



**Roya Kambin**  
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Marketing Business Unit

**Chevron Environmental  
Management Company**  
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Alameda County Health Care Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

Re: Former Texaco Service Station 317233  
2259 First Street  
Livermore, California  
ACEHS Case No. RO2908

**RECEIVED**

**5:20 pm, Apr 26, 2012**

Alameda County  
Environmental Health

I accept the First 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 First 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,

A handwritten signature in black ink, appearing to read "Roya Kambin", with a large, stylized flourish at the end.

Roya Kambin  
Project Manager

Attachment: First Quarter 2012 Groundwater Monitoring and Sampling Report



**CONESTOGA-ROVERS  
& ASSOCIATES**

5900 Hollis Street, Suite A  
Emeryville, California 94608  
Telephone: (510) 420-0700 Fax: (510) 420-9170  
<http://www.craworld.com>

April 26, 2012

Reference No. 312264

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

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

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Dear Mr. Wickham:

Conestoga-Rovers & Associates (CRA) is submitting this *First Semi-Annual 2012 Groundwater Monitoring and Sampling Report* for the site referenced above (Figures 1, 2, and 3) on behalf of Chevron Environmental Management Company (Chevron). Groundwater monitoring and sampling was performed by Gettler-Ryan, Inc. (G-R) of Dublin, California, and their March 20, 2012 *Groundwater Monitoring and Sampling Data Package* is included as Attachment A. Current and historical groundwater monitoring and sampling data are presented in Table 1. Lancaster Laboratories' March 26, 2012 *Analytical Results* is included as Attachment B.

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Equal  
Employment Opportunity  
Employer

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**CONESTOGA-ROVERS  
& ASSOCIATES**

April 26, 2012

Reference No. 312264

- 2 -

Please contact Kiersten Hoey at (510) 420-3347 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Kiersten Hoey

Brandon S. Wilken PG 7564



KH/cw/17  
Encl.

Figure 1	Vicinity Map
Figure 2	Shallow Zone Groundwater Elevation Contour and Hydrocarbon Concentration Map
Figure 3	Deep 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: Mr. Roya Kambin, Chevron (*electronic copy*)  
Mr. Eric Uranaga, City of Livermore Economic Development

## FIGURES

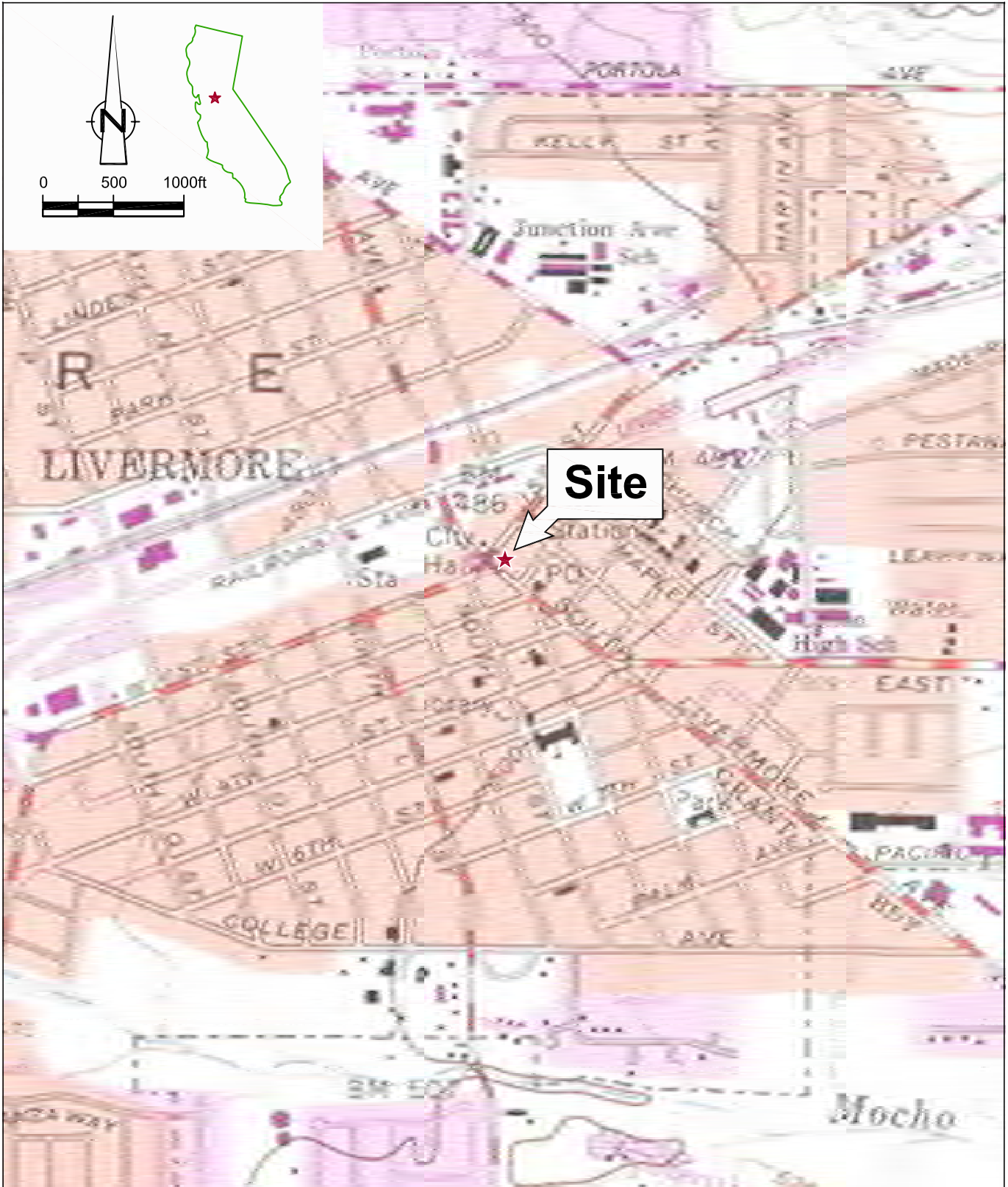


Figure 1  
 VICINITY MAP  
 FORMER TEXACO STATION (CHEVRON SITE 307233)  
 2259 FIRST STREET  
*Livermore, California*



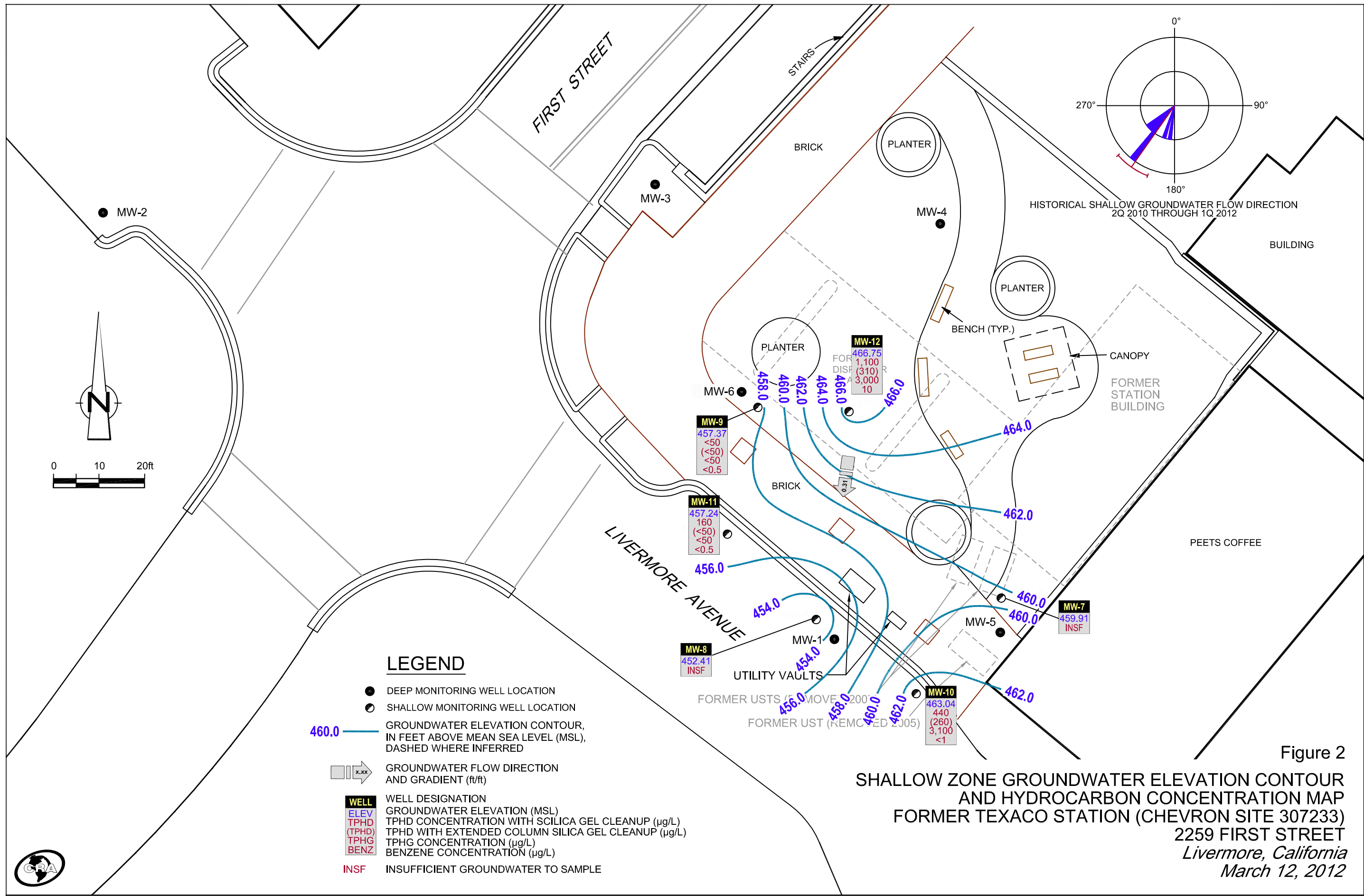
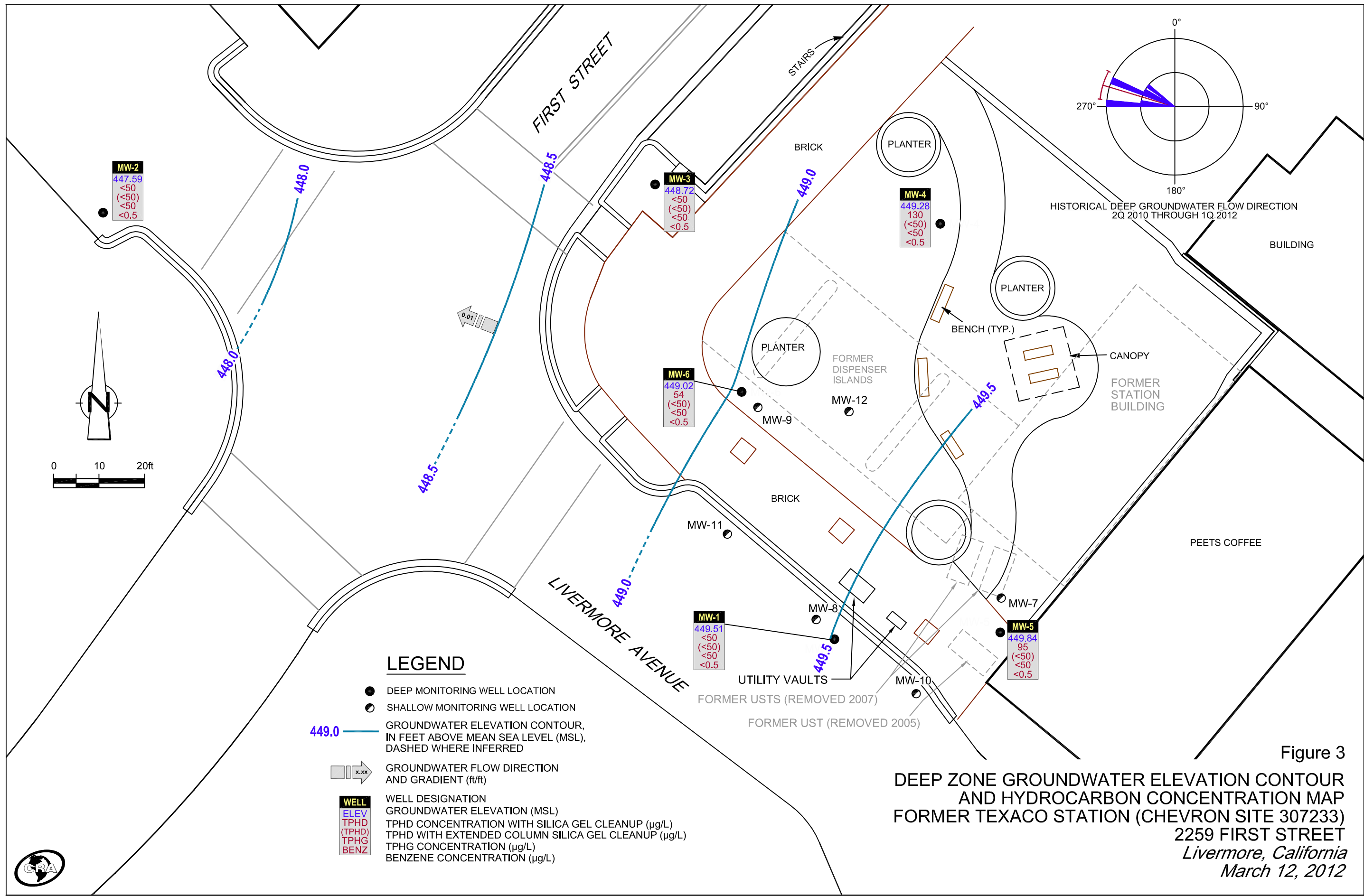


Figure 2  
 SHALLOW ZONE GROUNDWATER ELEVATION CONTOUR  
 AND HYDROCARBON CONCENTRATION MAP  
 FORMER TEXACO STATION (CHEVRON SITE 307233)  
 2259 FIRST STREET  
 Livermore, California  
 March 12, 2012





- LEGEND**
- DEEP MONITORING WELL LOCATION
  - SHALLOW MONITORING WELL LOCATION
  - 449.0 — GROUNDWATER ELEVATION CONTOUR, IN FEET ABOVE MEAN SEA LEVEL (MSL), DASHED WHERE INFERRED
  - x.xx GROUNDWATER FLOW DIRECTION AND GRADIENT (ft/ft)
  - | WELL | ELEV                        | TPHD  | TPHD  | TPHG                      | BENZ                         |
|------|-----------------------------|---|---|---------------------------|------------------------------|
|      | GROUNDWATER ELEVATION (MSL) | TPHD CONCENTRATION WITH SILICA GEL CLEANUP (µg/L) | TPHD WITH EXTENDED COLUMN SILICA GEL CLEANUP (µg/L) | TPHG CONCENTRATION (µg/L) | BENZENE CONCENTRATION (µg/L) |

**Figure 3**  
**DEEP ZONE GROUNDWATER ELEVATION CONTOUR AND HYDROCARBON CONCENTRATION MAP**  
**FORMER TEXACO STATION (CHEVRON SITE 307233)**  
**2259 FIRST STREET**  
*Livermore, California*  
*March 12, 2012*

## TABLE



TABLE 1

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

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY		
							TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Ferrous Iron
	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	µg/L
MW-1	05/25/2010 <sup>1</sup>	490.86	30.62	460.24	0.00	0.00	-	-	-	-	-	-	-	-	-	-
MW-1	05/27/2010	490.86	30.65	460.21	0.00	0.00	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
MW-1	09/13/2010	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	03/07/2011	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	06/06/2011	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	09/19/2011	490.86	31.26	459.60	0.00	0.00	-	450/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
<b>MW-1</b>	<b>03/09/2012</b>	<b>490.86</b>	-	-	<b>0.00</b>	<b>0.00</b>	-	-	-	-	-	-	-	-	-	-
<b>MW-1</b>	<b>03/12/2012<sup>4</sup></b>	<b>490.86</b>	<b>41.35</b>	<b>449.51</b>	<b>0.00</b>	<b>0.00</b>	-	<b>&lt;50/&lt;50</b>	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	-	-	-
MW-2	05/25/2010 <sup>1</sup>	489.43	31.18	458.25	0.00	0.00	-	-	-	-	-	-	-	-	-	-
MW-2	05/27/2010	489.43	31.11	458.32	0.00	0.00	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
MW-2	09/13/2010	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	03/07/2011	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	06/06/2011	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	09/19/2011	489.43	31.92	457.51	0.00	0.00	-	230/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
<b>MW-2</b>	<b>03/09/2012</b>	<b>489.43</b>	-	-	<b>0.00</b>	<b>0.00</b>	-	-	-	-	-	-	-	-	-	-
<b>MW-2</b>	<b>03/12/2012<sup>4</sup></b>	<b>489.43</b>	<b>41.84</b>	<b>447.59</b>	<b>0.00</b>	<b>0.00</b>	-	<b>&lt;50/&lt;50</b>	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	-	-	-
MW-3	05/25/2010 <sup>1</sup>	490.38	30.17	460.21	0.00	0.00	-	-	-	-	-	-	-	-	-	-
MW-3	05/27/2010	490.38	30.98	459.40	0.00	0.00	610	-	2,100	2	<0.5	<0.5	0.9	-	-	-
MW-3	09/13/2010	490.38	36.77	453.61	0.00	0.00	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
MW-3	12/20/2010	490.38	32.41	457.97	0.00	0.00	-	97	<50	<0.5	<0.5	<0.5	<0.5	-	-	-

TABLE 1

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

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY		
							TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Ferrous Iron
	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	µg/L
MW-3	03/07/2011	490.38	28.06	462.32	0.00	0.00	-	<50	<50	<0.5	<0.5	<0.5	<0.5	4,300	70,400	53
MW-3	06/06/2011	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	09/19/2011	490.38	31.21	459.17	0.00	0.00	-	170/230	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
<b>MW-3</b>	<b>03/09/2012</b>	<b>490.38</b>	-	-	<b>0.00</b>	<b>0.00</b>	-	-	-	-	-	-	-	-	-	-
<b>MW-3</b>	<b>03/12/2012<sup>4</sup></b>	<b>490.38</b>	<b>41.66</b>	<b>448.72</b>	<b>0.00</b>	<b>0.00</b>	-	<b>&lt;50/&lt;50</b>	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	-	-	-
MW-4	05/25/2010 <sup>1</sup>	492.27	32.21	460.06	0.00	0.00	-	-	-	-	-	-	-	-	-	-
MW-4	05/27/2010	492.27	32.26	460.01	0.00	0.00	230	-	1,800	1	<0.5	<0.5	0.7	-	-	-
MW-4	09/13/2010	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	03/07/2011	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	06/06/2011	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	09/19/2011	492.27	32.78	459.49	0.00	0.00	-	330/140	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
<b>MW-4</b>	<b>03/09/2012</b>	<b>492.27</b>	-	-	<b>0.00</b>	<b>0.00</b>	-	-	-	-	-	-	-	-	-	-
<b>MW-4</b>	<b>03/12/2012<sup>4</sup></b>	<b>492.27</b>	<b>42.99</b>	<b>449.28</b>	<b>0.00</b>	<b>0.00</b>	-	<b>130/&lt;50</b>	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	-	-	-
MW-5	05/25/2010 <sup>1</sup>	491.99	31.39	460.60	0.00	0.00	-	-	-	-	-	-	-	-	-	-
MW-5	05/27/2010	491.99	31.42	460.57	0.00	0.00	120	-	420	2	<0.5	<0.5	1	-	-	-
MW-5	09/13/2010	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	03/07/2011	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	06/06/2011	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	06/22/2011 <sup>2</sup>	491.99	28.90	463.09	0.00	0.00	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
MW-5	09/19/2011	491.99	31.94	460.05	0.00	0.00	-	240/410	<50	<0.5	<0.5	<0.5	<0.5	-	-	-

TABLE 1

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

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY		
							TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Ferrous Iron
	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	µg/L
MW-5	03/09/2012	491.99	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-
MW-5	03/12/2012 <sup>4</sup>	491.99	42.15	449.84	0.00	0.00	-	95/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
MW-6	05/25/2010 <sup>1</sup>	491.52	31.63	459.89	0.00	0.00	-	-	-	-	-	-	-	-	-	-
MW-6	05/27/2010	491.52	31.79	459.73	0.00	0.00	1,000	-	3,700	4	<0.5	<0.5	1	-	-	-
MW-6	09/13/2010	491.52	37.64	453.88	0.00	0.00	68	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
MW-6	12/20/2010	491.52	33.32	458.20	0.00	0.00	-	140	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
MW-6	03/07/2011	491.52	28.96	462.56	0.00	0.00	-	63	<50	<0.5	<0.5	<0.5	<0.5	360	55,400	33
MW-6	06/06/2011	491.52	28.08	463.44	0.00	0.00	-	<50	<50	<0.5	<0.5	<0.5	<0.5	5,300	54,000	<10
MW-6	09/19/2011	491.52	32.38	459.14	0.00	0.00	-	<50/380	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
MW-6	03/09/2012	491.52	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-
MW-6	03/12/2012 <sup>4</sup>	491.52	42.50	449.02	0.00	0.00	-	54/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
MW-7	05/25/2010 <sup>1</sup>	492.29	28.69	463.60	0.00	0.00	-	-	-	-	-	-	-	-	-	-
MW-7	05/27/2010	492.29	28.61	463.68	0.00	0.00	2,800	-	14,000	1,800	35	320	660	-	-	-
MW-7	09/13/2010	492.29	31.75	460.54	0.00	0.00	40,000	-	16,000	1,700	33	460	600	-	-	-
MW-7	12/20/2010	492.29	27.96	464.33	0.00	0.00	-	6,200	15,000	2,800	59	450	530	-	-	-
MW-7	03/07/2011	492.29	24.98	467.31	0.00	0.00	-	55,000	16,000	1,500	50	470	2,100	<250	2,600	2,800

TABLE 1

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

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY		
							TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Ferrous Iron
	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	µg/L
MW-7	06/06/2011	492.29	24.12	468.17	0.00	0.00	-	24,000	<50	<0.5	<0.5	<0.5	<0.5	8,000	70,300	4,300
MW-7	06/22/2011 <sup>2</sup>	492.29	26.71	465.58	0.00	0.00	-	-	19,000	1,800	47	490	2,200	-	-	-
MW-7	09/19/2011 <sup>3</sup>	492.29	28.85	463.44	0.12	0.00	-	-	-	-	-	-	-	-	-	-
<b>MW-7</b>	<b>03/09/2012</b>	<b>492.29</b>	-	-	<b>0.00</b>	<b>0.00</b>	-	-	-	-	-	-	-	-	-	-
<b>MW-7</b>	<b>03/12/2012<sup>5</sup></b>	<b>492.29</b>	<b>32.38</b>	<b>459.91</b>	<b>0.00</b>	<b>0.00</b>	-	-	-	-	-	-	-	-	-	-
MW-8	05/25/2010 <sup>1</sup>	490.89	30.62	460.27	0.00	0.00	-	-	-	-	-	-	-	-	-	-
MW-8	05/27/2010	490.89	30.78	460.11	0.00	0.00	750	-	3,100	36	3	<0.5	2	-	-	-
MW-8	09/13/2010	490.89	36.55	454.34	0.00	0.00	590	-	3,400	5	2	<0.5	1	-	-	-
MW-8	12/20/2010	490.89	31.60	459.29	0.00	0.00	-	750	4,000	0.8	0.7	19	3	-	-	-
MW-8	03/07/2011	490.89	28.20	462.69	0.00	0.00	-	1,300	2,800	0.9	0.7	12	2	<250	7,000	820
MW-8	06/06/2011	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	09/19/2011	490.89	31.81	459.08	0.00	0.00	-	6,800/720	4,600	1	0.8	0.5	0.8	-	-	-
<b>MW-8</b>	<b>03/09/2012</b>	<b>490.89</b>	-	-	<b>0.00</b>	<b>0.00</b>	-	-	-	-	-	-	-	-	-	-
<b>MW-8</b>	<b>03/12/2012<sup>5</sup></b>	<b>490.89</b>	<b>38.48</b>	<b>452.41</b>	<b>0.00</b>	<b>0.00</b>	-	-	-	-	-	-	-	-	-	-
MW-9	05/25/2010 <sup>1</sup>	491.64	29.23	462.41	0.00	0.00	-	-	-	-	-	-	-	-	-	-
MW-9	05/27/2010	491.64	28.96	462.68	0.00	0.00	<50	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
MW-9	09/13/2010	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	03/07/2011	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	06/06/2011	491.64	24.67	466.97	0.00	0.00	-	<50	<50	<0.5	<0.5	<0.5	<0.5	<250	228,000	<10
MW-9	09/19/2011	491.64	29.46	462.18	0.00	0.00	-	250/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
<b>MW-9</b>	<b>03/09/2012</b>	<b>491.64</b>	-	-	<b>0.00</b>	<b>0.00</b>	-	-	-	-	-	-	-	-	-	-

TABLE 1

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

Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY		
							TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Ferrous Iron
	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	µg/L
MW-9	03/12/2012 <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-10	03/09/2012	491.15	28.00	463.15	0.00	0.00	-	-	-	-	-	-	-	-	-	-
MW-10	03/12/2012 <sup>4</sup>	491.15	28.11	463.04	0.00	0.00	-	440/260	3,100	<1	<1	36	16	-	-	-
MW-11	03/09/2012	490.59	31.48	459.11	0.00	0.00	-	-	-	-	-	-	-	-	-	-
MW-11	03/12/2012 <sup>4</sup>	490.59	33.35	457.24	0.00	0.00	-	160/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
MW-12	03/09/2012	493.72	25.43	468.29	0.00	0.00	-	-	-	-	-	-	-	-	-	-
MW-12	03/12/2012 <sup>4</sup>	493.72	26.97	466.75	0.00	0.00	-	1,100/310	3,000	10	1	19	38	-	-	-
QA	05/27/2010	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
QA	09/13/2010	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
QA	12/20/2010	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
QA	03/07/2011	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
QA	06/06/2011	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
QA	06/22/2011	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
QA	09/19/2011	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-
QA	03/12/2012	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-

TABLE 1

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

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY		
							TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Ferrous Iron
	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	µg/L

**Abbreviations and Notes:**

TOC = Top of Casing

DTW = Depth to Water

GWE = Groundwater elevation

(ft-amsl) = Feet Above Mean sea level

ft = Feet

µg/L = Micrograms per Liter

TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics

TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics

VOCS = Volatile Organic Compounds

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylene

-- = Not available / not applicable

<x = Not detected above laboratory method detection limit

\* TOC elevations were surveyed on April 19, 2010 by Morrow Surveying. Vertical datum is NAVD 88 from GPS observations

1 Well development performed.

2 Second quarter 2011 resampling event because MW-5 and MW-7 bottles for TPHg and BTEX analysis were switched during the original 6/6/2011 sampling event.

3 Monitored only due to the presence of NAPL.

4 Silica Gel Cleanup / 10 gram Column Silica Gel Cleanup with Capric Acid Reverse Surrogate.

5 Insufficient water to sample.

ATTACHMENT A

MONITORING DATA PACKAGE






# GETTLER-RYAN INC.



## TRANSMITTAL

March 20, 2012  
G-R #385876

TO: Ms. Kiersten Hoey  
Conestoga-Rovers & Associates  
5900 Hollis Street, Suite A  
Emeryville, CA 94608

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 <b>Well Development of March 9, 2012 and First Quarter Event of March 12, 2012</b>

### 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.



## WELL CONDITION STATUS SHEET

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

Job #: 385876  
 Event Date: 3-12-12  
 Sampler: ML FT

WELL ID	Vault Frame Condition	Gasket/O-Ring (M)missing	BOLTS (M) Missing (R) Replaced	Bolt Flanges B= Broken S= Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/N	REPLACE CAP Y/N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Yes / No
MW-1	OK	—	—	—	—	—	✓	NO	NO	EMCO/12"/2	NO
MW-2	OK	—	—	—	—	—	✓	↓	↓	"	↓
MW-3	OK	—	—	—	—	—	✓	↓	↓	MORRISON/7"/2	↓
MW-4	OK	—	—	—	—	—	✓	↓	↓	"	↓
MW-5	OK	—	—	—	—	—	✓	↓	↓	EMCO/12"/2	↓
MW-6	OK	—	—	—	—	—	✓	↓	↓	MORRISON/7"/2	↓
MW-7	OK	—	—	—	—	—	✓	↓	↓	"	↓
MW-8	OK	—	—	—	—	—	✓	↓	↓	EMCO/12"/2	↓
MW-9	OK	—	—	—	—	—	✓	↓	↓	MORRISON/7"/2	↓
MW-10	OK	—	—	—	—	—	✓	↓	↓	NO ID/8"/2	↓
MW-11	OK	—	—	—	—	—	✓	↓	↓	"	↓
MW-12	OK	—	—	—	—	—	✓	↓	↓	"	↓

Comments \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

***FORMER CHEVRON SERVICE STATION #307233  
Livermore, CA***

***WELL DEVELOPMENT EVENT OF  
March 9, 2012***



# GETTLER - RYAN INC.

## WELL MONITORING/DEVELOPMENT FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876  
 Site Address: 2259 First Street Event Date: 3.9.12 (inclusive)  
 City: Livermore, CA Sampler: FT

Well ID: MW-10  
 Well Diameter: 2 in.  
 Initial Total Depth: 32-38 ft.  
 Final Total Depth: 32-38 ft.  
 Depth to Water: 28.00 ft.

Date Monitored: 3.9.12

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

Check if water column is less than 0.50 ft.  
 $4.38 \times VF .17 = .74$  x10 case volume = Estimated Purge Volume: 7.0 gal.

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

### Purge Equipment:

Disposable Bailer /  
 Stainless Steel Bailer /  
 Stack Pump /  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Metal Filters \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

Start Time (purge): 0930 Weather Conditions: SUNNY  
 Sample Time/Date:     /    /     Water Color: BRN. Odor: Y 10  
 Approx. Flow Rate: 50 → .75 gpm. Sediment Description: SILTY  
 Did well de-water? Yes If yes, Time: 0950 Volume: 4.0 gal. DTW @ Sampling:     

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
<u>0931</u>	<u>.75</u>	<u>7.72</u>	<u>712</u>	<u>18.4</u>		
<u>0932</u>	<u>1.5</u>	<u>7.70</u>	<u>710</u>	<u>19.0</u>		
<u>0937</u>	<u>2.25</u>	<u>7.68</u>	<u>709</u>	<u>19.6</u>		
<u>0942</u>	<u>3.0</u>	<u>7.66</u>	<u>707</u>	<u>20.0</u>		
<u>0947</u>	<u>3.75</u>	<u>7.65</u>	<u>705</u>	<u>20.4</u>		
<u>0950</u>	<u>4.0</u>	<u>7.67</u>	<u>706</u>	<u>20.9</u>		

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES

COMMENTS: INITIAL CGI READING: 10 PPM  
DEVELOP ONLY

8" WELL BOX

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/DEVELOPMENT FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876  
 Site Address: 2259 First Street Event Date: 3-9-12 (inclusive)  
 City: Livermore, CA Sampler: FT

Well ID: MW-11  
 Well Diameter: 2 in.  
 Initial Total Depth: 34.73 ft.  
 Final Total Depth: 34.73 ft.  
 Depth to Water: 31.48 ft.

Date Monitored: 3-9-12

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

Check if water column is less than 0.50 ft.  
 $3.25 \times VF_{.17} = .55$  x10 case volume = Estimated Purge Volume: 6.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: ~~31.48~~

**Purge Equipment:**  
 Disposable Bailer   
 Stainless Steel Bailer   
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**  
 Disposable Bailer   
 Pressure Bailer \_\_\_\_\_  
 Metal Filters \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

Start Time (purge): 1015 Weather Conditions: SUNNY  
 Sample Time/Date: — / — Water Color: BRN. Odor: Y / N  
 Approx. Flow Rate: ✓ gpm. Sediment Description: S. SILTY  
 Did well de-water? YES If yes, Time: 1035 Volume: 4.0 gal. DTW @ Sampling: —

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)
1018	.60	7.82	696	19.2		
1021	1.20	7.80	699	18.8		
1024	1.80	7.79	702	18.7		
1027	2.40	7.77	704	18.8		
1031	3.00	7.75	706	18.9		
1035	4.0	7.74	708	18.7		

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES

COMMENTS: INITIAL CGI READING: 15 PPM  
**DEVELOP ONLY**

8" WELL BOX

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/DEVELOPMENT FIELD DATA SHEET

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

Job Number: 385876  
 Event Date: 3.9.12 (inclusive)  
 Sampler: FT

Well ID: MW-12  
 Well Diameter: 2 in.  
 Initial Total Depth: 34.49 ft.  
 Final Total Depth: 34.49 ft.  
 Depth to Water: 25.43 ft.

Date Monitored: 3.9.12

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: ~~25.43~~  
 Check if water column is less than 0.50 ft.  
 xVF 1.17 = 1.54 x10 case volume = Estimated Purge Volume: 15.0 gal.

**Purge Equipment:**  
 Disposable Bailer /  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Metal Filters \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

Start Time (purge): 1110 Weather Conditions: SUNNY  
 Sample Time/Date: - / - Water Color: BW Odor: 0/N SLIGHT  
 Approx. Flow Rate: - gpm. Sediment Description: S. SILTY  
 Did well de-water? YES If yes, Time: 1145 Volume: 6.0 gal. DTW @ Sampling: -

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)
<u>1118</u>	<u>1.5</u>	<u>8.10</u>	<u>810</u>	<u>18.3</u>		
<u>1126</u>	<u>3.0</u>	<u>8.08</u>	<u>813</u>	<u>18.1</u>		
<u>1134</u>	<u>4.5</u>	<u>8.06</u>	<u>816</u>	<u>18.0</u>		
<u>1145</u>	<u>6.0</u>	<u>8.04</u>	<u>821</u>	<u>17.7</u>		

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES

COMMENTS: INITIAL CGI READING: 20PPM  
DEVELOP ONLY  
8" WELL BOX  
 Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



***FORMER CHEVRON SERVICE STATION #307233  
Livermore, CA***

***QUARTERLY MONITORING EVENT OF  
March 12, 2012***



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876  
 Site Address: 2259 First Street Event Date: 3.12.12 (inclusive)  
 City: Livermore, CA Sampler: FR

Well ID: MW-1 Date Monitored: 3.12.12  
 Well Diameter: 2  
 Total Depth: 58.81 ft.  
 Depth to Water: 41.35 ft.  Check if water column is less than 0.50 ft.  
17.46 xVF .17 = 2.96 x3 case volume = Estimated Purge Volume: 9.0 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 44.84

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

**Purge Equipment:**  
 Disposable Bailer   
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**  
 Disposable Bailer   
 Pressure Bailer \_\_\_\_\_  
 Metal Filters \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

Start Time (purge): 1230 Weather Conditions: CLOUDY/SUNNY  
 Sample Time/Date: 1300 13.12.12 Water Color: CLEAN Odor: Ø / IN SLIGHT  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: NONE  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 41.40

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)
<u>1236</u>	<u>3.0</u>	<u>7.52</u>	<u>728</u>	<u>18.4</u>	_____	_____
<u>1242</u>	<u>6.0</u>	<u>7.49</u>	<u>724</u>	<u>18.6</u>	_____	_____
<u>1249</u>	<u>9.0</u>	<u>7.46</u>	<u>720</u>	<u>18.9</u>	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-1</u>	<u>6</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO(8015)/BTEX(8260)</u>
	<u>2</u> x 500ml ambers	<u>YES</u>	<u>NP</u>	<u>LANCASTER</u>	<u>TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)</u>
	<u>x 1</u> liter ambers	<u>YES</u>	<u>NP</u>	<u>CHEVRON RTC</u>	<u>CHEVRON PFI STUDY SAMPLES</u>

COMMENTS: EMCO 12" OK

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876  
 Site Address: 2259 First Street Event Date: 3-12-12 (inclusive)  
 City: Livermore, CA Sampler: ML

Well ID: MW-2 Date Monitored: 3-12-12  
 Well Diameter: 2  
 Total Depth: 58.60 ft.  
 Depth to Water: 41.84 ft.  Check if water column is less than 0.50 ft.  
16.76 xVF .17 = 2.8 x3 case volume = Estimated Purge Volume: 8.4 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 45.19

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

**Purge Equipment:**  Disposable Bailer  
 Stainless Steel Bailer  
 Stack Pump  
 Suction Pump  
 Grundfos  
 Peristaltic Pump  
 QED Bladder Pump  
 Other: \_\_\_\_\_

**Sampling Equipment:**  Disposable Bailer  
 Pressure Bailer  
 Metal Filters  
 Peristaltic Pump  
 QED Bladder Pump  
 Other: \_\_\_\_\_

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

Start Time (purge): 0830 Weather Conditions: SUNNY  
 Sample Time/Date: 0910 13-12-12 Water Color: CLOUDY Odor: Y/N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: NONE  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 42.02

Time (2400 hr.)	Volume (gal.)	pH	Conductivity <sup>MS</sup> (µmhos/cm @ 25°C)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
<u>0840</u>	<u>3</u>	<u>7.50</u>	<u>0.76</u>	<u>12.0</u>		
<u>0850</u>	<u>6</u>	<u>7.46</u>	<u>0.80</u>	<u>12.4</u>		
<u>0858</u>	<u>8.5</u>	<u>7.44</u>	<u>0.81</u>	<u>12.5</u>		

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2</u>	<u>0</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO(8015)/BTEX(8260)</u>
	<u>2</u> x 500ml ambers	<u>YES</u>	<u>NP</u>	<u>LANCASTER</u>	<u>TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)</u>
	<u>x 1 liter ambers</u>	<u>YES</u>	<u>NP</u>	<u>CHEVRON RTC</u>	<u>CHEVRON PFI STUDY SAMPLES</u>

COMMENTS: \_\_\_\_\_

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876  
 Site Address: 2259 First Street Event Date: 3-12-12 (inclusive)  
 City: Livermore, CA Sampler: ML

Well ID: MW-3Date Monitored: 3-12-12Well Diameter: 2Total Depth: 59.36 ft.

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

Depth to Water: 41.66 ft. Check if water column is less than 0.50 ft.

17.70 xVF .17 = 3.0 x3 case volume = Estimated Purge Volume: 9 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 45.20**Purge Equipment:**

Disposable Bailer X  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**

Disposable Bailer X  
 Pressure Bailer \_\_\_\_\_  
 Metal Filters \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

Start Time (purge): 1115 Weather Conditions: Sunny  
 Sample Time/Date: 1200 13-12-12 Water Color: cloudy Odor: Y10  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: Light  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal! DTW @ Sampling: 41.77

Time (2400 hr.)	Volume (gal.)	pH	Conductivity $\mu S$ (umhos/cm $\mu S$ )	Temperature (°F)	D.O. (mg/L)	ORP (mV)
<u>1125</u>	<u>3</u>	<u>7.72</u>	<u>0.92</u>	<u>14.9</u>		
<u>1135</u>	<u>6</u>	<u>7.69</u>	<u>0.90</u>	<u>15.4</u>		
<u>1149</u>	<u>9</u>	<u>7.67</u>	<u>0.94</u>	<u>15.6</u>		

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	<u>6</u> x vva vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	<u>2</u> x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	<u>x 1</u> liter ambers	YES	NP	CHEVRON RTC	CHEVRON PFI STUDY SAMPLES

**COMMENTS:**

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876  
 Site Address: 2259 First Street Event Date: 3-12-12 (inclusive)  
 City: Livermore, CA Sampler: ML

Well ID: MW-4 Date Monitored: 3-12-12  
 Well Diameter: 2  
 Total Depth: 58.93 ft.  
 Depth to Water: 42.99 ft.  Check if water column is less than 0.50 ft.  
15.94 xVF .17 = 2.7 x3 case volume = Estimated Purge Volume: 8.1 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 46.17

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

**Purge Equipment:**  
 Disposable Bailer   
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**  
 Disposable Bailer   
 Pressure Bailer \_\_\_\_\_  
 Metal Filters \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

Start Time (purge): 1215 Weather Conditions: Sunny  
 Sample Time/Date: 1250 / 3-12-12 Water Color: cloudy Odor: Y100  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: light  
 Did well de-water? no If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 43.16

Time (2400 hr.)	Volume (gal.)	pH	Conductivity <sup>ms</sup> (umhos/cm - uS)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
<u>1222</u>	<u>2.75</u>	<u>7.66</u>	<u>1.07</u>	<u>15.4</u>		
<u>1230</u>	<u>5.5</u>	<u>7.60</u>	<u>1.06</u>	<u>15.6</u>		
<u>1238</u>	<u>8.25</u>	<u>7.61</u>	<u>1.07</u>	<u>15.8</u>		

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-4</u>	<u>0</u> x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	<u>2</u> x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	<u>x 1 liter ambers</u>	YES	NP	CHEVRON RTC	CHEVRON PFI STUDY SAMPLES

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876  
 Site Address: 2259 First Street Event Date: 3-12-12 (inclusive)  
 City: Livermore, CA Sampler: ML

Well ID: MW-5 Date Monitored: 3-12-12  
 Well Diameter: 2  
 Total Depth: 58.87 ft.  
 Depth to Water: 42.15 ft.  Check if water column is less than 0.50 ft.  
16.72 xVF 1.7 = 2.8 x3 case volume = Estimated Purge Volume: 8.4 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 45.49

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

### Purge Equipment:

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

### Sampling Equipment:

Disposable Bailer   
 Pressure Bailer \_\_\_\_\_  
 Metal Filters \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

Start Time (purge): 0930 Weather Conditions: Sunny  
 Sample Time/Date: 1010 13-12-12 Water Color: Clear Odor: Y 10  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: light  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 42.41

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (°F)	D.O. (mg/L)	ORP (mV)
<u>0940</u>	<u>3</u>	<u>7.50</u>	<u>11.5</u>	<u>0.90</u>		
<u>0950</u>	<u>6</u>	<u>7.46</u>	<u>11.9</u>	<u>0.86</u>		
<u>0958</u>	<u>8.5</u>	<u>7.47</u>	<u>11.9</u>	<u>0.86</u>		

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	x 1 liter ambers	YES	NP	CHEVRON RTC	CHEVRON PFI STUDY SAMPLES

### COMMENTS:

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876  
 Site Address: 2259 First Street Event Date: 3-12-12 (inclusive)  
 City: Livermore, CA Sampler: ML

Well ID: MW-6  
 Well Diameter: 2  
 Total Depth: 58.94 ft.  
 Depth to Water: 42.50 ft.  
16.44 xVF .17 = 2.7  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 45.78

Date Monitored: 3-12-12

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

Check if water column is less than 0.50 ft.

x3 case volume = Estimated Purge Volume: 8.1 gal.

### Purge Equipment:

Disposable Bailer X  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

### Sampling Equipment:

Disposable Bailer X  
 Pressure Bailer \_\_\_\_\_  
 Metal Filters \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

Start Time (purge): 1025 Weather Conditions: Sunny  
 Sample Time/Date: 1100 13-12-12 Water Color: cloudy Odor: Y10  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: light  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 42.68

Time (2400 hr.)	Volume (gal.)	pH	Conductivity <sup>ms</sup> (µmhos/cm - ps)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)
<u>1034</u>	<u>2.75</u>	<u>7.52</u>	<u>0.76</u>	<u>14.1</u>		
<u>1043</u>	<u>5.5</u>	<u>7.46</u>	<u>0.82</u>	<u>14.4</u>		
<u>1050</u>	<u>8.25</u>	<u>7.47</u>	<u>0.80</u>	<u>14.6</u>		

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	<u>U</u> x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	<u>Z</u> x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	x 1 liter ambers	YES	NP	CHEVRON RTC	CHEVRON PFI STUDY SAMPLES

### COMMENTS:

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_





# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876  
 Site Address: 2259 First Street Event Date: 3-12-12 (inclusive)  
 City: Livermore, CA Sampler: ML

Well ID: MW-7 Date Monitored: 3-12-12  
 Well Diameter: 2  
 Total Depth: 32.83 ft.  
 Depth to Water: 32.38 ft.  Check if water column is less than 0.50 ft.

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

0.45 xVF - = - x3 case volume = Estimated Purge Volume: - gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: -

**Purge Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Metal Filters \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

Start Time (purge): \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
 Sample Time/Date: / Water Color: \_\_\_\_\_ Odor: Y / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: \_\_\_\_\_

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

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	x 1 liter ambers	YES	NP	CHEVRON RTC	CHEVRON PFI STUDY SAMPLES

COMMENTS: WELL DRY INSUFFICIENT WATER TO SAMPLE

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876  
 Site Address: 2259 First Street Event Date: 3.12.12 (inclusive)  
 City: Livermore, CA Sampler: FR

Well ID: MW-8 Date Monitored: 3.12.12

Well Diameter: 2  
 Total Depth: 38.89 ft.  
 Depth to Water: 38.48 ft.

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

Check if water column is less than 0.50 ft.

.41 xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

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

### Purge Equipment:

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

### Sampling Equipment:

Disposable Bailer \_\_\_\_\_  
 Pressure Bailer \_\_\_\_\_  
 Metal Filters \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

Start Time (purge): \_\_\_\_\_ Weather Conditions: \_\_\_\_\_  
 Sample Time/Date: \_\_\_\_\_ / \_\_\_\_\_ Water Color: \_\_\_\_\_ Odor: Y / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: \_\_\_\_\_

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

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x vva vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	x 1 liter ambers	YES	NP	CHEVRON RTC	CHEVRON PFI STUDY SAMPLES

COMMENTS: EMCO 12" OIL  
INSUFFICIENT WATER TO SAMPLE

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876  
 Site Address: 2259 First Street Event Date: 3.12.12 (inclusive)  
 City: Livermore, CA Sampler: FT

Well ID: MW-9 Date Monitored: 3.12.12  
 Well Diameter: 2  
 Total Depth: 39.85 ft.  
 Depth to Water: 34.27 ft.  Check if water column is less than 0.50 ft.  
5.58 xVF .17 = .94 x3 case volume = Estimated Purge Volume: 3.0 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 35.38

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

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

**Sampling Equipment:**  
 Disposable Bailer   
 Pressure Bailer   
 Metal Filters   
 Peristaltic Pump   
 QED Bladder Pump   
 Other:

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

Start Time (purge): 1145 Weather Conditions: Cloudy/Sunny  
 Sample Time/Date: 1215 13.12.12 Water Color: BW Odor: Y/O  
 Approx. Flow Rate: ✓ gpm. Sediment Description: SILTY  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 34.95

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)
<u>1148</u>	<u>1.0</u>	<u>7.34</u>	<u>650</u>	<u>17.9</u>		
<u>1151</u>	<u>2.0</u>	<u>7.32</u>	<u>648</u>	<u>18.1</u>		
<u>1154</u>	<u>3.0</u>	<u>7.30</u>	<u>645</u>	<u>18.2</u>		

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-9</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	<u>2</u> x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	<u>x 1</u> liter ambers	YES	NP	CHEVRON RTC	CHEVRON PFI STUDY SAMPLES

COMMENTS: MORRISON 6" (OK)

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876  
 Site Address: 2259 First Street Event Date: 3.12.12 (inclusive)  
 City: Livermore, CA Sampler: FT

Well ID: MW-10 Date Monitored: 3.12.12  
 Well Diameter: 2  
 Total Depth: 32.38 ft.  
 Depth to Water: 28.11 ft.  Check if water column is less than 0.50 ft.  
4.27 xVF .17 = .72 x3 case volume = Estimated Purge Volume: 2.0 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 28.96

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

**Purge Equipment:**  
 Disposable Bailer   
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**  
 Disposable Bailer   
 Pressure Bailer \_\_\_\_\_  
 Metal Filters \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

Start Time (purge): 0930 Weather Conditions: SUNNY  
 Sample Time/Date: 1000 13.12.12 Water Color: LT. BLEN Odor: Y / N  
 Approx. Flow Rate: — gpm. Sediment Description: S. SILTY  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 28.93

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)
<u>0933</u>	<u>.75</u>	<u>7.38</u>	<u>640</u>	<u>17.2</u>		
<u>0936</u>	<u>1.5</u>	<u>7.36</u>	<u>645</u>	<u>17.8</u>		
<u>0940</u>	<u>2.0</u>	<u>7.35</u>	<u>649</u>	<u>18.0</u>		

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-10</u>	<u>6</u> x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	<u>2</u> x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	<u>x 1</u> liter ambers	YES	NP	CHEVRON RTC	CHEVRON PFI STUDY SAMPLES

COMMENTS: 8" Box OK

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876  
 Site Address: 2259 First Street Event Date: 3.12.12 (inclusive)  
 City: Livermore, CA Sampler: FR

Well ID: MW-11 Date Monitored: 3.12.12  
 Well Diameter: 2  
 Total Depth: 34.70 ft.  
 Depth to Water: 33.35 ft.  Check if water column is less than 0.50 ft.  
1.35 x VF .17 = .23 x3 case volume = Estimated Purge Volume: .69 gal.

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

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

**Purge Equipment:**  
 Disposable Bailer \_\_\_\_\_  
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**  
 Disposable Bailer   
 Pressure Bailer \_\_\_\_\_  
 Metal Filters \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

Start Time (purge): \_\_\_\_\_ Weather Conditions: SUNNY  
 Sample Time/Date: 1030 / 3.12.12 Water Color: BRN Odor: Y / N  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: SILTY  
 Did well de-water? \_\_\_\_\_ If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: —

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

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-11	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	2x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	x 1 liter ambers	YES	NP	CHEVRON RTC	CHEVRON PFI STUDY SAMPLES

COMMENTS: LAB SAMPLED WELL. INSUFFICIENT WATER FOR PUMPING WOULD HAVE DE-WATERED. 8" Box OK

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876  
 Site Address: 2259 First Street Event Date: 3.12.12 (inclusive)  
 City: Livermore, CA Sampler: FR

Well ID: MW-12 Date Monitored: 3.12.12  
 Well Diameter: 2  
 Total Depth: 34.49 ft.  
 Depth to Water: 26.97 ft.  Check if water column is less than 0.50 ft.  
7.52 xVF .17 = 1.27 x3 case volume = Estimated Purge Volume: 40 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 28.47

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

**Purge Equipment:**  
 Disposable Bailer   
 Stainless Steel Bailer \_\_\_\_\_  
 Stack Pump \_\_\_\_\_  
 Suction Pump \_\_\_\_\_  
 Grundfos \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

**Sampling Equipment:**  
 Disposable Bailer   
 Pressure Bailer \_\_\_\_\_  
 Metal Filters \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

Start Time (purge): 1050 Weather Conditions: SUNNY  
 Sample Time/Date: 1130 / 3.12.12 Water Color: BLU Odor: 0 / N MODERATE  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: S, SILTY  
 Did well de-water? YES If yes, Time: 1057 Volume: 3.0 gal. DTW @ Sampling: 28.45

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm - µS)	Temperature (°C/ F)	D.O. (mg/L)	ORP (mV)
<u>1053</u>	<u>1.5</u>	<u>7.46</u>	<u>647</u>	<u>17.2</u>		
<u>1057</u>	<u>3.0</u>	<u>7.43</u>	<u>656</u>	<u>17.5</u>		

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-12	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	x 1 liter ambers	YES	NP	CHEVRON RTC	CHEVRON PFI STUDY SAMPLES

COMMENTS: 8" WELL BOX

Add/Replaced Lock: \_\_\_\_\_ Add/Replaced Plug: \_\_\_\_\_ Add/Replaced Bolt: \_\_\_\_\_





ATTACHMENT B

LABORATORY ANALYTICAL REPORT

## ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Chevron  
6001 Bollinger Canyon Rd L4310  
San Ramon CA 94583

March 26, 2012

Project: 307233

Submittal Date: 03/14/2012  
Group Number: 1295102  
PO Number: 0015075227  
Release Number: FROHNAPPLE  
State of Sample Origin: CAClient Sample DescriptionQA-T-120312 NA Water  
MW-1-W-120312 Grab Water  
MW-1-W-120312 Grab Water  
MW-2-W-120312 Grab Water  
MW-2-W-120312 Grab Water  
MW-3-W-120312 Grab Water  
MW-3-W-120312 Grab Water  
MW-4-W-120312 Grab Water  
MW-4-W-120312 Grab Water  
MW-5-W-120312 Grab Water  
MW-5-W-120312 Grab Water  
MW-6-W-120312 Grab Water  
MW-6-W-120312 Grab Water  
MW-9-W-120312 Grab Water  
MW-9-W-120312 Grab Water  
MW-10-W-120312 Grab Water  
MW-10-W-120312 Grab Water  
MW-11-W-120312 Grab Water  
MW-11-W-120312 Grab Water  
MW-12-W-120312 Grab Water  
MW-12-W-120312 Grab WaterLancaster Labs (LLI) #6577208  
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6577228

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

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

Respectfully Submitted,



Jill M. Parker  
Senior Specialist

(717) 556-7262

**Sample Description: QA-T-120312 NA Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 QA**

**LLI Sample # WW 6577208**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012

Chevron

Submitted: 03/14/2012 09:25

6001 Bollinger Canyon Rd L4310

Reported: 03/26/2012 18:53

San Ramon CA 94583

FSLQA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l</b>					
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
<b>GC Volatiles SW-846 8015B ug/l</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P120764AA	03/17/2012 02:06	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P120764AA	03/17/2012 02:06	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12075A53A	03/16/2012 12:46	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	12075A53A	03/16/2012 12:46	Laura M Krieger	1

**Sample Description: MW-1-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-1**

**LLI Sample # WW 6577209**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 13:00 by ML

Chevron

6001 Bollinger Canyon Rd L4310

Submitted: 03/14/2012 09:25

San Ramon CA 94583

Reported: 03/26/2012 18:53

FSL01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l</b>					
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
<b>GC Volatiles SW-846 8015B ug/l</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Petroleum SW-846 8015B ug/l</b>					
<b>Hydrocarbons w/Si</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
The reverse surrogate, capric acid, is present at <1%.					

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P120764AA	03/17/2012 02:33	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P120764AA	03/17/2012 02:33	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12075A53A	03/16/2012 20:19	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	12075A53A	03/16/2012 20:19	Laura M Krieger	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770004A	03/20/2012 21:19	Tracy A Cole	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770004A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-1-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-1**

**LLI Sample # WW 6577210**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 13:00 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSQ01

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

**General Sample Comments**

State of California Lab Certification No. 2501

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

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770005A	03/20/2012 09:21	Elizabeth J Marin	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770005A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-2-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-2**

**LLI Sample # WW 6577211**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 09:10 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSL02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
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
<b>GC Volatiles SW-846 8015B</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Petroleum SW-846 8015B</b>					
<b>Hydrocarbons w/Si</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
The reverse surrogate, capric acid, is present at <1%.					

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P120764AA	03/17/2012 03:01	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P120764AA	03/17/2012 03:01	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12082A53A	03/22/2012 17:52	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12082A53A	03/22/2012 17:52	Marie D John	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770004A	03/20/2012 21:42	Tracy A Cole	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770004A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-2-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-2**

**LLI Sample # WW 6577212**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 09:10 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSQ02

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

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770005A	03/20/2012 09:44	Elizabeth J Marin	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770005A	03/19/2012 09:20	Catherine R Wiker	1



**Sample Description: MW-3-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-3**

**LLI Sample # WW 6577213**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 12:00 by ML

Chevron

6001 Bollinger Canyon Rd L4310

Submitted: 03/14/2012 09:25

San Ramon CA 94583

Reported: 03/26/2012 18:53

FSL03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l</b>					
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
<b>GC Volatiles SW-846 8015B ug/l</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Petroleum SW-846 8015B ug/l</b>					
<b>Hydrocarbons w/Si</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
The reverse surrogate, capric acid, is present at <1%.					

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P120764AA	03/17/2012 03:28	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P120764AA	03/17/2012 03:28	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12082A53A	03/22/2012 18:18	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12082A53A	03/22/2012 18:18	Marie D John	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770004A	03/20/2012 22:04	Tracy A Cole	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770004A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-3-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-3**

**LLI Sample # WW 6577214**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 12:00 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSQ03

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

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770005A	03/20/2012 10:06	Elizabeth J Marin	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770005A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-4-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-4**

**LLI Sample # WW 6577215**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 12:50 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSL04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l</b>					
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
<b>GC Volatiles SW-846 8015B ug/l</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Petroleum SW-846 8015B ug/l</b>					
<b>Hydrocarbons w/Si</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
The reverse surrogate, capric acid, is present at <1%.					

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P120764AA	03/17/2012 03:56	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P120764AA	03/17/2012 03:56	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12076A20A	03/19/2012 21:21	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	12076A20A	03/19/2012 21:21	Laura M Krieger	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770004A	03/20/2012 22:27	Tracy A Cole	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770004A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-4-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-4**

**LLI Sample # WW 6577216**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 12:50 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSQ04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	<b>GC Petroleum Hydrocarbons w/Si</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	130	50	1

**General Sample Comments**

State of California Lab Certification No. 2501

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

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770005A	03/20/2012 10:28	Elizabeth J Marin	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770005A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-5-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-5**

**LLI Sample # WW 6577217**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 10:10 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSL05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
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
<b>GC Volatiles SW-846 8015B</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Petroleum SW-846 8015B</b>					
<b>Hydrocarbons w/Si</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
The reverse surrogate, capric acid, is present at <1%.					

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P120764AA	03/17/2012 04:24	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P120764AA	03/17/2012 04:24	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12076A20A	03/19/2012 21:43	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	12076A20A	03/19/2012 21:43	Laura M Krieger	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770004A	03/20/2012 22:50	Tracy A Cole	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770004A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-5-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-5**

**LLI Sample # WW 6577218**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 10:10 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSQ05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	<b>GC Petroleum Hydrocarbons w/Si</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	95	50	1

**General Sample Comments**

State of California Lab Certification No. 2501

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

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770005A	03/20/2012 10:50	Elizabeth J Marin	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770005A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-6-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-6**

**LLI Sample # WW 6577219**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 11:00 by ML

Chevron

6001 Bollinger Canyon Rd L4310

Submitted: 03/14/2012 09:25

San Ramon CA 94583

Reported: 03/26/2012 18:53

FSL06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l</b>					
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
<b>GC Volatiles SW-846 8015B ug/l</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Petroleum SW-846 8015B ug/l</b>					
<b>Hydrocarbons w/Si</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
The reverse surrogate, capric acid, is present at <1%.					

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P120764AA	03/17/2012 04:52	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P120764AA	03/17/2012 04:52	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12076A20A	03/19/2012 22:05	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	12076A20A	03/19/2012 22:05	Laura M Krieger	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770004A	03/20/2012 23:12	Tracy A Cole	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770004A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-6-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-6**

**LLI Sample # WW 6577220**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 11:00 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSQ06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	<b>GC Petroleum Hydrocarbons w/Si</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	54	50	1

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770005A	03/20/2012 11:13	Elizabeth J Marin	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770005A	03/19/2012 09:20	Catherine R Wiker	1



**Sample Description: MW-9-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-9**

**LLI Sample # WW 6577221**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 12:15 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSL09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
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
<b>GC Volatiles SW-846 8015B</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Petroleum SW-846 8015B</b>					
<b>Hydrocarbons w/Si</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
The reverse surrogate, capric acid, is present at <1%.					

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P120764AA	03/17/2012 05:20	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P120764AA	03/17/2012 05:20	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12076A20A	03/19/2012 22:27	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	12076A20A	03/19/2012 22:27	Laura M Krieger	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770004A	03/20/2012 23:35	Tracy A Cole	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770004A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-9-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-9**

**LLI Sample # WW 6577222**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 12:15 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSQ09

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

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770005A	03/20/2012 11:36	Elizabeth J Marin	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770005A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-10-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-10**

**LLI Sample # WW 6577223**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 10:00 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSL10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10943	Benzene	71-43-2	N.D.	1	2
10943	Ethylbenzene	100-41-4	36	1	2
10943	Toluene	108-88-3	N.D.	1	2
10943	Xylene (Total)	1330-20-7	16	1	2
<b>GC Volatiles SW-846 8015B</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	3,100	250	5
<b>GC Petroleum SW-846 8015B</b>					
<b>Hydrocarbons w/Si</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	260	50	1
The reverse surrogate, capric acid, is present at <1%.					

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P120764AA	03/17/2012 05:47	Kelly E Keller	2
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P120764AA	03/17/2012 05:47	Kelly E Keller	2
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12076A20A	03/20/2012 12:00	Laura M Krieger	5
01146	GC VOA Water Prep	SW-846 5030B	1	12076A20A	03/20/2012 12:00	Laura M Krieger	5
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770004A	03/20/2012 23:57	Tracy A Cole	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770004A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-10-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-10**

**LLI Sample # WW 6577224**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 10:00 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSQ10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	<b>GC Petroleum Hydrocarbons w/Si</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	440	50	1

**General Sample Comments**

State of California Lab Certification No. 2501

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

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770005A	03/20/2012 11:59	Elizabeth J Marin	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770005A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-11-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-11**

**LLI Sample # WW 6577225**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 10:30 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSL11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
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
<b>GC Volatiles SW-846 8015B</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
<b>GC Petroleum SW-846 8015B</b>					
<b>Hydrocarbons w/Si</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
The reverse surrogate, capric acid, is present at <1%.					

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P120764AA	03/17/2012 06:15	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P120764AA	03/17/2012 06:15	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12076A20A	03/19/2012 23:11	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	12076A20A	03/19/2012 23:11	Laura M Krieger	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770004A	03/21/2012 00:20	Tracy A Cole	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770004A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-11-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-11**

**LLI Sample # WW 6577226**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 10:30 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSQ11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	<b>GC Petroleum Hydrocarbons w/Si</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	160	50	1

**General Sample Comments**

State of California Lab Certification No. 2501

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

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770005A	03/20/2012 12:21	Elizabeth J Marin	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770005A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-12-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-12**

**LLI Sample # WW 6577227**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 11:30 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSL12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10943	Benzene	71-43-2	10	0.5	1
10943	Ethylbenzene	100-41-4	19	0.5	1
10943	Toluene	108-88-3	1	0.5	1
10943	Xylene (Total)	1330-20-7	38	0.5	1
<b>GC Volatiles SW-846 8015B</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	3,000	50	1
<b>GC Petroleum SW-846 8015B</b>					
<b>Hydrocarbons w/Si</b>					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	310	50	1
The reverse surrogate, capric acid, is present at <1%.					

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P120764AA	03/17/2012 06:43	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P120764AA	03/17/2012 06:43	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12076A20A	03/19/2012 23:33	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	12076A20A	03/19/2012 23:33	Laura M Krieger	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770004A	03/21/2012 00:43	Tracy A Cole	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770004A	03/19/2012 09:20	Catherine R Wiker	1

**Sample Description: MW-12-W-120312 Grab Water**  
**Facility# 307233 Job# 385876 GRD**  
**2259 First St-Livermore T0600196622 MW-12**

**LLI Sample # WW 6577228**  
**LLI Group # 1295102**  
**Account # 10904**

**Project Name: 307233**

Collected: 03/12/2012 11:30 by ML

Chevron

6001 Bollinger Canyon Rd L4310  
 San Ramon CA 94583

Submitted: 03/14/2012 09:25

Reported: 03/26/2012 18:53

FSQ12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	<b>GC Petroleum Hydrocarbons w/Si</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	1,100	50	1

**General Sample Comments**

State of California Lab Certification No. 2501

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

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	120770005A	03/20/2012 12:44	Elizabeth J Marin	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	120770005A	03/19/2012 09:20	Catherine R Wiker	1



## Quality Control Summary

Client Name: Chevron

Group Number: 1295102

Reported: 03/26/12 at 06:53 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

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: P120764AA	Sample number(s): 6577208-6577209,6577211,6577213,6577215,6577217,6577219,6577221,6577223,6577225,6577227							
Benzene	N.D.	0.5	ug/l	96		77-121		
Ethylbenzene	N.D.	0.5	ug/l	95		79-120		
Toluene	N.D.	0.5	ug/l	93		79-120		
Xylene (Total)	N.D.	0.5	ug/l	95		77-120		
Batch number: 12075A53A	Sample number(s): 6577208-6577209							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	100	100	75-135	0	30
Batch number: 12076A20A	Sample number(s): 6577215,6577217,6577219,6577221,6577223,6577225,6577227							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	100	100	75-135	0	30
Batch number: 12082A53A	Sample number(s): 6577211,6577213							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	100	91	75-135	10	30
Batch number: 120770004A	Sample number(s): 6577209,6577211,6577213,6577215,6577217,6577219,6577221,6577223,6577225,6577227							
TPH-DRO CA C10-C28 w/ Si Gel	N.D.	32.	ug/l	69	69	50-118	0	20
Batch number: 120770005A	Sample number(s): 6577210,6577212,6577214,6577216,6577218,6577220,6577222,6577224,6577226,6577228							
TPH-DRO CA C10-C28 w/ Si Gel	N.D.	32.	ug/l	88	94	50-118	7	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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: P120764AA	Sample number(s): 6577208-6577209,6577211,6577213,6577215,6577217,6577219,6577221,6577223,6577225,6577227								
	UNSPK: P576365								
Benzene	99	106	72-134	6	30				
Ethylbenzene	98	104	71-134	7	30				
Toluene	98	107	80-125	9	30				
Xylene (Total)	99	106	79-125	7	30				

\*- Outside of specification

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

## Quality Control Summary

Client Name: Chevron  
Reported: 03/26/12 at 06:53 PM

Group Number: 1295102

### 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: P120764AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6577208	103	94	96	100
6577209	103	98	96	100
6577211	102	99	96	100
6577213	103	94	96	99
6577215	102	98	97	102
6577217	106	98	97	101
6577219	105	99	95	100
6577221	106	98	95	100
6577223	105	98	96	104
6577225	105	96	96	101
6577227	102	99	96	101
Blank	103	96	96	100
LCS	102	98	97	102
MS	102	98	96	100
MSD	103	97	98	102
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12  
Batch number: 12075A53A  
Trifluorotoluene-F

6577208	82
6577209	82
Blank	83
LCS	98
LCSD	98
Limits:	63-135

Analysis Name: TPH-GRO N. CA water C6-C12  
Batch number: 12076A20A  
Trifluorotoluene-F

6577215	90
6577217	90
6577219	88
6577221	92
6577223	101
6577225	90
6577227	162*
Blank	88
LCS	112
LCSD	113
Limits:	63-135

Analysis Name: TPH-GRO N. CA water C6-C12

\*- Outside of specification

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

## Quality Control Summary

Client Name: Chevron  
Reported: 03/26/12 at 06:53 PM

Group Number: 1295102

### Surrogate Quality Control

Batch number: 12082A53A  
Trifluorotoluene-F

---

6577211	82
6577213	84
Blank	82
LCS	98
LCSD	95

---

Limits: 63-135

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel  
Batch number: 120770004A  
Orthoterphenyl

---

6577209	85
6577211	91
6577213	81
6577215	88
6577217	77
6577219	82
6577221	61
6577223	88
6577225	74
6577227	83
Blank	88
LCS	75
LCSD	75

---

Limits: 50-154

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel  
Batch number: 120770005A  
Orthoterphenyl

---

6577210	98
6577212	102
6577214	104
6577216	110
6577218	97
6577220	104
6577222	83
6577224	106
6577226	95
6577228	106
Blank	101
LCS	90
LCSD	90

---

Limits: 50-154

\*- Outside of specification

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

# Chevron California Region Analysis Request/Chain of Custody



586 AMBER

031212-07

For Lancaster Laboratories use only

Acct. #: 10904

Sample # 6577208-28

Group #: 020405

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

C# 1295102

Facility #: SS#307233-OML G-R#385876 Global ID#T0600196622 Site Address: 2259 FIRST STREET, LIVERMORE, CA Chevron PM: EF      Lead Consultant: CRAHK Hoey G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568 Consultant/Office: Deanna L. Harding (deanna@grinc.com) Consultant Prj. Mgr.: Consultant Phone #: 925-551-7555      Fax #: 925-551-7899 Sampler: <u>MIKE LOMBARD</u>				<b>Matrix</b> <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/> Air		<b>Analyses Requested</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="10">Preservation Codes</th> </tr> <tr> <td>H</td><td>H</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td colspan="10" style="font-size: small;">                     BTEX # 8260 <input type="checkbox"/> 8021 <input type="checkbox"/>                      TPH 8015 MOD GRO                      TPH 8015 MOD DRO <input checked="" type="checkbox"/> Silica Gel Cleanup                      8260 full scan                      Oxygenates                      Total Lead Method                      Dissolved Lead Method                      TPH-DRO w/sgc COLUMN                 </td> </tr> </table>										Preservation Codes										H	H									BTEX # 8260 <input type="checkbox"/> 8021 <input type="checkbox"/> TPH 8015 MOD GRO TPH 8015 MOD DRO <input checked="" type="checkbox"/> Silica Gel Cleanup 8260 full scan Oxygenates Total Lead Method Dissolved Lead Method TPH-DRO w/sgc COLUMN										<b>Preservative Codes</b> H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other  <input type="checkbox"/> J value reporting needed <input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds 8021 MTBE Confirmation <input type="checkbox"/> Confirm highest hit by 8260 <input type="checkbox"/> Confirm all hits by 8260 <input type="checkbox"/> Run ___ oxy's on highest hit <input type="checkbox"/> Run ___ oxy's on all hits	
Preservation Codes																																															
H	H																																														
BTEX # 8260 <input type="checkbox"/> 8021 <input type="checkbox"/> TPH 8015 MOD GRO TPH 8015 MOD DRO <input checked="" type="checkbox"/> Silica Gel Cleanup 8260 full scan Oxygenates Total Lead Method Dissolved Lead Method TPH-DRO w/sgc COLUMN																																															
Sample Identification		Date Collected	Time Collected	Grab	Composite	Soil	Water	Oil	Air	Total Number of Containers	BTEX #	TPH 8015 MOD GRO	TPH 8015 MOD DRO	8260 full scan	Oxygenates	Total Lead Method	Dissolved Lead Method	TPH-DRO w/sgc COLUMN	Comments / Remarks																												
QA		3-12-12		X			X			2	X	X						X	Please report DRO w/sgc using 10 grams of silica and also report 1 gram shake results																												
MW-1			1300	X			X			2	X	X						X																													
MW-2			0910	X			X			2	X	X						X																													
MW-3			1200	X			X			2	X	X						X																													
MW-4			1250	X			X			2	X	X						X																													
MW-5			1010	X			X			2	X	X						X																													
MW-6			1100	X			X			2	X	X						X																													
MW-9			1215	X			X			2	X	X						X																													
MW-10			1000	X			X			2	X	X						X																													
MW-11			1030	X			X			2	X	X						X																													
MW-12			1130	X			X			2	X	X						X																													

**Turnaround Time Requested (TAT)** (please circle)

STD. TAT      72 hour      48 hour  
 24 hour      4 day      5 day

Relinquished by: <i>[Signature]</i>	Date: 3/12/12	Time: 1330	Received by: <i>[Signature]</i>	Date: 3-12-12	Time: 1330
Relinquished by: <i>[Signature]</i>	Date: 3/12/12	Time: 1550	Received by: <i>[Signature]</i>	Date: 12 MAR 12	Time: 1550
Relinquished by: <i>[Signature]</i>	Date: 3/13/12	Time: 1630	Received by: FE	Date:	Time:
Relinquished by Commercial Carrier: UPS <input checked="" type="radio"/> FedEx <input type="radio"/> Other _____	Temperature Upon Receipt: 0.6-1.4 °C		Received by: <i>[Signature]</i>	Date: 3-14-12	Time: 925
Custody Seals Intact? <input checked="" type="radio"/> Yes <input type="radio"/> No					

**Data Package Options** (please circle if required)

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

# Explanation of Symbols and Abbreviations

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

<b>RL</b>	Reporting Limit	<b>BMQL</b>	Below Minimum Quantitation Level
<b>N.D.</b>	none detected	<b>MPN</b>	Most Probable Number
<b>TNTC</b>	Too Numerous To Count	<b>CP Units</b>	cobalt-chloroplatinate units
<b>IU</b>	International Units	<b>NTU</b>	nephelometric turbidity units
<b>umhos/cm</b>	micromhos/cm	<b>ng</b>	nanogram(s)
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>meq</b>	milliequivalents	<b>lb.</b>	pound(s)
<b>g</b>	gram(s)	<b>kg</b>	kilogram(s)
<b>µg</b>	microgram(s)	<b>mg</b>	milligram(s)
<b>mL</b>	milliliter(s)	<b>L</b>	liter(s)
<b>m<sup>3</sup></b>	cubic meter(s)	<b>µL</b>	microliter(s)
		<b>pg/L</b>	picogram/liter
<b>&lt;</b>	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.		
<b>&gt;</b>	greater than		
<b>ppm</b>	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.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	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.		

## Data Qualifiers:

**C** – result confirmed by reanalysis.

**J** - estimated value – The result is  $\geq$  the Method Detection Limit (MDL) and  $<$  the Limit of Quantitation (LOQ).

## U.S. EPA CLP Data Qualifiers:

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

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

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

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

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

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