

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

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 RECEIVED

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

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



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.

Equal Employment Opportunity Employer



January 29, 2013 Reference No. 312264

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

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Greg Barclay, PG 6260

JG/cw/21 Encl.

Brian Silva

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**

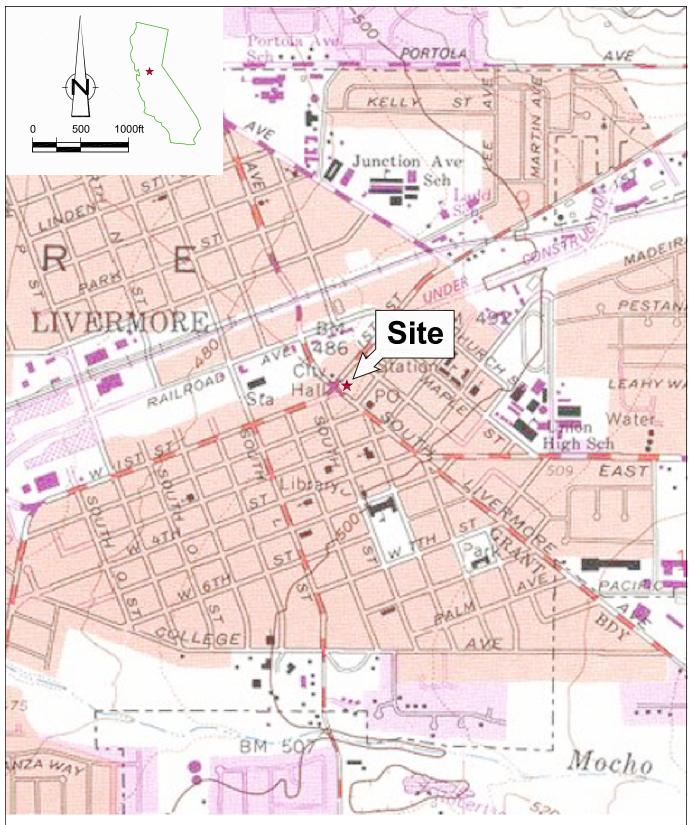
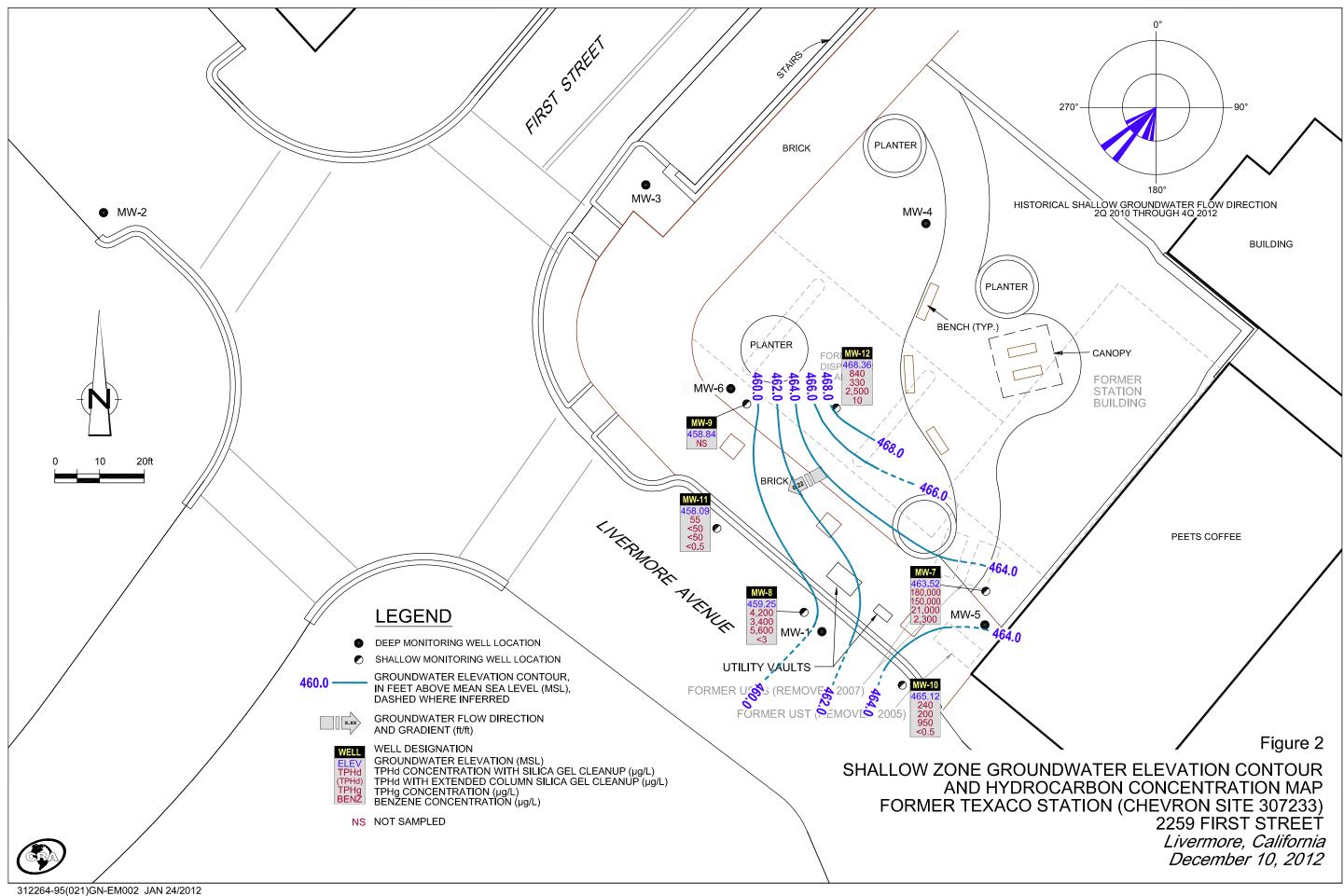


Figure 1

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





**TABLE** 

TABLE 1 Page 1 of 6

													-								
	T	1		1	1	1		HYDROCARBONS	S	PI	RIMAF	RY VO	CS				GENERA	L CHEM	ISTRY	ı	ı
Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	трн-рко	TPH-DRO w/Si Gel	TPH-GRO	В	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	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	490.86	-	-	0.00	0.00	-	=	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	3/12/20124	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 <sup>7</sup>	490.86	-	-	0.00	0.00	-	=	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	9/10/20124	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 <sup>7</sup>	490.86	-	-	0.00	0.00	_	-	-	_	_	_	_	_	-	_	-	_	-	_	-
MW-2	5/25/2010	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 <sup>7</sup>	489.43	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	3/12/20124	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 <sup>7</sup>	489.43	_	_	0.00	0.00	-	-	-	_	_	_	_	_	_	_	_	_	_	_	-
MW-2	9/10/2012 <sup>4</sup>	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	489.43	41.32	440.11	0.00	0.00	-	-50 / -50	-	-0.5	-0.5	-0.0	-0.0	-	-	-	-	-	-	-	-
IVIVV-2	1410,2012	409.43	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	5/25/2010 <sup>1</sup>	490.38	30.17	460.21	0.00	0.00															
MW-3	5/25/2010	490.38	30.17	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	-50	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	4,300	70,400	_	53	_	_	_	_
17177-3	5/ // 2011	470.30	20.00	402.02	0.00	0.00	-	-50	450	-0.5	-0.0	-0.0	-0.0	4,500	70,400	-	33	-	-	-	-

TABLE 1 Page 2 of 6

													-								
	T	1	1	1	1	1		HYDROCARBONS	3	PI	RIMAF	RY VO	CS				GENERA	L CHEM	ISTRY	ı	1
Location	Date	тос	DTW	GWE	LNAPLT	LNAPL REMOVED	TPH-DRO	TPH-DRO w/Si Gel	TPH-GRO	В	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	490.38	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	3/12/2012	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 <sup>7</sup>	490.38	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	9/10/20124	490.38	41.02	449.36	0.00	0.00	-	<50 / <50	<50	<5	<5	<5	<5	-	-	-	-	-	_	-	_
MW-3	12/10/2012 <sup>7</sup>	490.38	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	5/25/2010 <sup>1</sup>	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	492.27	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	3/12/2012	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	492.27	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	9/10/20124	492.27	42.30	449.97	0.00	0.00	-	580 / 310	2,400	2	0.7	2	2	-	-	-	-	-	-	-	-
MW-4	12/10/2012 <sup>7</sup>	492.27	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	5/25/2010 <sup>1</sup>	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 <sup>2</sup>	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 <sup>7</sup>	491.99	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	3/12/20124	491.99	42.15	449.84	0.00	0.00	-	95/<50	<50	<0.5	<0.5	<0.5	< 0.5	-	-	-	-	-	-	-	-

								HYDROCARBONS		PI	RIMAI	RY VO	rs .	•			GENER/	AL CHEMI	STRY		
Location	Date	тос	DTW	GWE	NAPLT	NAPL REMOVED	ген-рко	rPH-DRO w/Si Gel	PH-GRO	В	T	E	X	Nitrate Nitrogen	Sulfate	Cotal sulfide (dissolved)	errous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Меthапе	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 MW-5 <b>MW-5</b>	6/4/2012 <sup>7</sup> 9/10/2012 <sup>4</sup> 12/10/2012 <sup>7</sup>	491.99 491.99 491.99	- 41.39 -	- 450.60 -	0.00 0.00 0.00	0.00 0.00 0.00	- - -	- <50 / <50 -	- <50 -	- <0.5	- <0.5	- <0.5	- <0.5 -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - - -
MW-6 MW-6 MW-6 MW-6	5/25/2010 <sup>1</sup> 5/27/2010 9/13/2010 12/20/2010	491.52 491.52 491.52 491.52	31.63 31.79 37.64 33.32	459.89 459.73 453.88 458.20	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	- 1,000 68 -	- - - 140	- 3,700 <50 <50	4 <0.5 <0.5	- <0.5 <0.5 <0.5		1 <0.5 <0.5	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
MW-6 MW-6 MW-6 MW-6	3/7/2011 6/6/2011 9/19/2011 3/9/2012 <sup>7</sup>	491.52 491.52 491.52	28.96 28.08 32.38	462.56 463.44 459.14	0.00 0.00 0.00	0.00 0.00 0.00 0.00	- - -	63 <50 <50/380	<50 <50 <50	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5		<0.5 <0.5 <0.5	360 5,300 -	55,400 54,000 -	- - -	33 <10 -	- - -	- - -	- - -	- - -
MW-6 MW-6 MW-6	3/12/2012 <sup>4</sup> 6/4/2012 <sup>7</sup> 9/10/2012 <sup>4</sup>	491.52 491.52 491.52	42.50 - 41.82	449.02 - 449.70	0.00 0.00 0.00	0.00 0.00 0.00	- - -	54/<50 - 86/<50	<50 - <50	<0.5 - <0.5	<0.5 - <0.5	<0.5 - <0.5	<0.5 - <0.5	- -	- - -	-		- - -		- - -	- - -
MW-6	12/10/2012 <sup>7</sup>	491.52	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7 MW-7 MW-7	5/25/2010 <sup>1</sup> 5/27/2010 9/13/2010 12/20/2010	492.29 492.29 492.29 492.29	28.69 28.61 31.75 27.96	463.60 463.68 460.54 464.33	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	2,800 40,000	- - - 6,200	- 14,000 16,000 15,000	1,800 1,700 2,800	35 33 59	320 460 450	660 600 530	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
MW-7 MW-7 MW-7	3/7/2011 6/6/2011 6/22/2011 <sup>2</sup>	492.29 492.29 492.29	24.98 24.12 26.71	467.31 468.17 465.58	0.00 0.00 0.00	0.00 0.00 0.00	- - -	55,000 24,000	16,000 <50 19,000	1,500 <0.5 1,800	50 <0.5 47	470 <0.5	2,100 <0.5 2,200	<250 8,000	2,600 70,300 -	-	2,800 4,300	- - -	- - -	- - -	- - -
MW-7 <b>MW-7</b> MW-7	9/19/2011 <sup>3</sup> 3/9/2012 3/12/2012 <sup>5</sup>	492.29 <b>492.29</b> 492.29	28.85 - 32.38	463.44 - 459.91	0.12 <b>0.00</b> 0.00	0.00 <b>0.00</b> 0.00	- - -	- - -	- - -	- - -	-	-	-	-	- - -	- -	- - -	- - -	- - -	- - -	- - -
MW-7 MW-7	6/4/2012 <sup>5,6</sup> 9/10/2012 <sup>5,9</sup> 12/10/2012 <sup>4,9</sup>	492.29 492.29	32.38 32.62	459.91 459.67	0.00	0.00	-	-	-	-	- -	-	-	-	-	- -	-	-	-	-	-
<b>MW-7</b> MW-8	5/25/2010 <sup>1</sup>	<b>492.29</b> 490.89	<b>28.77</b> 30.62	<b>463.52</b> 460.27	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

TABLE 1 Page 4 of 6

								HYDROCARBONS	s	PI	RIMAI	RY VO	?S				GENER/	AL CHEMI	STRY		
												11 700	50				L		,,,,,,		
Location	Date	тос	DTW	GWE	LNAPLT	LNAPL REMOVED	TPH-DRO	TPH-DRO w/Si Gel	TPH-GRO	В	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Метћане	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 MW-8	12/20/2010 3/7/2011	490.89 490.89	31.60 28.20	459.29 462.69	0.00	0.00	-	750 1,300	4,000 2,800	0.8	0.7	19 12	3	<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	~230	2,400	-	2,000	_	_	_	-
MW-8	3/9/2012	490.89	-	-	0.00	0.00	-	-	-	-	-	-	-	_	_	_	_	_	_	_	_
MW-8	3/12/2012 <sup>5</sup>	490.89	38.48	452.41	0.00	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
MW-8	6/4/2012 <sup>4,8</sup>	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 <sup>5</sup>	490.89	38.73	452.16	0.00	0.00	_	-	-	_	_	_	_	_	-,	-		_	-	_,	-
MW-8	12/10/2012 <sup>4</sup>	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
1,277 0	, ,	150.05	01.01	103.20	0.00	0.00		1,200 / 0,100	3,000	-0					1,000	100	2,000	220,000		<b>2</b> ,000	20,500
MW-9	5/25/2010	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	<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 <sup>7</sup>	491.64	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-9	3/12/2012 <sup>4</sup>	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 <sup>7</sup>	491.64	35.80	455.84	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-9	9/10/20124	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 <sup>10</sup>	491.64	32.80	458.84	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	3/9/2012 <sup>1</sup>	491.15	28.00	463.15	0.00	0.00	-	=	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	3/12/20124	491.15	28.11	463.04	0.00	0.00	-	440/260	3,100	<1	<1	36	16	-	-	-	-	-	-	-	-
MW-10	6/4/2012 <sup>4</sup>	491.15	29.49	461.66	0.00	0.00	-	750/640	3,300	0.7	1	36	12	-	-	-	-	-	-	-	-
MW-10	9/10/2012 <sup>5</sup>	491.15	32.10	459.05	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	12/10/2012 <sup>4</sup>	491.15	26.03	465.12	0.00	0.00	-	240 / 200	950	<0.5	<0.5	2	2	-	-	-	-	-	-	-	-
	1																				
MW-11	3/9/2012	490.59	31.48	459.11	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 1 Page 5 of 6

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

							HYDROCARBON:			RIMAR						GENERA		-		
Date	тос	DTW	GWE	LNAPLT	LNAPL REMOVED	трн-дко	TPH-DRO w/ Si Gel	трн.ско	В	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
3/12/2012 <sup>4</sup> 6/4/2012 <sup>5</sup>	490.59 490.59	33.35 34.22	457.24 456.37	0.00	0.00	- -	160/<50	<50 -	<0.5	<0.5	<0.5	<0.5	-	-	- -	- -	- -	- -	- -	-
9/10/2012 <sup>5</sup>	490.59	34.48	456.11	0.00	0.00	-	-	_	_	_	_	_	-	_	_	_	_	_	_	_
12/10/20124	490.59	32.50	458.09	0.00	0.00	-	55/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
3/9/2012 <sup>1</sup> 3/12/2012 <sup>4</sup> 6/4/2012 <sup>4</sup>	493.72 493.72 493.72	25.43 26.97 26.54	468.29 466.75 467.18	0.00 0.00 0.00	0.00 0.00 0.00	- - -	- 1,100/310 990/510	- 3,000 4,200	- 10 15	- 1 2	- 19 12	- 38 23	- - -	- - -	- - -	-	- - -	- -	- - -	- - -
9/10/20124	493.72	28.80	464.92	0.00	0.00	-	1,000 / 290	2,500	30	2	2	2	-	-	-	-	-	-	-	-
12/10/20124	493.72	25.36	468.36	0.00	0.00	-	840/330	2,500	10	<3	<3	<3	-	-	-	-	-	-	-	-
5/27/2010 9/13/2010 12/20/2010 3/7/2011 6/6/2011 6/22/2011 9/19/2011	- - - - -	- - - - -	- - - - -	-	-	- - - - - -	- - - - - -	<50 <50 <50 <50 <50 <50 <50	<0.5 <0.5 <0.5 <0.5	<0.5 <0.5 <0.5 <0.5	<0.5 <0.5 <0.5 <0.5	<0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
	Units  3/12/2012 <sup>4</sup> 6/4/2012 <sup>5</sup> 9/10/2012 <sup>5</sup> 12/10/2012 <sup>4</sup> 3/9/2012 <sup>1</sup> 3/12/2012 <sup>4</sup> 6/4/2012 <sup>4</sup> 9/10/2012 <sup>4</sup> 12/10/2012 <sup>4</sup> 5/27/2010 9/13/2010 12/20/2010 3/7/2011 6/6/2011 6/6/2011	Units ft  3/12/2012 <sup>4</sup> 490.59 6/4/2012 <sup>5</sup> 490.59 9/10/2012 <sup>5</sup> 490.59 12/10/2012 <sup>4</sup> 490.59  3/9/2012 <sup>1</sup> 493.72 3/12/2012 <sup>4</sup> 493.72 6/4/2012 <sup>4</sup> 493.72 9/10/2012 <sup>4</sup> 493.72 12/10/2012 <sup>4</sup> 493.72 5/27/2010 - 9/13/2010 - 12/20/2010 - 3/7/2011 - 6/6/2011 - 6/22/2011 - 9/19/2011 -	Units ft ft  3/12/2012 <sup>4</sup> 490.59 33.35 6/4/2012 <sup>5</sup> 490.59 34.22 9/10/2012 <sup>5</sup> 490.59 34.88 12/10/2012 <sup>4</sup> 490.59 32.50  3/9/2012 <sup>1</sup> 493.72 25.43 3/12/2012 <sup>4</sup> 493.72 26.97 6/4/2012 <sup>4</sup> 493.72 26.54 9/10/2012 <sup>4</sup> 493.72 28.80 12/10/2012 <sup>4</sup> 493.72 25.36  5/27/2010 9/13/2010 12/20/2010 3/7/2011 6/6/2011 6/22/2011 9/19/2011	Units ft ft ft-amsl  3/12/2012 <sup>4</sup> 490.59 33.35 457.24 6/4/2012 <sup>5</sup> 490.59 34.22 456.37 9/10/2012 <sup>5</sup> 490.59 34.48 456.11 12/10/2012 <sup>4</sup> 490.59 32.50 458.09  3/9/2012 <sup>1</sup> 493.72 25.43 468.29 3/12/2012 <sup>4</sup> 493.72 26.97 466.75 6/4/2012 <sup>4</sup> 493.72 26.54 467.18 9/10/2012 <sup>4</sup> 493.72 28.80 464.92 12/10/2012 <sup>4</sup> 493.72 25.36 468.36  5/27/2010 9/13/2010 12/20/2010 12/20/2010 13/7/2011 16/6/2011 16/22/2011 19/19/2011	Units ft ft ft-amsl ft  3/12/2012 <sup>4</sup> 490.59 33.35 457.24 0.00 6/4/2012 <sup>5</sup> 490.59 34.22 456.37 0.00 9/10/2012 <sup>5</sup> 490.59 34.48 456.11 0.00 12/10/2012 <sup>4</sup> 490.59 32.50 458.09 0.00  3/9/2012 <sup>1</sup> 493.72 25.43 468.29 0.00 3/12/2012 <sup>4</sup> 493.72 26.97 466.75 0.00 6/4/2012 <sup>4</sup> 493.72 26.54 467.18 0.00 9/10/2012 <sup>4</sup> 493.72 28.80 464.92 0.00 12/10/2012 <sup>4</sup> 493.72 25.36 468.36 0.00  5/27/2010 5/27/2010 1/2(0/2010 3/7/2011 6/6/2011 6/6/2/2011 6/22/2011	Units ft ft ft-amsl ft gal  3/12/2012 <sup>4</sup> 490.59 33.35 457.24 0.00 0.00 6/4/2012 <sup>5</sup> 490.59 34.22 456.37 0.00 0.00 9/10/2012 <sup>5</sup> 490.59 34.48 456.11 0.00 0.00 12/10/2012 <sup>4</sup> 490.59 32.50 458.09 0.00 0.00  3/9/2012 <sup>1</sup> 493.72 25.43 468.29 0.00 0.00 3/12/2012 <sup>4</sup> 493.72 26.97 466.75 0.00 0.00 6/4/2012 <sup>4</sup> 493.72 26.54 467.18 0.00 0.00 9/10/2012 <sup>4</sup> 493.72 28.80 464.92 0.00 0.00 12/10/2012 <sup>4</sup> 493.72 25.36 468.36 0.00 0.00 5/27/2010 5/27/2010 9/13/2010 12/20/2010 12/20/2010 12/20/2011 16/6/2011 16/22/2011 19/19/2011	Units ft ft ft ft-amsl ft gal µg/L  3/12/2012 <sup>4</sup> 490.59 33.35 457.24 0.00 0.00 - 6/4/2012 <sup>5</sup> 490.59 34.22 456.37 0.00 0.00 - 9/10/2012 <sup>5</sup> 490.59 34.48 456.11 0.00 0.00 - 12/10/2012 <sup>4</sup> 490.59 32.50 458.09 0.00 0.00 -  3/9/2012 <sup>1</sup> 493.72 25.43 468.29 0.00 0.00 - 3/12/2012 <sup>4</sup> 493.72 26.97 466.75 0.00 0.00 - 6/4/2012 <sup>4</sup> 493.72 26.54 467.18 0.00 0.00 - 9/10/2012 <sup>4</sup> 493.72 25.36 468.36 0.00 0.00 - 12/10/2012 <sup>4</sup> 493.72 25.36 468.36 0.00 0.00 - 5/27/2010	Units ft ft ft-ansl ft gal µg/L µg/L 3/12/2012 <sup>4</sup> 490.59 33.35 457.24 0.00 0.00 - 160/<50 6/4/2012 <sup>5</sup> 490.59 34.22 456.37 0.00 0.00	Units ft ft ft-ansl ft gal µg/L µg/L µg/L µg/L 3/12/2012 <sup>4</sup> 490.59 33.35 457.24 0.00 0.00 - 160/<50 <50 6/4/2012 <sup>5</sup> 490.59 34.22 456.37 0.00 0.00	Units $ft$ $ft$ $ft$ $ft$ -ansl $ft$ $gal$ $\mu g/L$ $\mu g/L$ $\mu g/L$ $\mu g/L$ $\mu g/L$ $\mu g/L$ $gal$	Units $ft$ $ft$ $ft$ $ft$ $t$ $t$ $t$ $t$ $t$ $t$ $t$ $t$ $t$	Units	Units	Units	Units $ft$ $ft$ $ft$ $ft$ $ansl$ $ft$ $gal$ $pgL$ $pg$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Date	Date   Date   TOC   DTW   GWE   LATE   Fit   GWE   LATE   Fit   GWE   LATE   Fit   GWE   GWE   Fit   G	Date    Toc   DTW   GWE   V

#### 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

 $\mu$ g/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 Page 6 of 6

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

							1	HYDROCARBON	S	PR.	IMAR	y vocs	;				GENER/	L CHEM	ISTRY		
Location	Date	тос	DTW	GWE	LNAPLT	LNAPL REMOVED	трн-рко	TPH-DRO w/ Si Gel	трн-ско	В	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	ug/L	μg/L μ	ıg/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</p>

- 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
- 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



### 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 #: Site Address: City:		st Street					Job #: Event Date: Sampler:	38587		)·12	
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)	REPLAC LOCK Y (18)	CAP	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y
MW-7	OK						<b>→</b>			Morrison 6-12	
Mw-8	OK						->			MORRISON 6"/2  Emcs/12"/2  Morrison/6"/2	
Mw-9	OK	_					$\rightarrow$			Monnison 6"12	
MW-10	OK						<b>→</b>		-	CUINA   5"   2	
MW-11	DK						$\rightarrow$			W	
MW-12	OK		$\longrightarrow$	B=1	OK		->	-	<b>V</b>		
									_		
-											
									-		
	-										
										· · · · · · · · · · · · · · · · · · ·	
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.



### WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#:	Chevron #30	7233		Job Number:	385876		
Site Address:	2259 First St	reet		Event Date:	12 - 10	) 12	– (inclusive)
City:	Livermore, C	Α	The state of	Sampler:	FT		
Well ID	MW- 7			Date Monitored:	12.	10.12	
Well Diameter	2		Г	/olume 3/4"= 0.0		2"= 0.17 3"= 0.38	
Total Depth	32.83 ft.			actor (VF) 4"= 0.6		"= 1.50 12"= 5.86	
Depth to Water	- 4		_	olumn is less then 0.5			
Depth to Water	4.00 w/ 80% Recharge	xVF		x3 case volume = .20) + DTW]: <b>29. 5</b>		/olume: 2.6	gal.
popul to trato.	w co /o reconarge	[(ricigin or	TTAICI COIGIIII X O	.20) · D [ • • ]. <u>A [ ]. G</u>	Time Starte		(2400 hrs)
Purge Equipment:		;	Sampling Equipm	nent:		leted:	(2400 hrs)
Disposable Bailer		1	Disposable Bailer			oduct:	ft
Stainless Steel Baile	er	1	Pressure Bailer		Depth to W		ft
Stack Pump			Metal Filters			n Thickness:	ft
Suction Pump		ı	Peristaltic Pump		Visual Com	irmation/Description	1:
Grundfos		(	QED Bladder Pum	р	Skimmer /	bsorbant Sock (circ	de one)
Peristaltic Pump		(	Other:			ed from Skimmer:_	
QED Bladder Pump						ed from Well:	
Other:						oved:	
Time (2400 hr.)  1433  1436	Volume (gal.)  .75  1.5  2.0	pH 7.17 7.14 7.12	Conductivity (µmhos/cm (µm		D.O. (mg/L)	ORP (mV)	_
		<u> </u>	LABORATOR	Y INFORMATION			_
SAMPLE ID	(#) CONTAINER	REFRIG.		YPE LABORATORY		ANALYSES	
MW- T	💪 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)		
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc		
	3	\/F0		14110107	TPH-DRO w/sgc		
	x voa vial	YES	NP NeOU	LANCASTER	SULFATE (EPA		020)
	x 500ml clear glass	YES	NaOH	LANCASTER		FIDE (SM20 4500	52U)
	x 250ml poly	YES	NP HNO3	LANCASTER		ITY (SM20 2320 B)	
	x 250ml amber	YES YES	HNO3	LANCASTER LANCASTER	CALCIUM (6010)	(SM20 3500 Fe B)	
	3 x voa vial	YES	HCL	LANCASTER		(SM20 3500 Fe B) THANE (RSK-175)	
OMMENTS:	7 X VOU VIUI	120		MER IN WE	-	THANE (NON-175)	
						Ð	
Add/Replaced	Lock:	Ada	d/Replaced Plu	a.	Add/Replace	1 Bolt	



# WELL MONITORING/SAMPLING FIELD DATA SHEET

Date Monitored:	Client/Facility#				Job Number:	385876	
Math   Date   Math   Sample   Sample   Sample   Simple   Simple	City:						(inclusive)
Volume   Surf = 0.02   1 = 0.04   2 = 0.17   3 = 0.38   3 = 1   1	Well ID	MW- 8					1.12
Total Depth   38, 89	Well Diameter	2		Volum	ne 3/4"= 0.0		
Comparison of the content of the c	Total Depth	38.89 ft.					
Depth to Water w/ 80% Recharge   (Height of Water Column x 0.20) + DTW ; 33.09	Depth to Water		1.	_			
Sampling Equipment:   Sampling Equipment:   Disposable Bailer   Disposable Disposable Data Bailer   Data B	Depth to Water				_	7	
Depth to Product:   ft	Purae Equipment			Sampling Equipment			
Stank   Stan							
Metal Filters	•	ler .		· ·		Depth to Water	ft
		<u> </u>				Hydrocarbon Th	nickness:ft
Skimmer / Absgrant Sock (circle one)   Content   Conductivity	Suction Pump				•	Visual Confirma	ation/Description:
Conductivity   Cond	Grundfos			•		Skimmor / Abas	urbant Saak (airala ana)
Amr. Removed from Well:	Peristaltic Pump			· · · · · · · · · · · · · · · · · · ·			
Start Time (purge):	QED Bladder Pump	)			**		
Sample Time/Date:   335 /12 \ (0.1)   Sediment Description:   Sediment Descr	Other:						
Sediment Description:   Sedi			10.10		_		
Conductivity   Temperature   D.O.   ORP	-						STRONL-
Time (2400 hr.) Volume (gal.) pH	• •	-			_		noling: 31. 82
1313   1.0   7.30   562   18.4   18.6   1320   3.5   7.25   5.73   18.8				Conductivity	Temperature	D.O.	ORP
1316   2.0   7.27   5 69   18.6   18.8     18.2     18.2       18.2       18.2	A L					(mg/L)	(mv)
LABORATORY INFORMATION  SAMPLE ID (#) CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES  MW-		:	1. 30				
LABORATORY INFORMATION  SAMPLE ID (#) CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES  MW-			1.27				
SAMPLE ID  (#) CONTAINER REFRIG. PRESERV. TYPE LABORATORY  X voa vial YES HCL LANCASTER TPH-GRO(8015)/BTEX(8260) TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)  X voa vial YES NP LANCASTER SULFATE (EPA 300.0) Nx 500ml clear glass YES NaOH LANCASTER DISSOLVED SULFIDE (SM20 4500 S2D) LX 250ml poly YES NP LANCASTER TOTAL ALKALINITY (SM20 2320 B) LX 250ml amber YES HNO3 LANCASTER CALCIUM (6010) LX 250ml amber YES HCL LANCASTER DISSOLVED METHANE (RSK-175)  COMMENTS:	1320		1.23	5.13	18.8		
SAMPLE ID  (#) CONTAINER REFRIG. PRESERV. TYPE LABORATORY  X voa vial YES HCL LANCASTER TPH-GRO(8015)/BTEX(8260) TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)  X voa vial YES NP LANCASTER SULFATE (EPA 300.0) Nx 500ml clear glass YES NaOH LANCASTER DISSOLVED SULFIDE (SM20 4500 S2D) LX 250ml poly YES NP LANCASTER TOTAL ALKALINITY (SM20 2320 B) LX 250ml amber YES HNO3 LANCASTER CALCIUM (6010) LX 250ml amber YES HCL LANCASTER DISSOLVED METHANE (RSK-175)  COMMENTS:				LABORATORY	NEODMATION		
MW- 8	SAMPLE ID	(#) CONTAINER	REFRIG.				NALYSES
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)							
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)						TPH-DRO w/sgc CO	LUMN/
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)     3 x voa vial   YES   HCL   LANCASTER   DISSOLVED METHANE (RSK-175)     COMMENTS:							
x 250ml poly YES			YES	NP	LANCASTER		
x 250ml poly YES				<del></del>	<del></del>		
\$\frac{1}{3} \times \text{voa vial}  \text{YES}  \text{HCL}  \text{LANCASTER}  \text{FERROUS IRON (SM20 3500 Fe B)}  \text{3}  \text{x voa vial}  \text{YES}  \text{HCL}  \text{LANCASTER}  \text{DISSOLVED METHANE (RSK-175)}  \text{COMMENTS:}				<del></del>	<del></del>		(SM20 2320 B)
3 x voa vial YES HCL LANCASTER DISSOLVED METHANE (RSK-175)  COMMENTS:							
COMMENTS:							
	COMMENTS	x voa vial	YES	I HCL	LANCASTER	IDISSOLVED METHA	NE (KSK-175)
Add/Darland Land				10			
			<u> </u>				



# WELL MONITORING/SAMPLING FIELD DATA SHEET

City:   Livermore, CA   Sampler:   F		385876	Job Number:		7233	Chevron #30	Client/Facility#:
Vell ID	(inclusive)	12-10-12 (in	Event Date:		reet	2259 First St	Site Address:
Volume			Sampler:		A	Livermore, C	City:
Total Depth   31.95 ft		12.10.12	ate Monitored:	D		<u>.</u>	
Total Depth   39.85		1"= 0.04 2"= 0.17 3"= 0.38	3/4"= 0.02	Volume		2	Well Diameter
Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]:		-				39.85 ft.	Total Depth
Depth to Water w/ 80% Recharge ((Height of Water Column x 0.20) + DTW):    Purge Equipment:   Sampling Equipment:   Disposable Bailer   Disposable Bailer   Depth to Water Column x 0.20) + DTW):   Time Completed:   Depth to Product:   Depth to Product:   Depth to Water:   Depth to W		t.	is less then 0.50	neck if water column	☐ CI	32.80 ft.	Depth to Water
Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]:    Purge Equipment:   Sampling Equipment:   Disposable Bailer   Disposable Bailer   Disposable Bailer   Disposable Bailer   Disposable Bailer   Depth to Product:   Depth to Water:   Depth to W	gal.				· Ammid	7.05	
Purge Equipment: Disposable Bailer Disposable Bailer Stainless Steel Bailer Stack Pump Metal Filters Stuction Pump Peristattic Pump Grundfos GeD Bladder Pump Other:  Start Time (purge):  Start Time	yan.	ga ga				The state of the s	Depth to Water
Disposable Bailer Disposable Bailer Stainless Steel Bailer Stack Pump Metal Filters Stuction Pump Grundfos QED Bladder Pump Other:  Start Time (purge):  Sta	(2400 hrs)	Time Started:	D1 VVJ	ater Column x 0.20) +	[(i leight of vi	w co w recharge	Doptii to Trator
Disposable Bailer Disposable Bailer Stainless Steel Bailer Pressure Bailer Metal Filters Suction Pump Grundfos QED Bladder Pump Other:  Start Time (purge):				mpling Equipment:	Sa		Purge Equipment:
Stainless Steel Bailer Stack Pump Stack Pump Metal Filters Peristaltic Pump Grundfos QED Bladder Pump Other:  Start Time (purge):  Star	ft	Depth to Product:					
Stack Pump Suction Pump Grundfos Grundfos Grundfos Grundfos QED Bladder Pump Other:  Start Time (purge): Start Time (purge): Start Time (purge): Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time (purge):  Start Time	ft	Depth to Water:		·			
Suction Pump	ft	Hydrocarbon Thickness:				·	
Grundfos Peristaltic Pump Other:  GED Bladder Pump Other:  GED Bladder Pump Other:  Weather Conditions:  Start Time (purge):  Start Ti		Visual Confirmation/Description:					
Peristaltic Pump				-			•
Container   Conduction   Container   Conduction   Cond	one)	Skimmer / Absorbant Sock (circle on		·			
Other:	gal	Amt Reproved from Skimmer:		ICI	O.		·
Start Time (purge):	gal						
Sample Time/Date:		valer Kernoveu.					
SAMPLE ID         (#) CONTAINER         REFRIG.         PRESERV. TYPE         LABORATORY         ANALYSES           MW-         x yg/a vial         YES         HCL         LANCASTER         TPH-GRO(8015)/BTEX(8260)           x 500m/ 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 S2           x 250ml poly         YES         NP         LANCASTER         TOTAL ALKALINITY (SM20 2320 B)           x 250ml amber         YES         HNO3         LANCASTER         CALCIUM (6010)           x 250ml amber         YES         HCL         LANCASTER         FERROUS IRON (SM20 3500 Fe B)		D.O. ORP	Temperature	Conductivity			Time
MW-         x yea vial         YES         HCL         LANCASTER         TPH-GRO(8015)/BTEX(8260)           x 500m/ 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 S2           x 250ml poly         YES         NP         LANCASTER         TOTAL ALKALINITY (SM20 2320 B)           x 250ml amber         YES         HNO3         LANCASTER         CALCIUM (6010)           x 250ml amber         YES         HCL         LANCASTER         FERROUS IRON (SM20 3500 Fe B)			ORMATION	ABORATORY IN			
x 500m 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 S2           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)	V						
TPH-DRO w/sgc(8015)   x voa vial   YES							MW-
x voa vial         YES         NP         LANCASTER         SULFATE (EPA 300.0)           x 500ml clear glass         YES         NaOH         LANCASTER         DISSOLVED SULFIDE (SM20 4500 S2           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)				NP	YES	x 500m/ambers	
x 500ml clear glass         YES         NaOH         LANCASTER         DISSOLVED SULFIDE (SM20 4500 S2           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)	Α			NE	VEO		
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)	20)					<del></del>	<del></del>
x 250ml poly         YES         HNO3         LANCASTER         CALCIUM (6010)           x 250ml amber         YES         HCL         LANCASTER         FERROUS IRON (SM20 3500 Fe B)	(ח:						
x 250ml amber YES HCL LANCASTER FERROUS IRON (SM20 3500 Fe B)							
			<del></del>				-
. A VINT VINT 1 C		DISSOLVED METHANE (RSK-175)		HCL	YES	x voa vial	
		7350LVED METHANE (RSK-173)	LANCASTER		ILO	A voa viai	
COMMENTS: MO				Mlo			COMMENTS:
A CONTRACTOR OF THE CONTRACTOR							A.



### WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#:				Job Number:	385876	
Site Address:	2259 First Str			Event Date:	12.10.12	(inclusive)
City:	Livermore, C	A		Sampler:	Fr	
Well ID	MW- 10		D	ate Monitored:	12.10.12	
Well Diameter	2		Volume	e 3/4"= 0.0	2 1"= 0.04 2"= 0.17 3"= 0	0.38
Total Depth	32.38 ft.		Factor	(VF) 4"= 0.6	6 5"= 1.02 6"= 1.50 12"= 5	5.80
Depth to Water		xVF .\	Check if water column		0 ft. Estimated Purge Volume: 3.0	
Depth to Water	w/ 80% Recharge				0	gal.
					Time Started:	(2400 hrs)
Purge Equipment:		9	Sampling Equipment:		Time Completed: Depth to Product:	(2400 hrs)
Disposable Bailer			Disposable Bailer		Depth to Water:	n ft
Stainless Steel Baile	er	F	Pressure Bailer		Hydrocarbon Thickness:	t t
Stack Pump		V	Metal Filters		Visual Confirmation/Descript	
Suction Pump			Peristaltic Pump		Violati Committation Descript	
Grundfos		C	QED Bladder Pump		Skimmer / Absorbant Sock (	circle one)
Peristaltic Pump			Other:		Amt Removed from Skimme	r:gal
QED Bladder Pump					Amt Removed from Well:	gal
Other:					Water Removed:	
Time (2400 hr.)	Volume (gal.)  1.0 2.0 3.0	pH 7.40 1.38 1.36	Conductivity (µmhos/cm us)  542 540 537	Temperature (© / F ) 18.6 18.7 18.9	gal. DTW @ Sampling:	26.25 
			LABORATORY IN			
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY		
MW- 10	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)	
	x 500ml ambers	YES	NP 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 45)	00 S2D)
	x 250ml poly	YES	NP NP	LANCASTER	TOTAL ALKALINITY (SM20 2320	
	x 250ml poly	YES	HNO3	LANCASTER	CALCIUM (6010)	<u> </u>
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe	B)
	x voa vial	YES	HCL	LANCASTER	DISSOLVED METHANE (RSK-17	
COMMENTS:					65	
Add/Replaced	Lock:	Add	/Replaced Plug:		Add/Replaced Bolt:	

# WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#:	Chevron #30	7233		Job Number:	385876		
Site Address:	2259 First St	reet		Event Date:	12.1	0.12	 (inclusive)
City:	Livermore, C	Α		_ Sampler:	F1		_`
Well ID	MW- 11			Date Monitored:	12.	10.12	
Well Diameter	2		Vo	lume 3/4"= 0.0		2"= 0.17 3"= 0.3	
Total Depth	34.70 ft.			ctor (VF) 4"= 0.6		6"= 1.50 12"= 5.8	
Depth to Water			 Check if water col	umn is less then 0.50	O ft.		
	2.20	Section 1		x3 case volume =		Volume: 1.0	gal.
Depth to Water	w/ 80% Recharge				4		
		_				ed: pleted:	
Purge Equipment:			Sampling Equipme	nt:		roduct:	
Disposable Bailer			Disposable Bailer			/ater:	
Stainless Steel Bail	er	F	ressure Bailer			on Thickness:	"
Stack Pump			letal Filters			firmation/Descriptie	"
Suction Pump			Peristaltic Pump				
Grundfos			QED Bladder Pump			Absorbant Sock (cire	
Peristaltic Pump		C	Other:			/ed from Skimmer:_	
QED Bladder Pump	·					ed from Well:	
Other:					Water Rem	oved:	
Approx. Flow R Did well de-wate	ate:	gpm. yes, Time	Sediment	Description:	_Odor: Y /(N <u>。</u> gal. DTW @ 9	ν€	2.85
Time (2400 hr.)	Volume (gal.)	pН	Conductivity (µmhos/cm - µs	Temperature	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			- -
				-			
SAMPLE ID	(#) CONTAINED	REFRIG.		INFORMATION		ANALYOPO	
MW- \\	(#) CONTAINER  6 x voa vial	YES	PRESERV. TYPE	LANCASTER	TPH-GRO(8015)	ANALYSES	
1000-11	2_x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc		
	Z COOM GINDERS		141	DATO/OTER	TPH-DRO w/sgc		-
	x voa vial	YES	NP	LANCASTER	SULFATE (EPA	300.0)	
	x 500ml clear glass	YES	NaOH	LANCASTER		LFIDE (SM20 4500	S2D)
	x 250ml poly	YES	NP	LANCASTER	<del></del>	IITY (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 ME	THANE (RSK-175)	
OMMENTS:							
Add/Replaced	Lock:	Add	/Replaced Plug		Add/Replace	d Bolt:	

### WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#:	Chevron #30	7233		Job Number:	385876	
Site Address:	2259 First St	reet		Event Date:	12,10.1	2 (inclusive)
City:	Livermore, C	Α		Sampler:	FT	
Well ID	MW- 12			Date Monitored:	12-10.	12
Well Diameter	2		Volu	me 3/4"= 0.0	2 1"= 0.04 2"=	: 0.17 3"= 0.38
Total Depth	34,49 ft.			or (VF) 4"= 0.60		1.50 12"= 5.80
Depth to Water	25.34 ft.		Check if water colu	mn is less then 0.50	O ft.	
7	9.13	- hamile		_ x3 case volume =		lume: 4.5 gal.
Depth to Water v	w/ 80% Recharge	•			•	
Purge Equipment:		s	ampling Equipment		Time Complet	
Disposable Bailer				. /	Depth to Prod	
Dispusable Bailei Stainless Steel Bailei			Disposable Bailer		Depth to Wate	er:ft
			ressure Bailer		Hydrocarbon 1	Thickness: ft
Stack Pump			letal Filters			nation/Description:
Suction Pump			eristaltic Pump			
Grundfos			ED Bladder Pump			propant Sock (circle one)
Peristaltic Pump			Other:			from Skimmer: gal
QED Bladder Pump						from Well:gal
Other:					Water Remove	ed:
Approx. Flow Ra Did well de-water  Time (2400 hr.)  1358  1401		gpm. yes, Time pH 7.27 7.24 7.22	Conductivity (µmhos/cm - µS)		gal. DTW @ Sa  D.O. (mg/L)	ORP (mV)
			LABORATORY			
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE			ANALYSES
MW-12	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/B	
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc Co TPH-DRO w/sgc(80	
	x voa vial	YES	NP	LANCASTER	SULFATE (EPA 300	
	x 500ml clear glass	YES	NaOH	LANCASTER		IDE (SM20 4500 S2D)
	x 250ml poly	YES	NAOH NP	LANCASTER		
	x 250ml poly	YES	HNO3	LANCASTER	TOTAL ALKALINIT	1 (SIVIZU 232U D)
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (S	SM20 3500 Fa B)
	x voa vial	YES	HCL	LANCASTER	DISSOLVED METH	
COMMENTS:						4
Add/Replaced	Lock:	Add	/Replaced Plug:		Add/Replaced I	Bolt:

# Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories Please forward the lab results directly to the	2	- / 2 sultant and d	oc: G-	R.	cct. #:_	Г			Sampl	e#	Requ		ories use	only Group #:	010	648
Facility #:SS#307233-OML G-R#385876 Global ID#T0600196622  Site Address:2259 FIRST STREET, LIVERMORE, CA  Chevron PM:CM						Solitaliers ⊠ 8021 □	H	Silica Gel Cleanup	Pre		10 A 200	ANE H		Preserva  H = HCI N = HNO <sub>3</sub> S = H <sub>2</sub> SO <sub>4</sub> ☐ J value report ☐ Must meet low possible for 8:	T = Thio B = NaC O = Othe ting needed west detec	sulfate DH er d tion limits
Sample Identification Coll	ate Ti	ime gaz lected 5	=	Water 🔲	Oil 🗆 Air	BTEX STATES 8260	TPH 8015 MOD GRO	D DRO	8260 full scan	Total Lead Method	Dissolved Lead Method	SK 175		8021 MTBE Cor Confirm higher Confirm all hit Run oxy	est hit by 8 ts by 8260 o's on highe	est hit
MW-7 MW-8 MW-10 MW-11	14	35 X 10 X 50 X		3		X	XXXXX				×			Please report in the state of t	rt DRO w/s	sgc and
Turnaround Time Requested (TAT) (please circle)  STD. TAT: 72 hour 48 hour  24 hour 4 day 5 day	Relinquished by Relinquished by Relinquished by	:	152	and the second second			D:	ate ate	Time Time Time	Rece	vived by:	tulgo	110	Date Date	Time / 43# Time	
QC Summary  Type VI (Raw Data)  Coelt Deliverable not needed  Relinquished by				Commercial Carrier: Received by:				s Intact?	Yes No	Date	Time					

# Chevron California Region Analysis Request/Chain of Custody

Laboratories			100	A	.cct. #	:			;		F <b>or La</b> ple # _								•	010	647
Please forward the lab results directly to the Lead Co	onsultant a	nd co	c: G-	R.		Γ			_	Ar	nalyse	es F	lequ	est	ed			٦			
Facility #: SS#307233-OML G-R#385876 Global ID#T0	060019662	2	N	latrix	,					Pı	reserv	/ati	on C						Preserva	tive Co	les
Site Address: 2259 FIRST STREET, LIVERMORE, CA						-	_	-		+				Į.	3		V	H	H = HCI	T = Thio	sulfate
Chevron PM: CM Lead Consultant: CR/	ATH H	ariu			Н				Cleanup						Î	00			$N = HNO_3$ $S = H_2SO_4$	B = NaC O = Oth	
Chevron PM: CM Lead Consultant: CR/Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, Dut	blin, CA 945	568		Potable NPDES		ners			S   S				12 8	7~	63	232	010) FE B	Ī	☐ J value report	ing neede	d
Consultant Prj. Mgr.: (deanna@grinc.com)						ontai	□ 8021□		Silica				122	525	720	20	30	7	Must meet log possible for 8		
Consultant Phone #925-551-7555 Fax #: 925-55	51-7899					9		ا و			Method	3	E /	30	3502VGD SW AL (45	15 m	350	7170	8021 MTBE Cor	•	
Sampler: FRANKTEILININONI		0				per		D G	8		nates			45	3	וארדונוו	20 3;	T	☐ Confirm highe	est hit by 8	260
		osit		_	Air	N	MTB	15 MC	15 MC	II scan	Oxygenates	3	ed Les	202	1707	77	Smil	0	Confirm all hi		
Sample Identification Date Collected C	Time Collected Co	Composite	Soil	Water	Ö	Total Number of Containers	BTEX + MTBE	TPH 8015 MOD GRO	TPH 8015 MOD DRO XX Silica Gel	8260 full scan	Oxy Total Lead		Dissolved Lead Method	5 2	015 014	77.75	100		☐ Run oxy	_	
12.10.12	Joinected C		0)	W			-			-				, ,	-all from	7			Comments / F		
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	210 X					2			$\langle \!  $				X						Please repo	t DRO w/	sgc
	250 X				1	2		>	4				X						using 10 grams of silica and also report 1 gram shake		
MW12 0 1	415 X			4	1	2		_>	4			$\perp$	$\perp \times$							suits	ike .
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Turnaround Time Requested (TAT) (please circle) STD. TAI 72 hour 48 hour	Relinquishe	d by:		T	e-	٠.	— <u>`</u>	2.14	Da I · \ 2	ate	Time		Rece	eivec	by:					Date	Time
STD. TAI         72 hour         48 hour           24 hour         4 day         5 day	Relinquishe	d by:							Da		Time	,	Rece	eived	by:					Date	Time
Data Package Options (please circle if required)	Relinquishe	d by:							Da	ate	Time	,	Rece	elvec	by:					Date	Time
QC Summary Type I - Full EDF/EDD Type VI (Raw Data) Coelt Deliverable not needed WIP (RWQCB)	Relinquishe UPS	Relinquished by Commercial Carrier:  UPS FedEx Other							Received by:				Date	Time							
Disk	Temperature Upon Receipt C°						ǰ	Custody Seals Intact? Yes No													

### ATTACHMENT B

LABORATORY ANALYTICAL REPORT



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:

Prepared for:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 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	Chevron	Attn: Anna Avina
COPY TO ELECTRONIC	CRA	Attn: Brian Silva
COPY TO		



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

Respectfully Submitted,

fill M. Parker
Senior Specialist

(717) 556-7262



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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

Reported: 12/21/2012 09:03

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

L4310

Submitted: 12/11/2012 09:25 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 Pe	troleum	SW-846 80	15B	ug/l	ug/l	
Hydro	carbons w/Si					
06610	TPH-DRO CA C10-C28  Due to the dilution can not be determin	of the sampl		150,000 ic acid recovery	670	20
Metal	S	SW-846 603	10B	ug/l	ug/l	
01750	Calcium		7440-70-2	179,000	64.0	1
Wet C	hemistry	SM20 2320	В	ug/l as CaCO3	ug/l as CaCO3	
12150	Total Alkalinity		n.a.	573,000	700	1
		SM20 3500 modified	Fe B	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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Ti	me	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



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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

Submitted: 12/11/2012 09:25

Reported: 12/21/2012 09:03

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

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

FLQ07

As Received CAT As Received Dilution Method CAS Number Analysis Name Result Factor No.

Detection Limit

ug/l ug/l SW-846 8015B GC Petroleum

Hydrocarbons w/Si

06610 TPH-DRO CA C10-C28 w/ Si Gel 180,000 1,700 50 n.a.

#### 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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Tim	ne	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



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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

Submitted: 12/11/2012 09:25

Reported: 12/21/2012 09:03

Collected: 12/10/2012 13:35 by FT 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
	troleum carbons w/Si	SW-84	6 801	L5B	ug/l	ug/l	
06610	TPH-DRO CA C10-C28 The reverse surroga				3,400 at <1%.	50	1
Metals	5	SW-84	6 601	LOB	ug/l	ug/l	
01750	Calcium			7440-70-2	18,900	64.0	1
Wet Cl	- · · · · ·	SM20	2320	В	ug/l as CaCO3	ug/l as CaCO3	
12150	Total Alkalinity			n.a.	220,000	700	1
		SM20 modif		Fe B	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.

			-					
CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Tir	me	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



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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

Submitted: 12/11/2012 09:25

Reported: 12/21/2012 09:03

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

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

FLQ08

CAT Analysis Name CAS Number Result As Received Method Dilution Factor

GC Petroleum SW-846 8015B ug/1 ug/1

Hydrocarbons w/Si

06610 TPH-DRO CA C10-C28 w/ Si Gel n.a. 4,200 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.

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



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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

Submitted: 12/11/2012 09:25

Reported: 12/21/2012 09:03

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

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

FLC10

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	e	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	123470026A	12/19/2012 2	21:39	Heather E Williams	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	123470026A	12/13/2012 1	10:40	Elizabeth A Sholder	1



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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

Submitted: 12/11/2012 09:25

Reported: 12/21/2012 09:03

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

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

FLQ10

As Received CAT As Received Dilution Method CAS Number Analysis Name No. Result Factor Detection Limit ug/l ug/l SW-846 8015B GC Petroleum

Hydrocarbons w/Si

06610 TPH-DRO CA C10-C28 w/ Si Gel 240 50 n.a.

#### 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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Tir	me	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



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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

Submitted: 12/11/2012 09:25

Reported: 12/21/2012 09:03

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

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

FLC11

CAT No. Analysis Name CAS Number		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor	
GC Petroleum SW-846 8015 Hydrocarbons w/Si		8015B	ug/l	ug/l		
нуато	Carbons w/SI					
06610	TPH-DRO CA C10-C28 v	w/ Si Gel	n.a.	N.D.	50	1
	The reverse surrogat	te, 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.

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



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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

Submitted: 12/11/2012 09:25

Reported: 12/21/2012 09:03

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

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

FLQ11

As Received CAT As Received Dilution Method CAS Number Analysis Name Result Factor No. Detection Limit ug/l ug/l SW-846 8015B GC Petroleum

Hydrocarbons w/Si

06610 TPH-DRO CA C10-C28 w/ Si Gel 55 50 n.a.

#### 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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Tim	e	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	1



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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

Submitted: 12/11/2012 09:25

Reported: 12/21/2012 09:03

Collected: 12/10/2012 14:15 by FT 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
	6 8015B	ug/l	ug/l	
Hydrocarbons w/Si  06610 TPH-DRO CA C10-C28 w/ Si G The reverse surrogate, cap		330 at <1%	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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Tim	ne	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



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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 Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

FLQ12

As Received CAT As Received Dilution Method CAS Number Analysis Name Result Factor No. Detection Limit ug/l ug/l SW-846 8015B GC Petroleum

Hydrocarbons w/Si

Submitted: 12/11/2012 09:25

Reported: 12/21/2012 09:03

06610 TPH-DRO CA C10-C28 w/ Si Gel 840 50 n.a.

#### 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.

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



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Page 1 of 2

### 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 <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD <u>%REC</u>	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: 123470026A TPH-DRO CA C10-C28 w/ Si Gel	Sample numbe N.D.	r(s): 688 32.	9597,68895 ug/l	599,688960 87	1,6889603 87	,6889605 50-118	0	20
Batch number: 123470027A TPH-DRO CA C10-C28 w/ Si Gel	Sample numbe N.D.	r(s): 688 32.	9598,68896 ug/l	500,688960 103	2,6889604 107	,6889606 50-118	4	20
Batch number: 123481848004 Calcium	Sample numbe 69.4	r(s): 688 64.0	9597,68895 ug/l	599 98		90-110		
Batch number: 12346834401A Ferrous Iron	Sample numbe N.D.	r(s): 688 10.	9597,68895 ug/l	599 99		93-105		
Batch number: 12347002103A Total Alkalinity	Sample numbe N.D.	r(s): 688 700.	9599 ug/l as CaCO3	102		90-110		
Batch number: 12347002105A Total Alkalinity	Sample numbe	r(s): 688 700.	9597 ug/l as CaCO3	103		90-110		
Batch number: 12352023001A Dissolved Sulfide	Sample numbe N.D.	r(s): 688 54.	9597,68895 ug/l	599 102		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 <u>%REC</u>	MSD <u>%REC</u>	MS/MSD <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG Conc	DUP <u>Conc</u>	DUP RPD	Dup RPD <u>Max</u>
Batch number: 123481848004 Calcium	Sample 1 159 (2)		: 6889597 81-118			C: P889342 : 78,800	BKG: P889342 80,300	2	20
Batch number: 12346834401A Ferrous Iron	Sample :	number(s) 98		,688959 2	9 UNSPK 6	C: P889147 19,600	BKG: P889147 18,800	4 (1)	5
Batch number: 12347002103A Total Alkalinity	Sample :	number(s)	: 6889599 73-121	UNSPK:	688959	99 BKG: 688 220,000	9599 220,000	0	5
Batch number: 12347002105A Total Alkalinity	Sample: 54 (2)	number(s)	: 6889597 73-121	UNSPK:	P88782	28 BKG: P88 379,000	7826 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.



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Page 2 of 2

### 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

	MS	MSD	MS/MSD		RPD	BKG	DUP	DUP	Dup RPD
<u>Analysis Name</u>	%REC	%REC	<u>Limits</u>	RPD	<u>MAX</u>	Conc	Conc	RPD	<u>Max</u>
Batch number: 12352023001A	Sample	number(s	): 6889597	7,68895	99 UNSE	к: Р88952	1 BKG: P889	521	
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

- (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.

<sup>\*-</sup> Outside of specification

# Chevron California Region Analysis Request/Chain of Custody



Lancaster Laboratories					A	Acct. #	<u>:10</u>	290	24		Sam	For I	Land G	S S	Labor 959	atori 7-	68 US6	on O	iy Group	#: <u>01</u>	.06	647
Please forward the lab results directly	y to the Lead (	Consultan	t and c	c: G	-R.						Αr	naly	ses	Requ	estec	i		٦	G#13			
Facility #: SS#307233-OML G-R#38587		T0600196	622	П	Matrix	x			-		P	rese	rva	ion (	odes			╗	Prese	ervative (	Code	28
Site Address: 2259 FIRST STREET, LIVER	MORE, CA								$\dashv$	_	-		4	_	B		N	Щ	H = HCI			ulfate
Chevron PM: CM Lead Consultant: CRATH Hariu						П	s			Gel Cleanup						2		Ĺ	N = HNO <sub>3</sub> S = H <sub>2</sub> SO <sub>4</sub>			
Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568					able SES		ner			98				έ	47¢	23	01		☐ J value re	porting ne	eded	
Deanna L. Harding (de Consultant Prj. Mgr.:					☐ Potable ☐ NPDES		Containers	□ 8021□		Silica				3	227	253	CO10	3	☐ Must mee possible fe	t lowest de or 8260 co		
Consultant Phone #925-551-7555	Fax #: 925-	551-7899				1 1	₹		ဥ	<b>%</b>			Method	E V	30 N	ë ş	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	4	8021 MTBE	Confirmati	ion	
Consultant Phone #925-551-7555  Sampler: Fradic Tenn, No No.			0	1			ğ		8			Oxygenates	₽	Ž (	523	7	39	2	☐ Confirm h	ighest hit t	у 82	60
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Sample Identification	Date Collected	Time Collected	Grab Composite	Soil	Water	Ö	Total Number	BTEX + MTBE	TPH 8015 MOD GRO	TPH 8015 MOD DROX	8260 full scan		Total Lead	Dissolved Lead Meth	5m2	27.4	C. C. L.	نې د	☐ Run ☐ Run			
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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)
С	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 <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- **J** estimated value The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).
- ppm parts per million One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.
- ppb parts per billion

Dry weight basis

Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

#### U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

### **Inorganic Qualifiers**

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

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

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

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

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

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#### ANALYTICAL RESULTS

Prepared by:

Prepared for:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 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	<u>Lancaster Labs (LLI) #</u>
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	CRA c/o Gettler-Ryan	Attn: Rachelle Munoz
COPY TO		
ELECTRONIC	Chevron c/o CRA	Attn: Report Contact
COPY TO		
ELECTRONIC	Chevron	Attn: Anna Avina
COPY TO		
ELECTRONIC	CRA	Attn: Brian Silva
COPY TO		



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Respectfully Submitted,

fill M. Parker
Senior Specialist

(717) 556-7262



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Sample Description: QA-T-121210 NA Water

LLI Sample # WW 6891456 Facility# 307233 Job# 385876 GRD LLI Group # 1355622 2259 First St-Livermore T0600196622 QA Account # 10904

Project Name: 307233

Collected: 12/10/2012 Chevron

L4310

Submitted: 12/12/2012 09:25 6001 Bollinger Canyon Rd.

San Ramon CA 94583 Reported: 12/21/2012 20:15

#### 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 Vol	latiles	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.

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



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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

Submitted: 12/12/2012 09:25

Reported: 12/21/2012 20:15

Collected: 12/10/2012 14:55 by FT 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
<b>GC Vol</b>	.atiles TPH-GRO N. CA water	<b>SW-846</b> C6-C12	8015B n.a.	ug/l 21,000	ug/1 250	5
GC Mis	cellaneous	SW-846	8015B modified	ug/l	ug/l	
07105	Methane		74-82-8	12,000	300	100
Wet Ch 00228	<b>nemistry</b> Sulfate	EPA 300	14808-79-8	<b>ug/1</b> 250,000	<b>ug/l</b> 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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Ti	me	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



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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

Submitted: 12/12/2012 09:25

Reported: 12/21/2012 20:15

Collected: 12/10/2012 13:35 by FT 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 Vol	Latiles TPH-GRO N. CA water	<b>SW-846</b> C6-C12	8015B n.a.	ug/l 5,600	<b>ug/1</b> 250	5
GC Mis	scellaneous	SW-846	8015B modified	ug/l	ug/l	
07105	Methane		74-82-8	2,600	60	20
Wet Ch	nemistry	EPA 300	0.0	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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Tir	me	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



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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

Submitted: 12/12/2012 09:25

Reported: 12/21/2012 20:15

Collected: 12/10/2012 12:10 by FT 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 Vol	latiles	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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	ì	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P123522AA	12/17/2012 2	0:24	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123522AA	12/17/2012 2	0:24	Emily R Styer	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12349A20A	12/17/2012 1	.2:35	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12349A20A	12/17/2012 1	2:35	Marie D John	1



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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

Submitted: 12/12/2012 09:25

Reported: 12/21/2012 20:15

Collected: 12/10/2012 12:50 by FT 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
	latiles	SW-846		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.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	e	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P123522AA	12/17/2012 2	20:52	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123522AA	12/17/2012 2	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



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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

Submitted: 12/12/2012 09:25

Reported: 12/21/2012 20:15

Collected: 12/10/2012 14:15 by FT 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
<b>GC Vo</b>	<b>latiles</b> TPH-GRO N. CA water	<b>SW-846</b> C6-C12	8015B	<b>ug/1</b> 2,500	<b>ug/1</b> 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.

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	1:20	Emily R Styer	5
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P123522AA	12/17/2012 21	1:20	Emily R Styer	5
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12349A20A	12/17/2012 18	8:04	Marie D John	5
01146	GC VOA Water Prep	SW-846 5030B	1	12349A20A	12/17/2012 18	8:04	Marie D John	5



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### 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 <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD %REC	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: P123522AA	Sample numbe	er(s): 689	1456-6891	461				
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 Benzene	Sample numbe	er(s): 689 0.5	1457 ug/l	86	89	77-121	3	30
Batch number: 12349A20A	Sample numbe	er(s): 689	1456-6891	461				
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	111	89	75-135	22	30
Batch number: 123540003A Methane	Sample numbe	er(s): 689 3.0	1457-6891 ug/l	458 92		80-120		
Batch number: 12353655901A Sulfate	Sample numbe	er(s): 689 300.	1457-6891 ug/l	458 100	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 <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG Conc	DUP Conc	DUP RPD	Dup RPD <u>Max</u>
Batch number: 123540003A Methane	Sample 1 57		: 6891457- 35-157		8 UNSPK 20	C: P892042			
Batch number: 12353655901A Sulfate	Sample 1	number(s)	: 6891457- 90-110	-689145	8 UNSPK	C: 6891458 E N.D.	BKG: 6891458 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.



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### 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	
	Name: UST VOCs b	y 8260B - Water			
	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

<sup>\*-</sup> Outside of specification

<sup>(1)</sup> The result for one or both determinations was less than five times the LOQ.

<sup>(2)</sup> The unspiked result was more than four times the spike added.

# Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories 12 1/ () -62						Acct.	#: <u> </u>	<u>PC</u>	OL	_	Sam	For I	Canc Canc	aster } $9$	14	borat 50	ories	use	<b>only</b> Gro	up #:_	010	648	
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G-R, Inc., 6747 Sierra Cor	urt, Suite J, D	Oublin, CA	94568		bld RS	3	ners			Gel C	İ	ı		-   ,	8	7			☐J value	repor	ting neede	ed	
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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)
С	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 <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- J estimated value The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

**ppb** parts per billion

Dry weight basis

Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

#### U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers Inorganic Qualifiers

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

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

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

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

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

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