	X	X					X	X
MW-8		1335	X					11	X	X					X	X
MW-10		1210	X					6	X	X						
MW-11		1250	X					6	X	X						
MW-12	↓	1415	X			↓		6	X	X						

Comments / Remarks

Please report DRO w/sgc using 10 grams of silica and also report 1 gram shake results

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)

QC Summary Type I - Full EDF/EDD
Type VI (Raw Data) ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

	Relinquished by:	Date	Time	Received by:	Date	Time
1		12.11.12	1430		12/12	1434
2	Relinquished by:	Date	Time	Received by:	Date	Time
3	Relinquished by:	Date	Time	Received by:	Date	Time
	Relinquished by Commercial Carrier: UPS FedEx Other			Received by:	Date	Time
	Temperature Upon Receipt ____ C°			Custody Seals Intact? Yes No		

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only

Acct. #: ______ Sample # ______ Group #: 010647

Please forward the lab results directly to the Lead Consultant and cc: G-R.

Facility #: SS#307233-OML G-R#385876 Global ID#T0600196622

Site Address: 2259 FIRST STREET, LIVERMORE, CA

Chevron PM: CM Lead Consultant: CRATH Hariu

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: FRANK TEIXINONI

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

Analyses Requested

Preservation Codes																					B		N	H
Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water (☐ Potable ☐ NPDES)	Oil	☐ Air	Total Number of Containers	BTEX + MTBE 8260 ☐ 8021 ☐	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☒ Silica Gel Cleanup	8260 full scan	Oxygenates	Total Lead Method	Dissolved Lead Method	TPH-DRO COLUMN W/SGC	DISSOLVED SULFIDE (SM20 4500 S2D)	TOTAL ALKALINITY (AS CaCO3) (SM20 2320B)	CALCIUM (6010)	FERROUS IRON (SM20 3500FeB)			
	12.10.12					W																		
MW-7	↓	1455	X			↓			6			X					X	X	X	X	X			
MW-8	↓	1335	X			↓			6			X					X	X	X	X	X			
MW-10	↓	1210	X			↓			2			X					X							
MW-11	↓	1250	X			↓			2			X					X							
MW-12	↓	1415	X			↓			2			X					X							

Comments / Remarks

Please report DRO w/sgc using 10 grams of silica and also report 1 gram shake results

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)

QC Summary Type I - Full EDF/EDD
Type VI (Raw Data) ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12.10.12	1700			

Relinquished by Commercial Carrier: UPS (FedEx) Other ______ Received by: Date Time

Temperature Upon Receipt ______ C° Custody Seals Intact? Yes No

ATTACHMENT B

LABORATORY ANALYTICAL REPORT

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

December 21, 2012

Project: 307233

Submittal Date: 12/11/2012
Group Number: 1355228
PO Number: 0015093428
Release Number: MACLEOD
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
MW-7-W-121210 Grab Water	6889597
MW-7-W-121210 Grab Water	6889598
MW-8-W-121210 Grab Water	6889599
MW-8-W-121210 Grab Water	6889600
MW-10-W-121210 Grab Water	6889601
MW-10-W-121210 Grab Water	6889602
MW-11-W-121210 Grab Water	6889603
MW-11-W-121210 Grab Water	6889604
MW-12-W-121210 Grab Water	6889605
MW-12-W-121210 Grab Water	6889606

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

ELECTRONIC COPY TO	CRA c/o Gettler-Ryan	Attn: Rachelle Munoz
ELECTRONIC COPY TO	Chevron c/o CRA	Attn: Report Contact
ELECTRONIC COPY TO	Chevron	Attn: Anna Avina
ELECTRONIC COPY TO	CRA	Attn: Brian Silva

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

Respectfully Submitted,

Jill M. Parker
Senior Specialist

(717) 556-7262

Sample Description: **MW-7-W-121210 Grab Water**
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622 MW-7

LLI Sample # WW 6889597
LLI Group # 1355228
Account # 10904

Project Name: 307233

Collected: 12/10/2012 14:55 by FT

Submitted: 12/11/2012 09:25
Reported: 12/21/2012 09:03

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FLC07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	150,000	670	20
	Due to the dilution of the sample extract, capric acid recovery can not be determined.				
Metals	**SW-846 6010B**		**ug/l**	**ug/l**	
01750	Calcium	7440-70-2	179,000	64.0	1
Wet Chemistry	**SM20 2320 B**		**ug/l as CaCO3**	**ug/l as CaCO3**	
12150	Total Alkalinity	n.a.	573,000	700	1
	SM20 3500 Fe B modified		**ug/l**	**ug/l**	
08344	Ferrous Iron	n.a.	6,000	200	20
	SM20 4500 S2 D		**ug/l**	**ug/l**	
10499	Dissolved Sulfide	n.a.	N.D.	54	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	123470026A	12/20/2012 12:38	Nicholas R Rossi	20
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	123470026A	12/13/2012 10:40	Elizabeth A Sholder	1
01750	Calcium	SW-846 6010B	1	123481848004	12/15/2012 05:05	John W Yanzuk II	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	123481848004	12/14/2012 10:08	Denise K Conners	1
12150	Total Alkalinity	SM20 2320 B	1	12347002105A	12/13/2012 11:18	Clayton C Litchmore	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	12346834401A	12/11/2012 18:55	Daniel S Smith	20
10499	Dissolved Sulfide	SM20 4500 S2 D	1	12352023001A	12/17/2012 10:50	Susan E Hibner	1

Sample Description: MW-7-W-121210 Grab Water
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622 MW-7

LLI Sample # WW 6889598
LLI Group # 1355228
Account # 10904

Project Name: 307233

Collected: 12/10/2012 14:55 by FT

Submitted: 12/11/2012 09:25
Reported: 12/21/2012 09:03

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FLQ07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	180,000	1,700	50

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	123470027A	12/20/2012 13:02	Nicholas R Rossi	50
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	123470027A	12/13/2012 10:40	Elizabeth A Sholder	1

Sample Description: MW-8-W-121210 Grab Water
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622 MW-8

LLI Sample # WW 6889599
LLI Group # 1355228
Account # 10904

Project Name: 307233

Collected: 12/10/2012 13:35 by FT

Submitted: 12/11/2012 09:25
Reported: 12/21/2012 09:03

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FLC08

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si		**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel		n.a.	3,400	50	1
	The reverse surrogate, capric acid, is present at <1%.					
Metals		**SW-846 6010B**		**ug/l**	**ug/l**	
01750	Calcium		7440-70-2	18,900	64.0	1
Wet Chemistry		**SM20 2320 B**		**ug/l as CaCO3**	**ug/l as CaCO3**	
12150	Total Alkalinity		n.a.	220,000	700	1
		SM20 3500 Fe B modified		**ug/l**	**ug/l**	
08344	Ferrous Iron		n.a.	1,600	50	5
		SM20 4500 S2 D		**ug/l**	**ug/l**	
10499	Dissolved Sulfide		n.a.	130	54	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	123470026A	12/19/2012 21:15	Heather E Williams	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	123470026A	12/13/2012 10:40	Elizabeth A Sholder	1
01750	Calcium	SW-846 6010B	1	123481848004	12/15/2012 05:09	John W Yanzuk II	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	123481848004	12/14/2012 10:08	Denise K Conners	1
12150	Total Alkalinity	SM20 2320 B	1	12347002103A	12/13/2012 04:14	Clayton C Litchmore	1
08344	Ferrous Iron	SM20 3500 Fe B modified	1	12346834401A	12/11/2012 18:55	Daniel S Smith	5
10499	Dissolved Sulfide	SM20 4500 S2 D	1	12352023001A	12/17/2012 10:50	Susan E Hibner	1

Sample Description: MW-8-W-121210 Grab Water
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622 MW-8

LLI Sample # WW 6889600
LLI Group # 1355228
Account # 10904

Project Name: 307233

Collected: 12/10/2012 13:35 by FT

Submitted: 12/11/2012 09:25
Reported: 12/21/2012 09:03

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FLQ08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	4,200	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	123470027A	12/20/2012 10:11	Nicholas R Rossi	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	123470027A	12/13/2012 10:40	Elizabeth A Sholder	1

Sample Description: MW-10-W-121210 Grab Water
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622 MW-10

LLI Sample # WW 6889601
LLI Group # 1355228
Account # 10904

Project Name: 307233

Collected: 12/10/2012 12:10 by FT

Submitted: 12/11/2012 09:25
Reported: 12/21/2012 09:03

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FLC10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	200	50	1
	The reverse surrogate, capric acid, is present at <1%.				

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	123470026A	12/19/2012 21:39	Heather E Williams	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	123470026A	12/13/2012 10:40	Elizabeth A Sholder	1

Sample Description: MW-10-W-121210 Grab Water
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622 MW-10

LLI Sample # WW 6889602
LLI Group # 1355228
Account # 10904

Project Name: 307233

Collected: 12/10/2012 12:10 by FT

Submitted: 12/11/2012 09:25
Reported: 12/21/2012 09:03

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FLQ10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	240	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	123470027A	12/20/2012 10:35	Nicholas R Rossi	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	123470027A	12/13/2012 10:40	Elizabeth A Sholder	1

Sample Description: MW-11-W-121210 Grab Water
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622 MW-11

LLI Sample # WW 6889603
LLI Group # 1355228
Account # 10904

Project Name: 307233

Collected: 12/10/2012 12:50 by FT

Submitted: 12/11/2012 09:25
Reported: 12/21/2012 09:03

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FLC11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
	The reverse surrogate, capric acid, is present at <1%.				

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	123470026A	12/19/2012 22:03	Heather E Williams	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	123470026A	12/13/2012 10:40	Elizabeth A Sholder	1

Sample Description: MW-11-W-121210 Grab Water
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622 MW-11

LLI Sample # WW 6889604
LLI Group # 1355228
Account # 10904

Project Name: 307233

Collected: 12/10/2012 12:50 by FT

Submitted: 12/11/2012 09:25
Reported: 12/21/2012 09:03

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FLQ11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	55	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	123470027A	12/20/2012 10:59	Nicholas R Rossi	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	123470027A	12/13/2012 10:40	Elizabeth A Sholder	1

Sample Description: MW-12-W-121210 Grab Water
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622 MW-12

LLI Sample # WW 6889605
LLI Group # 1355228
Account # 10904

Project Name: 307233

Collected: 12/10/2012 14:15 by FT

Submitted: 12/11/2012 09:25
Reported: 12/21/2012 09:03

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FLC12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	330	50	1
	The reverse surrogate, capric acid, is present at <1%.				

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	123470026A	12/19/2012 22:27	Heather E Williams	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	123470026A	12/13/2012 10:40	Elizabeth A Sholder	1

Sample Description: MW-12-W-121210 Grab Water
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622 MW-12

LLI Sample # WW 6889606
LLI Group # 1355228
Account # 10904

Project Name: 307233

Collected: 12/10/2012 14:15 by FT

Submitted: 12/11/2012 09:25
Reported: 12/21/2012 09:03

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FLQ12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	840	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	123470027A	12/20/2012 11:23	Nicholas R Rossi	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	123470027A	12/13/2012 10:40	Elizabeth A Sholder	1

Quality Control Summary

Client Name: Chevron Group Number: 1355228
Reported: 12/21/12 at 09:03 AM

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

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 123470026A	Sample number(s): 6889597,6889599,6889601,6889603,6889605							
TPH-DRO CA C10-C28 w/ Si Gel	N.D.	32.	ug/l	87	87	50-118	0	20
Batch number: 123470027A	Sample number(s): 6889598,6889600,6889602,6889604,6889606							
TPH-DRO CA C10-C28 w/ Si Gel	N.D.	32.	ug/l	103	107	50-118	4	20
Batch number: 123481848004	Sample number(s): 6889597,6889599							
Calcium	69.4	64.0	ug/l	98		90-110		
Batch number: 12346834401A	Sample number(s): 6889597,6889599							
Ferrous Iron	N.D.	10.	ug/l	99		93-105		
Batch number: 12347002103A	Sample number(s): 6889599							
Total Alkalinity	N.D.	700.	ug/l as CaCO3	102		90-110		
Batch number: 12347002105A	Sample number(s): 6889597							
Total Alkalinity	880	700.	ug/l as CaCO3	103		90-110		
Batch number: 12352023001A	Sample number(s): 6889597,6889599							
Dissolved Sulfide	N.D.	54.	ug/l	102		90-110		

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: 123481848004	Sample number(s): 6889597,6889599 UNSPK: P889342 BKG: P889342								
Calcium	159 (2)	189 (2)	81-118	1	20	78,800	80,300	2	20
Batch number: 12346834401A	Sample number(s): 6889597,6889599 UNSPK: P889147 BKG: P889147								
Ferrous Iron	95	98	81-112	2	6	19,600	18,800	4 (1)	5
Batch number: 12347002103A	Sample number(s): 6889599 UNSPK: 6889599 BKG: 6889599								
Total Alkalinity	135*		73-121			220,000	220,000	0	5
Batch number: 12347002105A	Sample number(s): 6889597 UNSPK: P887828 BKG: P887826								
Total Alkalinity	54 (2)		73-121			379,000	378,000	0	5

*- 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 Group Number: 1355228
Reported: 12/21/12 at 09:03 AM

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: 12352023001A	Sample number(s): 6889597,6889599 UNSPK: P889521 BKG: P889521								
Dissolved Sulfide	85	72	43-137	9	16	350	340	1 (1)	5

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: TPH-DRO CA C10-C28 w/ Si Gel
Batch number: 123470026A

	Orthoterphenyl
6889597	623*
6889599	89
6889601	92
6889603	88
6889605	87
Blank	84
LCS	100
LCSD	95
Limits:	50-154

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel
Batch number: 123470027A

	Orthoterphenyl
6889598	672*
6889600	98
6889602	100
6889604	100
6889606	100
Blank	110
LCS	110
LCSD	112
Limits:	50-154

*- 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.

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories

Please forward the lab results directly to the Lead Consultant and cc: G-R.

For Lancaster Laboratories use only
Acct. #: 10904 Sample #: 6889597-606 Group #: 010647

G# 1355228

Facility #: SS#307233-OML G-R#385876 Global ID#T0600196622
Site Address: 2259 FIRST STREET, LIVERMORE, CA
Chevron PM: CM Lead Consultant: CRATH Hariu
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: FRANK TENNINONI

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	Matrix: Air	Total Number of Containers	BTEX + MTBE 8260 ☐ 8021 ☐	TPH 8015 MOD GRO	TPH 8015 MOD DRO	Silica Gel Cleanup	8260 full scan	Oxygenates ____	Total Lead Method ____	Dissolved Lead Method ____	TPH-DRO w/sgc Column (SM20 4500 S2D)	DISSOLVED SULFIDE (SM4500 S2D)	TOTAL ALKALINITY (SM20 2320B)	CAM Cr (6010) (SM20 3500 Cr B)	FERROUS IRON
	12.10.12					W													B		N	H
MW-7		1455	X						6			X						X	X	X	X	X
MW-8		1335	X						6			X						X	X	X	X	X
MW-10		1210	X						2			X						X				
MW-11		1250	X						2			X						X				
MW-12		1415	X						2			X						X				

Comments / Remarks

Please report DRO w/sgc using 10 grams of silica and also report 1 gram shake results

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)
QC Summary | Type I - Full | EDF/EDD
Type VI (Raw Data) | ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

		Date	Time		Date	Time
Relinquished by:		12.10.12	1700	Received by:		
Relinquished by:				Received by:		
Relinquished by:				Received by:		
Relinquished by Commercial Carrier: UPS (FedEx) Other ____				Received by: Pat Lyk	12/11/12	0925
Temperature Upon Receipt 2.3 C°				Custody Seals Intact? (Yes) No		

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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)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< 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.

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

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

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

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

December 21, 2012

Project: 307233

Submittal Date: 12/12/2012
Group Number: 1355622
PO Number: 0015093428
Release Number: MACLEOD
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
QA-T-121210 NA Water	6891456
MW-7-W-121210 Grab Water	6891457
MW-8-W-121210 Grab Water	6891458
MW-10-W-121210 Grab Water	6891459
MW-11-W-121210 Grab Water	6891460
MW-12-W-121210 Grab Water	6891461

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

ELECTRONIC COPY TO	CRA c/o Gettler-Ryan	Attn: Rachelle Munoz
ELECTRONIC COPY TO	Chevron c/o CRA	Attn: Report Contact
ELECTRONIC COPY TO	Chevron	Attn: Anna Avina
ELECTRONIC COPY TO	CRA	Attn: Brian Silva

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

Respectfully Submitted,

Jill M. Parker
Senior Specialist

(717) 556-7262

Sample Description: **QA-T-121210 NA Water**
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622 QA

LLI Sample # WW 6891456
LLI Group # 1355622
Account # 10904

Project Name: 307233

Collected: 12/10/2012

Submitted: 12/12/2012 09:25
Reported: 12/21/2012 20:15

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

LVRQA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	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

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 8260B Water	SW-846 8260B	1	P123522AA	12/17/2012 16:14	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123522AA	12/17/2012 16:14	Emily R Styer	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12349A20A	12/17/2012 11:29	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12349A20A	12/17/2012 11:29	Marie D John	1

Sample Description: **MW-7-W-121210 Grab Water**
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622 MW-7

LLI Sample # WW 6891457
LLI Group # 1355622
Account # 10904

Project Name: 307233

Collected: 12/10/2012 14:55 by FT

Submitted: 12/12/2012 09:25
Reported: 12/21/2012 20:15

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

LVR07

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles		**SW-846 8260B**		**ug/l**	**ug/l**	
10943	Benzene		71-43-2	2,300	50	100
10943	Ethylbenzene		100-41-4	400	5	10
10943	Toluene		108-88-3	47	5	10
10943	Xylene (Total)		1330-20-7	550	5	10
GC Volatiles		**SW-846 8015B**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water	C6-C12	n.a.	21,000	250	5
GC Miscellaneous		**SW-846 8015B modified**		**ug/l**	**ug/l**	
07105	Methane		74-82-8	12,000	300	100
Wet Chemistry		**EPA 300.0**		**ug/l**	**ug/l**	
00228	Sulfate		14808-79-8	250,000	15,000	50

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P123522AA	12/17/2012 19:29	Emily R Styer	10
10943	BTEX 8260B Water	SW-846 8260B	1	P123552AA	12/20/2012 18:40	Emily R Styer	100
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123522AA	12/17/2012 19:29	Emily R Styer	10
01163	GC/MS VOA Water Prep	SW-846 5030B	2	P123552AA	12/20/2012 18:40	Emily R Styer	100
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12349A20A	12/17/2012 17:20	Marie D John	5
01146	GC VOA Water Prep	SW-846 5030B	1	12349A20A	12/17/2012 17:20	Marie D John	5
07105	Volatile Headspace Hydrocarbon	SW-846 8015B modified	1	123540003A	12/19/2012 22:05	Kerrie A Freeburn	100
00228	Sulfate	EPA 300.0	1	12353655901A	12/18/2012 19:32	Christopher D Meeks	50

Sample Description: MW-8-W-121210 Grab Water
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622 MW-8

LLI Sample # WW 6891458
LLI Group # 1355622
Account # 10904

Project Name: 307233

Collected: 12/10/2012 13:35 by FT

Submitted: 12/12/2012 09:25
Reported: 12/21/2012 20:15

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

LVR08

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles		**SW-846 8260B**		**ug/l**	**ug/l**	
10943	Benzene		71-43-2	N.D.	3	5
10943	Ethylbenzene		100-41-4	11	3	5
10943	Toluene		108-88-3	N.D.	3	5
10943	Xylene (Total)		1330-20-7	N.D.	3	5
GC Volatiles		**SW-846 8015B**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water	C6-C12	n.a.	5,600	250	5
GC Miscellaneous		**SW-846 8015B modified**		**ug/l**	**ug/l**	
07105	Methane		74-82-8	2,600	60	20
Wet Chemistry		**EPA 300.0**		**ug/l**	**ug/l**	
00228	Sulfate		14808-79-8	N.D.	1,500	5

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P123522AA	12/17/2012 19:56	Emily R Styer	5
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123522AA	12/17/2012 19:56	Emily R Styer	5
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12349A20A	12/17/2012 17:42	Marie D John	5
01146	GC VOA Water Prep	SW-846 5030B	1	12349A20A	12/17/2012 17:42	Marie D John	5
07105	Volatile Headspace Hydrocarbon	SW-846 8015B modified	1	123540003A	12/19/2012 22:24	Kerrie A Freeburn	20
00228	Sulfate	EPA 300.0	1	12353655901A	12/18/2012 18:43	Christopher D Meeks	5

Sample Description: MW-10-W-121210 Grab Water
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622 MW-10

LLI Sample # WW 6891459
LLI Group # 1355622
Account # 10904

Project Name: 307233

Collected: 12/10/2012 12:10 by FT

Submitted: 12/12/2012 09:25
Reported: 12/21/2012 20:15

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

LVR10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	2	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.	950	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P123522AA	12/17/2012 20:24	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123522AA	12/17/2012 20:24	Emily R Styer	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12349A20A	12/17/2012 12:35	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12349A20A	12/17/2012 12:35	Marie D John	1

Sample Description: MW-11-W-121210 Grab Water
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622 MW-11

LLI Sample # WW 6891460
LLI Group # 1355622
Account # 10904

Project Name: 307233

Collected: 12/10/2012 12:50 by FT

Submitted: 12/12/2012 09:25
Reported: 12/21/2012 20:15

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

LVR11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	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

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 8260B Water	SW-846 8260B	1	P123522AA	12/17/2012 20:52	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123522AA	12/17/2012 20:52	Emily R Styer	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12349A20A	12/17/2012 12:57	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12349A20A	12/17/2012 12:57	Marie D John	1

Sample Description: MW-12-W-121210 Grab Water
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622 MW-12

LLI Sample # WW 6891461
LLI Group # 1355622
Account # 10904

Project Name: 307233

Collected: 12/10/2012 14:15 by FT

Submitted: 12/12/2012 09:25
Reported: 12/21/2012 20:15

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

LVR12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10943	Benzene	71-43-2	10	3	5
10943	Ethylbenzene	100-41-4	N.D.	3	5
10943	Toluene	108-88-3	N.D.	3	5
10943	Xylene (Total)	1330-20-7	N.D.	3	5
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	2,500	250	5

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P123522AA	12/17/2012 21:20	Emily R Styer	5
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123522AA	12/17/2012 21:20	Emily R Styer	5
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12349A20A	12/17/2012 18:04	Marie D John	5
01146	GC VOA Water Prep	SW-846 5030B	1	12349A20A	12/17/2012 18:04	Marie D John	5

Quality Control Summary

Client Name: Chevron Group Number: 1355622
Reported: 12/21/12 at 08:15 PM

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

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: P123522AA	Sample number(s): 6891456-6891461							
Benzene	N.D.	0.5	ug/l	86	88	77-121	2	30
Ethylbenzene	N.D.	0.5	ug/l	86	89	79-120	4	30
Toluene	N.D.	0.5	ug/l	89	92	79-120	3	30
Xylene (Total)	N.D.	0.5	ug/l	92	94	77-120	3	30
Batch number: P123552AA	Sample number(s): 6891457							
Benzene	N.D.	0.5	ug/l	86	89	77-121	3	30
Batch number: 12349A20A	Sample number(s): 6891456-6891461							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	111	89	75-135	22	30
Batch number: 123540003A	Sample number(s): 6891457-6891458							
Methane	N.D.	3.0	ug/l	92		80-120		
Batch number: 12353655901A	Sample number(s): 6891457-6891458							
Sulfate	N.D.	300.	ug/l	100	102	90-110	2	20

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: 123540003A	Sample number(s): 6891457-6891458 UNSPK: P892042								
Methane	57	56	35-157	1	20				
Batch number: 12353655901A	Sample number(s): 6891457-6891458 UNSPK: 6891458 BKG: 6891458								
Sulfate	99		90-110			N.D.	N.D.	0 (1)	20

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: P123522AA

*- 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 Group Number: 1355622
Reported: 12/21/12 at 08:15 PM

Surrogate Quality Control

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6891456	106	102	96	95
6891457	103	103	96	101
6891458	102	98	96	97
6891459	103	99	97	98
6891460	103	102	95	94
6891461	102	98	96	97
Blank	105	103	96	93
LCS	102	104	95	96
LCSD	103	103	95	95
Limits:	80-116	77-113	80-113	78-113

Analysis Name: UST VOCs by 8260B - Water
Batch number: P123552AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
Blank	104	100	95	93
LCS	103	102	95	96
LCSD	103	102	95	97
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 12349A20A

	Trifluorotoluene-F
6891456	78
6891457	191*
6891458	121
6891459	110
6891460	80
6891461	104
Blank	79
LCS	108
LCSD	100
Limits:	63-135

Analysis Name: Volatile Headspace Hydrocarbon
Batch number: 123540003A

	Propene
6891457	102
6891458	98
Blank	92
LCS	92
MS	55
MSD	53
Limits:	42-131

*- 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 Group Number: 1355622
Reported: 12/21/12 at 08:15 PM

*- 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.

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories 12 11 12 -02

Please forward the lab results directly to the Lead Consultant and cc: G-R.

For Lancaster Laboratories use only — Acct. #: 10904 Sample #: 6891456761 Group #: 010648

G# 1355622

Facility #: SS#307233-OML G-R#385876 Global ID#T0600196622
Site Address: 2259 FIRST STREET, LIVERMORE, CA
Chevron PM: CM Lead Consultant: CRATH Hariu
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: FRANK TERRINONI

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	Water	Oil ☐ Air	Total Number of Containers	Analyses Requested / Preservation Codes: BTEX ■ 8260 ☒ 8021 ☐	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	Oxygenates	Total Lead Method	Dissolved Lead Method	SULFATE (EPA 300.0) (RSK 175) DISSOLVED METHANE
						☐ Potable ☐ NPDES			H	H						H
QA	12.10.12					W		2	X	X						
MW-7		1455	X					11	X	X					X	X
MW-8		1335	X					11	X	X					X	X
MW-10		1210	X					6	X	X						
MW-11		1250	X					6	X	X						
MW-12	↓	1415	X			↓		6	X	X						

Comments / Remarks

Please report DRO w/sgc using 10 grams of silica and also report 1 gram shake results

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)
QC Summary Type I - Full **EDF/EDD**
Type VI (Raw Data) ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

	Date	Time		Date	Time
Relinquished by:	12-11-12	1430	Received by:	12/11/12	1430
Relinquished by:	12/11/12	1630	Received by:		
Relinquished by:			Received by:		
Relinquished by Commercial Carrier:			Received by:		

UPS (FedEx) Other ____
Temperature Upon Receipt 0.2 - 0.5 C°
Custody Seals Intact? (Yes) No

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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)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< 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.

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

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