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By Alameda County Environmental Health at 2:12 pm, Nov 01, 2013



Carryl MacLeod
Project Manager
Marketing Business Unit

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

October 29, 2013

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

Re: Former Texaco Service Station 307233
2259 First Street
Livermore, California
ACEHS Case RO0002908

I accept the Third Quarter 2013 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 Third Quarter 2013 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 that reads "Carryl MacLeod".

Carryl MacLeod
Project Manager

Attachment: Third Quarter 2013 Groundwater Monitoring and Sampling Report



**CONESTOGA-ROVERS
& ASSOCIATES**

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

October 29, 2013

Reference No. 312264

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

Re: Third Quarter 2013
Groundwater Monitoring and Sampling Report
Former Texaco Service Station 307233
2259 First Street
Livermore, California
ACEHS Case RO0002908

Dear Mr. Wickham:

Conestoga-Rovers & Associates (CRA) is submitting this *Third Quarter 2013 Groundwater Monitoring and Sampling Report* for the site referenced above (Figure 1) on behalf of Chevron Environmental Management Company (Chevron). Groundwater monitoring and sampling was performed by Gettler-Ryan, Inc. (G-R) of Dublin, California and their *Groundwater Monitoring and Sampling Data Package* is included as Attachment A. Current and historical groundwater monitoring and sampling data are presented in Table 1 and current data are shown on Figures 2 and 3. Eurofins Lancaster Laboratories Environmental, LLCs' *Analytical Results* report is included as Attachment B.

RESULTS OF THIRD QUARTER 2013 EVENT

On September 9, 2013, G-R monitored and sampled the site wells per the established schedule.

Results of the current monitoring event indicate the following:

- | | |
|----------------------------------------|---------------------------|
| • Shallow Groundwater Flow Direction | Southwest |
| • Shallow Hydraulic Gradient | 0.3 |
| • Approximate Depth to Water - Shallow | 27 to 36 feet below grade |
| • Deep Groundwater Flow Direction | Northwest |
| • Deep Hydraulic Gradient | 0.01 |
| • Approximate Depth to Water - Deep | 34 to 36 feet below grade |

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Employment Opportunity
Employer



Results of the current sampling event are presented below in Table A:

TABLE A: GROUNDWATER ANALYTICAL DATA						
Well ID	TPHd* (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
ESLs	100	100	1	40	30	20
MW-1	<50/<50	<50	<0.5	<0.5	<0.5	<0.5
MW-2	<50/<50	<50	<0.5	<0.5	<0.5	<0.5
MW-3	250/170	910	50	1	0.7	2
MW-4	76/65	190	<0.5	<0.5	<0.5	<0.5
MW-5	<50/<50	<50	<0.5	<0.5	<0.5	<0.5
MW-6	120/66	110	<0.5	<0.5	<0.5	<0.5
MW-7	Not sampled due to insufficient water					
MW-8	21,000/15,000	3,900	3	0.6	<0.5	0.6
MW-9	<50/<50	<50	<0.5	<0.5	<0.5	<0.5
MW-10	Not sampled due to insufficient water					
MW-11						
MW-12	720/280	3,300	33	2	19	14
ESL	San Francisco Bay Region-Regional Water Quality Control Board, (RWQCB), 2008, <i>Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater</i> , Interim final, May 2013, Table F-1a.					
NA	Not Analyzed					
*	Analyzed without and with 10 gram silica gel cleanup					
Concentrations in BOLD exceed ESLs						

CONCLUSIONS AND RECOMMENDATIONS

The results of ongoing groundwater monitoring and sampling at the site indicate the following:

- TPHd, TPHg, and to a lesser extent, benzene are the main constituents of concern at the site.
- The highest dissolved concentrations this quarter were detected in shallow zone wells MW-8 and MW-12 in the vicinity of the former USTs and dispenser islands.
- Post-land application sulfate levels in shallow zone wells ranged from <1,500 µg/L (MW-8) to 133,000 µg/L (MW-9).

CRA recommends continuing monitoring and sampling to evaluate concentration trends over time and to provide post-land application sulfate data.



**CONESTOGA-ROVERS
& ASSOCIATES**

October 29, 2013

Reference No. 312264

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ANTICIPATED FUTURE ACTIVITIES

Groundwater Monitoring

G-R will monitor and sample site wells per the established schedule. CRA will submit a groundwater monitoring and sampling report.

Additional Activity

CRA will continue to evaluate the effectiveness of the sulfate land application through fourth quarter 2013. At the conclusion of four quarters of post-application monitoring, a summary report will be prepared.

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

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Brian Silva

Greg Barclay, PG 6260



BS/aa/28

Encl.



**CONESTOGA-ROVERS
& ASSOCIATES**

October 29, 2013

Reference No. 312264

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

FIGURES

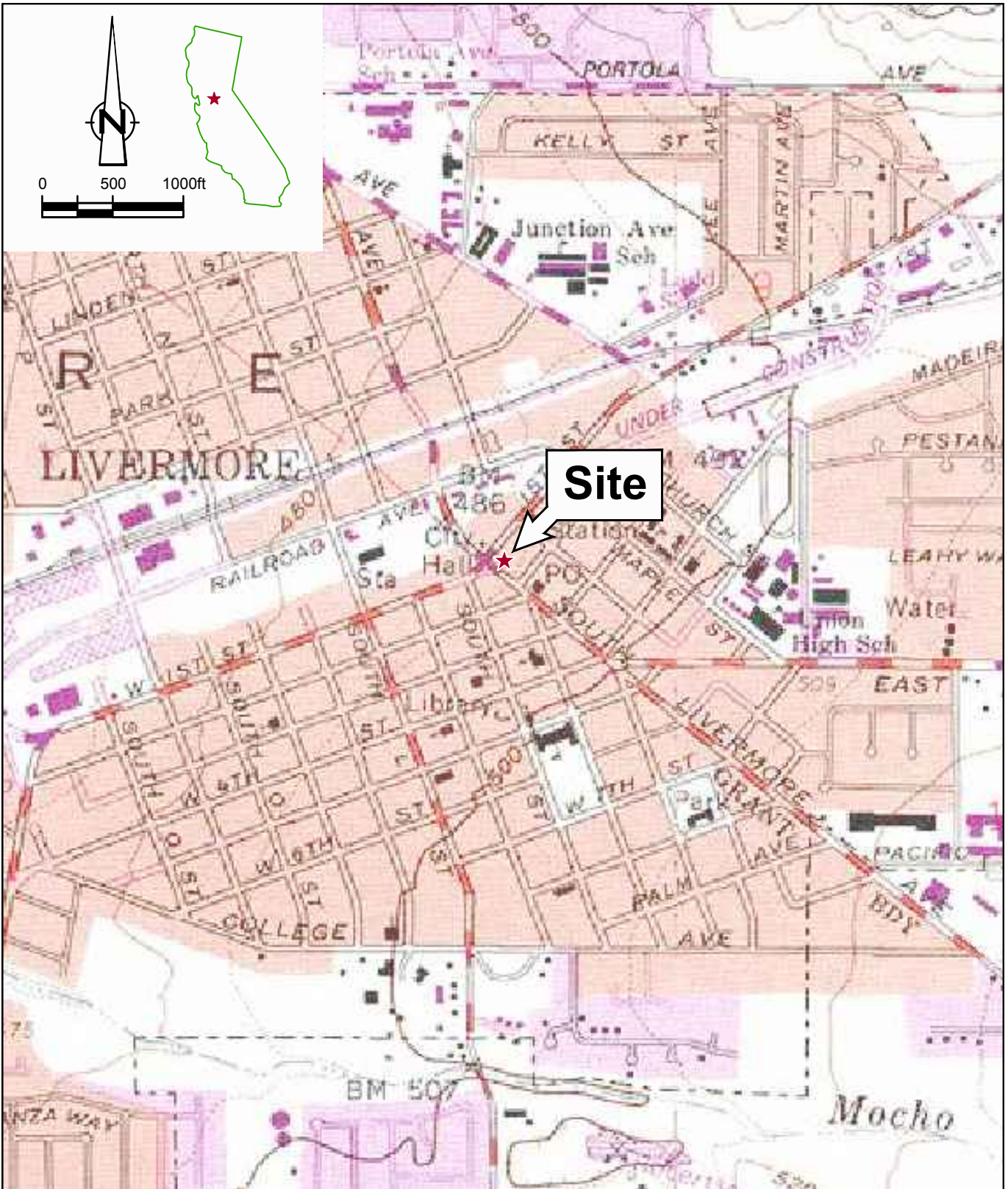
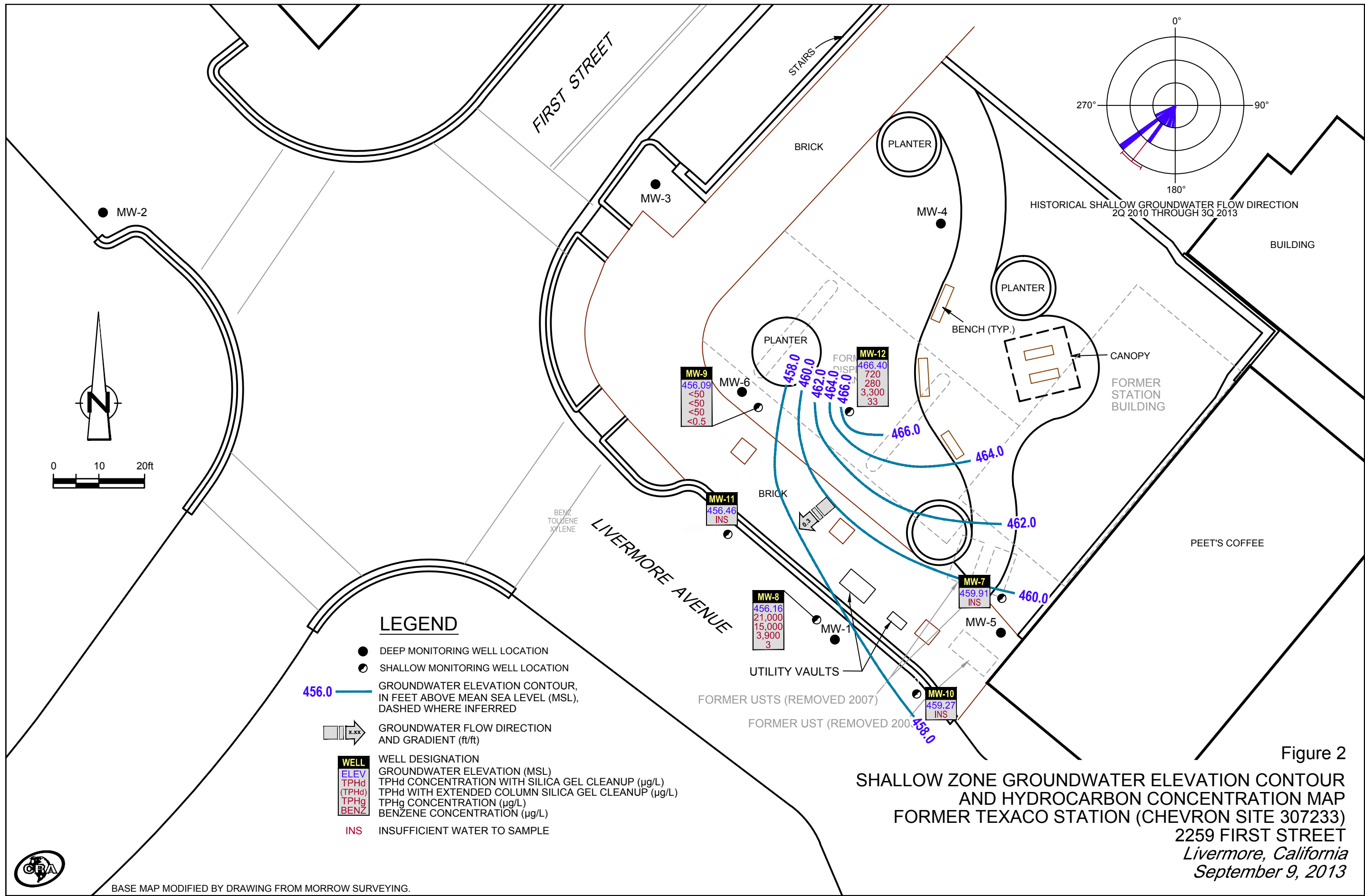


Figure 1
 VICINITY MAP
 FORMER TEXACO STATION (CHEVRON SITE 307233)
 2259 FIRST STREET
 Livermore, California





BASE MAP MODIFIED BY DRAWING FROM MORROW SURVEYING.

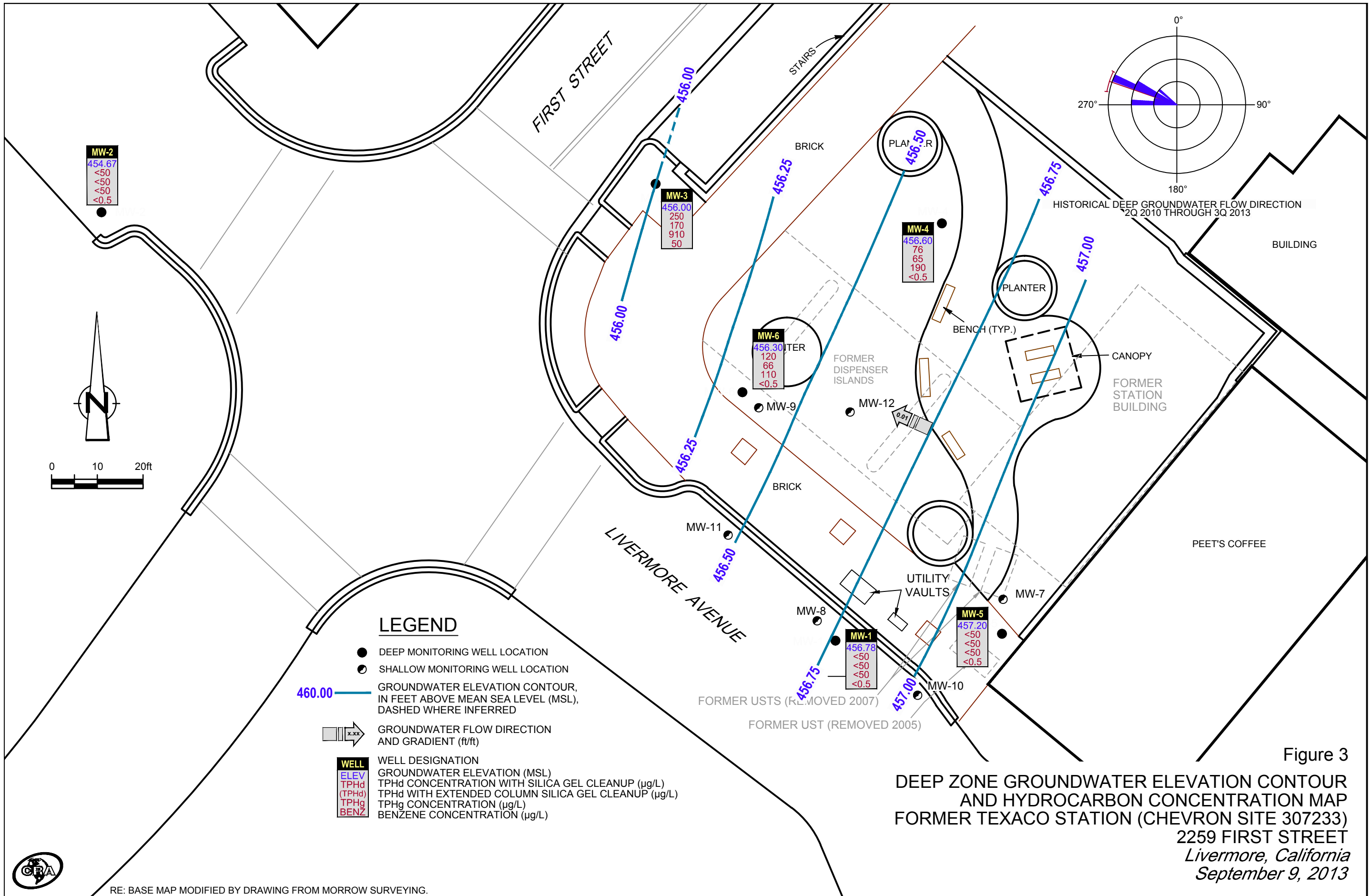


Figure 3
DEEP ZONE GROUNDWATER ELEVATION CONTOUR AND HYDROCARBON CONCENTRATION MAP
 FORMER TEXACO STATION (CHEVRON SITE 307233)
 2259 FIRST STREET
 Livermore, California
 September 9, 2013



RE: BASE MAP MODIFIED BY DRAWING FROM MORROW SURVEYING.

TABLE

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-CRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium		
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
MW-1	05/25/2010 ¹	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	-	-	-	-	-	-	-	-	-	-
MW-1	03/09/2012 ⁷	490.86	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	03/12/2012 ⁴	490.86	41.35	449.51	0.00	0.00	-	<50/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-
MW-1	06/04/2012 ⁷	490.86	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	09/10/2012 ⁴	490.86	40.67	450.19	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-
MW-1	12/10/2012 ⁷	490.86	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	03/04/2013 ⁴	490.86	30.35	460.51	0.00	0.00	-	170 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-
MW-1	06/03/2013 ⁷	490.86	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	09/09/2013⁴	490.86	34.08	456.78	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-
MW-2	05/25/2010 ¹	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	-	-	-	-	-	-	-	-	-	-
MW-2	03/09/2012 ⁷	489.43	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	03/12/2012 ⁴	489.43	41.84	447.59	0.00	0.00	-	<50/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-

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Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY								
							TPH-DRO	TPH-DRO w/ Si Gel	TPH-CRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium	
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-2	06/04/2012 ⁷	489.43	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	09/10/2012 ⁴	489.43	41.32	448.11	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-2	12/10/2012 ⁷	489.43	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	03/04/2013 ⁴	489.43	30.91	458.52	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-2	06/03/2013 ⁷	489.43	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	09/09/2013⁴	489.43	34.76	454.67	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-3	05/25/2010 ¹	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	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-
MW-3	03/09/2012 ⁷	490.38	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	03/12/2012 ⁴	490.38	41.66	448.72	0.00	0.00	-	<50/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-3	06/04/2012 ⁷	490.38	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	09/10/2012 ⁴	490.38	41.02	449.36	0.00	0.00	-	<50 / <50	<50	<5	<5	<5	<5	-	-	-	-	-	-	-	-	-
MW-3	12/10/2012 ⁷	490.38	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	03/04/2013 ⁴	490.38	30.58	459.80	0.00	0.00	-	360 / 240	1,500	150	3	2	3	-	-	-	-	-	-	-	-	-
MW-3	06/03/2013 ⁷	490.38	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	09/09/2013⁴	490.38	34.38	456.00	0.00	0.00	-	250 / 170	910	50	1	0.7	2	-	-	-	-	-	-	-	-	-
MW-4	05/25/2010 ¹	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	-	-	-	-	-	-	-	-	-

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							TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium	
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
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	-	-	-	-	-	-	-	-	-
MW-4	03/09/2012 ⁷	492.27	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	03/12/2012 ⁴	492.27	42.99	449.28	0.00	0.00	-	130/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-4	06/04/2012 ⁷	492.27	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	09/10/2012 ⁴	492.27	42.30	449.97	0.00	0.00	-	580 / 310	2,400	2	0.7	2	2	-	-	-	-	-	-	-	-	-
MW-4	12/10/2012 ⁷	492.27	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	03/04/2013 ⁴	492.27	31.89	460.38	0.00	0.00	-	170 / 100	350	<0.5	<0.5	0.6	<0.5	-	-	-	-	-	-	-	-	-
MW-4	06/03/2013 ⁷	492.27	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	09/09/2013⁴	492.27	35.67	456.60	0.00	0.00	-	76 / 65	190	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-5	05/25/2010 ¹	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 ²	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	-	-	-	-	-	-	-	-	-
MW-5	03/09/2012 ⁷	491.99	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/12/2012 ⁴	491.99	42.15	449.84	0.00	0.00	-	95/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-5	06/4/2012 ⁷	491.99	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium	
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-5	09/10/2012 ⁴	491.99	41.39	450.60	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-5	12/10/2012 ⁷	491.99	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/04/2013 ⁴	491.99	31.07	460.92	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-5	06/03/2013 ⁷	491.99	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/09/2013⁴	491.99	34.79	457.20	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-6	05/25/2010 ¹	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 ⁷	491.52	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/12/2012 ⁴	491.52	42.50	449.02	0.00	0.00	-	54/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-6	06/4/2012 ⁷	491.52	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/10/2012 ⁴	491.52	41.82	449.70	0.00	0.00	-	86/<50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-6	12/10/2012 ⁷	491.52	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/04/2013 ⁴	491.52	31.45	460.07	0.00	0.00	-	210 / 160	210	0.6	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-6	06/03/2013 ⁷	491.52	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/09/2013⁴	491.52	35.22	456.30	0.00	0.00	-	120 / 66	110	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-7	05/25/2010 ¹	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	-	-	-	-	-	-	-	-	-

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	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium	
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
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	-	-	-	-	-
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 ²	492.29	26.71	465.58	0.00	0.00	-	-	19,000	1,800	47	490	2,200	-	-	-	-	-	-	-	-	-
MW-7	09/19/2011 ³	492.29	28.85	463.44	0.12	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/09/2012	492.29	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/12/2012 ⁵	492.29	32.38	459.91	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	06/04/2012 ^{5,6}	492.29	32.38	459.91	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/10/2012 ^{5,9}	492.29	32.62	459.67	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	12/10/2012 ^{4,9}	492.29	28.77	463.52	0.00	0.00	-	180,000 / 150,000	21,000	2,300	47	400	550	-	250,000	<54	6,000	573,000	-	12,000	179,000	
MW-7	03/04/2013 ^{4,9}	492.29	29.63	462.66	0.00	0.00	-	46,000 / 34,000	18,000	1,900	26	370	390	-	221,000	880	6,300	679,000	-	16,000	127,000	
MW-7	06/03/2013 ⁹	492.29	31.13	461.16	0.00	0.00	-	-	21,000	1,900	23	310	250	-	159,000	-	-	-	-	9,500	-	
MW-7	09/09/2013^{5,9}	492.29	32.38	459.91	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	05/25/2010 ¹	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	-	-	-	-	-	-	-	-	-
MW-8	03/09/2012	490.89	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/12/2012 ⁵	490.89	38.48	452.41	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	06/04/2012 ^{4,8}	490.89	37.66	453.23	0.00	0.00	-	73,000/68,000	5,700	1	0.8	2	3	-	<1,500	<54	27,100	259,000	<700	2,000	31,200	
MW-8	9/10/2012 ⁵	490.89	38.73	452.16	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium	
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-8	12/10/2012 ⁴	490.89	31.64	459.25	0.00	0.00	-	4,200 / 3,400	5,600	<3	<3	11	<3	-	<1,500	130	1,600	220,000	-	2,600	18,900	
MW-8	03/04/2013 ⁴	490.89	30.85	460.04	0.00	0.00	-	9,400 / 6,300	4,700	<3	<3	<3	<3	-	<1,500	150	2,500	223,000	-	2,700	22,100	
MW-8	06/03/2013 ⁴	490.89	33.60	457.29	0.00	0.00	-	1,700 / 1,600	5,000	17	0.9	<0.5	1	-	3,000	<54	5,100	301,000	-	2,500	36,400	
MW-8	09/09/2013⁴	490.89	34.73	456.16	0.00	0.00	-	21,000 / 15,000	3,900	3	0.6	<0.5	0.6	-	<1,500	<54	7,100	305,000	-	1,000	34,700	
MW-9	05/25/2010 ¹	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	-	-	-	-	-	-	-	-	-
MW-9	03/09/2012 ⁷	491.64	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-9	03/12/2012 ⁴	491.64	34.27	457.37	0.00	0.00	-	<50/<50*	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-9	06/04/2012 ⁷	491.64	35.80	455.84	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-9	9/10/2012 ⁴	491.64	36.53	455.11	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-
MW-9	12/10/2012 ¹⁰	491.64	32.80	458.84	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-9	03/04/2013 ⁴	491.64	29.67	461.97	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	135,000	<54	520	342,000	-	15	176,000	
MW-9	06/03/2013 ⁴	491.64	31.30	460.34	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	127,000	<54	100	306,000	-	7.9	128,000	
MW-9	09/09/2013⁴	491.64	35.55	456.09	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	133,000	<54	84	321,000	-	<3.0	74,300	
MW-10	03/09/2012 ¹	491.15	28.00	463.15	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	03/12/2012 ⁴	491.15	28.11	463.04	0.00	0.00	-	440/260	3,100	<1	<1	36	16	-	-	-	-	-	-	-	-	-
MW-10	06/04/2012 ⁴	491.15	29.49	461.66	0.00	0.00	-	750/640	3,300	0.7	1	36	12	-	-	-	-	-	-	-	-	-
MW-10	09/10/2012 ⁵	491.15	32.10	459.05	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium	
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-10	12/10/2012 ⁴	491.15	26.03	465.12	0.00	0.00	-	240 / 200	950	<0.5	<0.5	2	2	-	-	-	-	-	-	-	-	-
MW-10	03/04/2013 ⁴	491.15	27.55	463.60	0.00	0.00	-	8,300 / 6,100	1,900	<0.5	<0.5	9	4	-	5,800	110	3,600	273,000	-	2,100	27,400	
MW-10	06/03/2013 ⁴	491.15	28.79	462.36	0.00	0.00	-	4,700 / 5,300	4,200	0.9	1	32	15	-	<1,500	<54	9,400	252,000	-	5,200	36,700	
MW-10	09/09/2013⁵	491.15	31.88	459.27	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-11	03/09/2012 ¹	490.59	31.48	459.11	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-11	03/12/2012 ⁴	490.59	33.35	457.24	0.00	0.00	-	160 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	
MW-11	06/04/2012 ⁵	490.59	34.22	456.37	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-11	09/10/2012 ⁵	490.59	34.48	456.11	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-11	12/10/2012 ⁴	490.59	32.50	458.09	0.00	0.00	-	55 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	
MW-11	03/04/2013 ⁴	490.59	28.11	462.48	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	59,600	<54	800	259,000	-	6.9	38,500	
MW-11	06/03/2013 ⁴	490.59	31.53	459.06	0.00	0.00	-	690 / 200	<50	<0.5	<0.5	<0.5	<0.5	-	54,400	<54	670	-	-	490	-	
MW-11	09/09/2013⁵	490.59	34.13	456.46	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-12	03/09/2012 ¹	493.72	25.43	468.29	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-12	03/12/2012 ⁴	493.72	26.97	466.75	0.00	0.00	-	1,100/310	3,000	10	1	19	38	-	-	-	-	-	-	-	-	
MW-12	06/04/2012 ⁴	493.72	26.54	467.18	0.00	0.00	-	990/510	4,200	15	2	12	23	-	-	-	-	-	-	-	-	
MW-12	09/10/2012 ⁴	493.72	28.80	464.92	0.00	0.00	-	1,000 / 290	2,500	30	2	2	2	-	-	-	-	-	-	-	-	
MW-12	12/10/2012 ⁴	493.72	25.36	468.36	0.00	0.00	-	840 / 330	2,500	10	<3	<3	<3	-	-	-	-	-	-	-	-	
MW-12	03/04/2013 ⁴	493.72	25.61	468.11	0.00	0.00	-	1,800 / 590	3,200	26	2	20	16	-	19,400	<54	4,700	559,000	-	1,100	80,300	
MW-12	06/03/2013 ⁴	493.72	29.50	464.22	0.00	0.00	-	450 / 260	3,000	12	0.8	9	6	-	14,700	<54	3,300	534,000	-	460	73,800	
MW-12	09/09/2013⁴	493.72	27.32	466.40	0.00	0.00	-	720 / 280	3,300	33	2	19	14	-	9,500	<54	4,500	559,000	-	960	69,200	
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	-	-	-	-	-	-	-	-	

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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	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium		
Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
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	-	-	-	-	-	-	-	-	-	-
QA	06/03/2013	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-
QA	09/09/2013	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-

Abbreviations and Notes:

- TOC = Top of casing
- DTW = Depth to water
- GWE = Groundwater elevation
- (ft-amsl) = Feet above mean sea level
- TOC elevations were surveyed on April 19, 2010 by Morrow Surveying. Vertical datum is NAVD 88 from GPS observations
- ft = Feet
- µg/L = Micrograms per liter
- TPH-DRO = Total petroleum hydrocarbons - diesel range organics
- TPH-GRO = Total petroleum hydrocarbons - gasoline range organics
- VOCS = Volatile organic compounds
- B = Benzene
- T = Toluene
- E = Ethylbenzene
- X = Xylenes (Total)
- = Not available / not applicable

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	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium		
Units		ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L

<x = Not detected at or above laboratory method detection limit

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

ATTACHMENT A

MONITORING DATA PACKAGE



GETTLER-RYAN INC.



TRANSMITTAL

September 19, 2013
G-R #385876

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

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

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

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package Third Quarter Event of September 9, 2013

COMMENTS:

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

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

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

trans/9-0271

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

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

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

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

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

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

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

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



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

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

Job Number: 385876
 Event Date: 9.9.13 (inclusive)
 Sampler: FT

Well ID: MW-1
 Well Diameter: 2
 Total Depth: 58.83 ft.
 Depth to Water: 34.08 ft.
24.75 xVF 17 = 4.20

Date Monitored: 9.9.13

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.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 39.03 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): 1000
 Sample Time/Date: 1040 9.9.13
 Approx. Flow Rate: ✓ gpm.
 Did well de-water? NO If yes, Time: _____

Weather Conditions: Sunny
 Water Color: Clear Odor: Y / 10
 Sediment Description: None
 Volume: _____ gal. DTW @ Sampling: 35.00

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm) <u>LS</u>	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)
<u>1010</u>	<u>4.5</u>	<u>7.42</u>	<u>621</u>	<u>20.0</u>	_____	_____
<u>1020</u>	<u>9.0</u>	<u>7.56</u>	<u>617</u>	<u>19.5</u>	_____	_____
<u>1030</u>	<u>13.0</u>	<u>7.58</u>	<u>614</u>	<u>19.4</u>	_____	_____

LABORATORY INFORMATION

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

COMMENTS:

Emile 12" OIL

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



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

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

Job Number: 385876
 Event Date: 9/9/13 (inclusive)
 Sampler: JOE: LANCAS; Frank: SAMAED

Well ID: MW-2
 Well Diameter: 2
 Total Depth: 58.68 ft.
 Depth to Water: 34.76 ft.
23.92 xVF = 0.17 = 4.06

Date Monitored: 9/9/13

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.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 39.54

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): 1400 Weather Conditions: Clear
 Sample Time/Date: 1437 / 9/9/13 Water Color: lt. Brun. Odor: Y / N
 Approx. Flow Rate: _____ gpm. Sediment Description: S. SILTY
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 34.79

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
<u>1409</u>	<u>4.0</u>	<u>7.48</u>	<u>706</u> (MS)	<u>21.7</u>	/	/
<u>1418</u>	<u>8.0</u>	<u>7.52</u>	<u>701</u>	<u>20.7</u>	/	/
<u>1427</u>	<u>12.0</u>	<u>7.56</u>	<u>696</u>	<u>20.5</u>	/	/

LABORATORY INFORMATION

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

COMMENTS: Emco 12" oil

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: 9/9/13 (inclusive)
 City: Livermore, CA Sampler: JoE

Well ID MW-3
 Well Diameter 2
 Total Depth 59.41 ft.
 Depth to Water 34.38 ft.
25.03 xVF 0.17 = 4.25

Date Monitored: 9/9/13

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.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 39.38

x3 case volume = Estimated Purge Volume: 12.76 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 / Absorbant Sock (circle one)
 Amt Removed from Skimmer: _____ gal
 Amt Removed from Well: _____ gal
 Water Removed: _____

Start Time (purge): 1258 Weather Conditions: Clear
 Sample Time/Date: 1322 / 9/9/13 Water Color: gray Odor: YIN
 Approx. Flow Rate: 2 gpm. Sediment Description: Light
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 35.40

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ^{MS} (µmho/cm µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
<u>1258</u>	<u>4</u>	<u>7.62</u>	<u>0.89</u>	<u>21.7</u>	/	/
<u>1301</u>	<u>8</u>	<u>7.62</u>	<u>0.88</u>	<u>21.6</u>	/	/
<u>1304</u>	<u>13</u>	<u>7.49</u>	<u>0.90</u>	<u>21.6</u>	/	/

LABORATORY INFORMATION

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

COMMENTS: _____

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



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876
 Site Address: 2259 First Street Event Date: 9/9/13 (inclusive)
 City: Livermore, CA Sampler: JOE

Well ID: MW-4 Date Monitored: 9/9/13
 Well Diameter: 2
 Total Depth: 58.93 ft.
 Depth to Water: 35.67 ft. Check if water column is less than 0.50 ft.
23.29 xVF 0.17 = 3.95 x3 case volume = Estimated Purge Volume: 11.87 gal.
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 40.32

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): 1148 Weather Conditions: Clear
 Sample Time/Date: 1222/9/9/13 Water Color: gray Odor: Y 10
 Approx. Flow Rate: _____ gpm. Sediment Description: Light
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 35.65

Time (2400 hr.)	Volume (gal.)	pH	Conductivity μS (pmhos/cm μS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
<u>1156</u>	<u>4</u>	<u>7.31</u>	<u>1.02</u>	<u>20.7</u>	/	/
<u>1205</u>	<u>8</u>	<u>7.39</u>	<u>0.99</u>	<u>20.4</u>	/	/
<u>1214</u>	<u>12</u>	<u>7.33</u>	<u>0.98</u>	<u>20.0</u>	/	/

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	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 voa vial	YES	NP	LANCASTER	SULFATE (EPA 300.0)
	x 500ml clear glass	YES	NaOH	LANCASTER	DISSOLVED SULFIDE (SM20 4500 S2D)
	x 250ml poly	YES	NP	LANCASTER	TOTAL ALKALINITY (SM20 2320 B)
	x 250ml poly	YES	HNO3	LANCASTER	CALCIUM (6010)
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	x voa vial	YES	HCL	LANCASTER	DISSOLVED METHANE (RSK-175)

COMMENTS: _____

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



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876
 Site Address: 2259 First Street Event Date: 9.9.13 (inclusive)
 City: Livermore, CA Sampler: FT

Well ID: MW-5 Date Monitored: 9.9.13
 Well Diameter: 2
 Total Depth: 59.91 ft.
 Depth to Water: 34.79 ft. Check if water column is less than 0.50 ft.
25.12 xVF .17 = 4.27 x3 case volume = Estimated Purge Volume: 13.0 gal.
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 39.81

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): 1115 Weather Conditions: Sunny
 Sample Time/Date: 1155 / 9.9.13 Water Color: Brn. Odor: Y / N
 Approx. Flow Rate: _____ gpm. Sediment Description: S. SILTY
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 34.79

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - US)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
<u>1125</u>	<u>4.5</u>	<u>7.64</u>	<u>678</u>	<u>19.8</u>	_____	_____
<u>1135</u>	<u>9.0</u>	<u>7.59</u>	<u>673</u>	<u>19.6</u>	_____	_____
<u>1145</u>	<u>13.0</u>	<u>7.55</u>	<u>669</u>	<u>19.4</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)
	2x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	x voa vial	YES	NP	LANCASTER	SULFATE (EPA 300.0)
	x 500ml clear glass	YES	NaOH	LANCASTER	DISSOLVED SULFIDE (SM20 4500 S2D)
	x 250ml poly	YES	NP	LANCASTER	TOTAL ALKALINITY (SM20 2320 B)
	x 250ml poly	YES	HNO3	LANCASTER	CALCIUM (6010)
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	x voa vial	YES	HCL	LANCASTER	DISSOLVED METHANE (RSK-175)

COMMENTS: Emco 1/2" oic

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: 9/9/13 (inclusive)
 City: Livermore, CA Sampler: JOE

Well ID: MW-6 Date Monitored: 9/9/13
 Well Diameter: 2
 Total Depth: 59.07 ft.
 Depth to Water: 35.22 ft. Check if water column is less than 0.50 ft.
23.85 xVF 0.17 = 4.05 x3 case volume = Estimated Purge Volume: 12.16 gal.
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 39.99

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): 1017 Weather Conditions: clear
 Sample Time/Date: 1101 / 9/9/13 Water Color: gray Odor: Y1(N)
 Approx. Flow Rate: _____ gpm. Sediment Description: Light
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 35.25

Time (2400 hr.)	Volume (gal.)	pH	Conductivity μS (umhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
<u>1028</u>	<u>4</u>	<u>7.32</u>	<u>0.93</u>	<u>20.6</u>	/	/
<u>1039</u>	<u>8</u>	<u>7.42</u>	<u>0.92</u>	<u>20.6</u>	/	/
<u>1049</u>	<u>12.5</u>	<u>7.46</u>	<u>0.92</u>	<u>19.5</u>	/	/

LABORATORY INFORMATION

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

COMMENTS: _____

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



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 385876
 Site Address: 2259 First Street Event Date: 9.9.13 (inclusive)
 City: Livermore, CA Sampler: FT

Well ID: MW-7 Date Monitored: 9.9.13
 Well Diameter: 2
 Total Depth: 32.73 ft.
 Depth to Water: 32.38 ft. Check if water column is less than 0.50 ft.
.35 xVF _____ = _____ x3 case volume = Estimated Purge Volume: _____ 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: _____
 Sample Time/Date: _____ / _____ Water Color: _____ Odor: Y / N
 Approx. Flow Rate: _____ gpm. Sediment Description: _____
 Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

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

LABORATORY INFORMATION

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

COMMENTS: MORRISON 6" OK
SKIMMER IN WELL
INSUFFICIENT WATER

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: 9.9.13 (inclusive)
 City: Livermore, CA Sampler: FT

Well ID: MW-8 Date Monitored: 9.9.13
 Well Diameter: 2
 Total Depth: 38.90 ft.
 Depth to Water: 34.73 ft. Check if water column is less than 0.50 ft.
4.17 xVF .17 = .70 x3 case volume = Estimated Purge Volume: 2.0 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]: 35.56

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): 1210 Weather Conditions: SUNNY
 Sample Time/Date: 1230 19.9.13 Water Color: cloudy, yr. low Odor: DI N Strong
 Approx. Flow Rate: _____ gpm. Sediment Description: S. silty
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 34.76

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm) ⁽¹⁵⁾	Temperature (°/ F)	D.O. (mg/L)	ORP (mV)
<u>1213</u>	<u>.75</u>	<u>7.15</u>	<u>962</u>	<u>20.6</u>	/	/
<u>1216</u>	<u>1.5</u>	<u>7.11</u>	<u>964</u>	<u>20.9</u>	/	/
<u>1219</u>	<u>2.0</u>	<u>7.08</u>	<u>967</u>	<u>20.3</u>	/	/

LABORATORY INFORMATION

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

COMMENTS: EMCO 12" OC

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



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

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

Job Number: 385876
 Event Date: 9/9/13 (inclusive)
 Sampler: JOE

Well ID: MW-9
 Well Diameter: 2
 Total Depth: 39.83 ft.
 Depth to Water: 35.55 ft.
4.28 xVF 0.17 = 0.72

Date Monitored: 9/9/13

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.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 36.40 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 / Absorbant Sock (circle one)
 Amt Removed from Skimmer: _____ gal
 Amt Removed from Well: _____ gal
 Water Removed: _____

Start Time (purge): 0954 Weather Conditions: clear
 Sample Time/Date: 1335 / 9/9/13 Water Color: gray Odor: Y10
 Approx. Flow Rate: _____ gpm. Sediment Description: Light
 Did well de-water? no If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ^{ms} (µmhos/cm @ 25°C)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)
<u>0956</u>	<u>1</u>	<u>7.39</u>	<u>1.04</u>	<u>20.1</u>	/	/
<u>0958</u>	<u>2</u>	<u>7.21</u>	<u>1.02</u>	<u>20.0</u>	/	/
<u>0959</u>	<u>2.5</u>	<u>7.19</u>	<u>1.02</u>	<u>19.5</u>	/	/

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-9	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc COLUMN/ TPH-DRO w/sgc(8015)
	2 x voa vial	YES	NP	LANCASTER	SULFATE (EPA 300.0)
	1 x 500ml clear glass	YES	NaOH	LANCASTER	DISSOLVED SULFIDE (SM20 4500 S2D)
	1 x 250ml poly	YES	NP	LANCASTER	TOTAL ALKALINITY (SM20 2320 B)
	1 x 250ml poly	YES	HNO3	LANCASTER	CALCIUM (6010)
	1 x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	3 x voa vial	YES	HCL	LANCASTER	DISSOLVED METHANE (RSK-175)

COMMENTS: Slow recovery

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



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

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

Job Number: 385876
 Event Date: 9.9.13 (inclusive)
 Sampler: FT

Well ID: MW-10
 Well Diameter: 2
 Total Depth: 32.06 ft.
 Depth to Water: 31.88 ft.
.18 xVF _____ = _____ x3 case volume = Estimated Purge Volume: _____ gal.

Date Monitored: 9.9.13

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.

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): _____
 Sample Time/Date: _____ / _____
 Approx. Flow Rate: _____ gpm.
 Did well de-water? _____ If yes, Time: _____

Weather Conditions: _____
 Water Color: _____ Odor: Y / N
 Sediment Description: _____
 Volume: _____ gal. DTW @ Sampling: _____

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

LABORATORY INFORMATION

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

COMMENTS:

INSUFFICIENT WATER
8" Bop (UNKNOWN)

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



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

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

Job Number: 385876
 Event Date: 9.9.13 (inclusive)
 Sampler: FT

Well ID: MW-11
 Well Diameter: 2
 Total Depth: 34.71 ft.
 Depth to Water: 34.13 ft.
.58 xVF = x3 case volume = Estimated Purge Volume: gal.

Date Monitored: 9.9.13

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.

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

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

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

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

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

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

LABORATORY INFORMATION

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

COMMENTS:

INSUFFICIENT WATER
8" BOX (UNKNOWN)

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: 9/9/13 (inclusive)
 City: Livermore, CA Sampler: JOE

Well ID: MW-12 Date Monitored: 9/9/12
 Well Diameter: 2
 Total Depth: 34.48 ft.
 Depth to Water: 27.32 ft. Check if water column is less than 0.50 ft.
7.16 x VF 0.17 = 1.21 x3 case volume = Estimated Purge Volume: 3.65 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]: 28.75

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): 1127 Weather Conditions: Clear
 Sample Time/Date: 1410 19/9/13 Water Color: gray Odor: Y1(N)
 Approx. Flow Rate: _____ gpm. Sediment Description: Light
 Did well de-water? no If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 31.82

Time (2400 hr.)	Volume (gal.)	pH	Conductivity μS (umhos/cm - μS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
<u>1129</u>	<u>1</u>	<u>7.19</u>	<u>1.30</u>	<u>19.5</u>	/	/
<u>1131</u>	<u>2</u>	<u>7.04</u>	<u>1.26</u>	<u>19.5</u>	/	/
<u>1135</u>	<u>4</u>	<u>6.99</u>	<u>1.25</u>	<u>19.0</u>	/	/

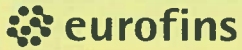
LABORATORY INFORMATION

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)
	2 x voa vial	YES	NP	LANCASTER	SULFATE (EPA 300.0)
	1 x 500ml clear glass	YES	NaOH	LANCASTER	DISSOLVED SULFIDE (SM20 4500 S2D)
	1 x 250ml poly	YES	NP	LANCASTER	TOTAL ALKALINITY (SM20 2320 B)
	1 x 250ml poly	YES	HNO3	LANCASTER	CALCIUM (6010)
	1 x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	3 x voa vial	YES	HCL	LANCASTER	DISSOLVED METHANE (RSK-175)

COMMENTS: Slow recovery

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

Chevron California Region Analysis Request/Chain of Custody



Lancaster Laboratories

09113-03
500

Acct. # _____

Group # _____

Sample # _____

For Eurofins Lancaster Laboratories use only
Instructions on reverse side correspond with circled numbers.

1041

1 Client Information		4 Matrix		5 Analyses Requested			
Facility # SS#307233-OML G-R#385876 Global ID#T0600196622 Site Address 2239 FIRST STREET, LIVERMORE, CA Chevron PM CM CRASB Lead Consultant Silva Consultant Offices Gettler-Ryan, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568 Consultant Project Mgr. Deanna L. Harding, (deanna@grnc.com), (925) 551-7444 x180 Consultant Phone # (916) 889-8908 x		Sediment <input type="checkbox"/> <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Surface <input type="checkbox"/> Oil <input type="checkbox"/> Air <input type="checkbox"/>		Total Number of Containers BTEX + MTBE 8021 <input type="checkbox"/> 8260 <input checked="" type="checkbox"/> TPH-GRO 8015 <input checked="" type="checkbox"/> 8260 <input type="checkbox"/> TPH-DRO 8015 with Silica Gel Cleanup <input type="checkbox"/> TPH-DRO 8015 with Silica Gel Cleanup <input checked="" type="checkbox"/> 8260 Full Scan Oxygenates Total Lead Dissolved Lead Sulfate / Dissolved Sulfide Total ALKALINITY Calcium Dissolved METHANE			
Sampler JOE D. LEWIS & Frank T.		3 Composite					

- SCR #: _____
- Results in Dry Weight
 - J value reporting needed
 - Must meet lowest detection limits possible for 8260 compounds
 - 8021 MTBE Confirmation
 - Confirm highest hit by 8260
 - Confirm all hits by 8260
 - Run _____ oxy's on highest hit
 - Run _____ oxy's on all hits

2 Sample Identification	Soil Depth	3 Collected		Grab	Composite	Soil	Water	Oil	Total Number of Containers	BTEX + MTBE	8021	8260	TPH-GRO	8015	TPH-DRO 8015 with Silica Gel Cleanup	TPH-DRO 8015 with Silica Gel Cleanup	8260 Full Scan	Oxygenates	Total Lead	Dissolved Lead	Sulfate / Dissolved Sulfide	Total ALKALINITY	Calcium	Dissolved METHANE	6 Remarks
		Date	Time																						
MW-1		9/9/13	1040						8																Please report DRO w/sgc using 10 grams of silica and also report 1 gram shake results SAMPLES DROPPED OFF TO LANCASTER IN RICHMOND, CA 09-11-13 @ 1345
MW-2			1437						8																
MW-3			1322						8																
MW-4			1222						8																
MW-5			1155						8																
MW-6			1101						16																
MW-8			1230						16																
MW-9			1335						16																
MW-12			1410						16																
QA			NA						2																

7 Turnaround Time Requested (TAT) (please circle)				Relinquished by		Date 9/9/13	Time 1516	Received by		Date 9.9.13	Time 1516	9
Standard	5 day	4 day		Relinquished by		Date 9.9.13	Time 1630	Received by GETTLER-RYAN FRIDGE		Date 09-10-13	Time 0700	
72 hour	48 hour	24 hour		Relinquished by Commercial Carrier:		UPS _____ FedEx _____ Other _____		Received by		Date 11SEP13	Time 1350	
8 Data Package (circle if required)				Relinquished by Commercial Carrier:		Temperature Upon Receipt _____ °C		Custody Seals Intact?		Yes	No	
Type I - Full		Type VI (Raw Data)		EDD (circle if required) EDF/EDD		EDFFLAT (default)		Other: _____				

ATTACHMENT B

LABORATORY ANALYTICAL REPORTS

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

September 18, 2013

Project: 307233

Submittal Date: 09/10/2013
Group Number: 1417507
PO Number: 0015118372
Release Number: SHRILL HOPKINS
State of Sample Origin: CA

Client Sample Description

MW-8-W-130909 NA Water
MW-9-W-130909 NA Water
MW-12-W-130909 NA Water

Lancaster Labs (LL) #

7191101
7191102
7191103

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: Rachele Munoz
ELECTRONIC COPY TO	Chevron c/o CRA	Attn: Report Contact
ELECTRONIC COPY TO	Chevron	Attn: Anna Avina
ELECTRONIC COPY TO	CRA	Attn: Brian Silva

Respectfully Submitted,



Jill M. Parker
Senior Specialist

(717) 556-7262

Sample Description: MW-8-W-130909 NA Water
 Facility# 307233 Job# 385876 GRD
 2259 First St-Livermore T0600196622 MW-8

LL Sample # WW 7191101
 LL Group # 1417507
 Account # 10904

Project Name: 307233

Collected: 09/09/2013 12:30 by JL Chevron
 Submitted: 09/10/2013 09:15 L4310
 Reported: 09/18/2013 13:34 6001 Bollinger Canyon Rd.
 San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
Wet Chemistry					
		SM 3500-Fe B modified-1997	ug/l	ug/l	
08344	Ferrous Iron	n.a.	7,100	500	50

General Sample Comments

State of California Lab Certification No. 2501
 All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08344	Ferrous Iron	SM 3500-Fe B modified-1997	1	13255834401A	09/12/2013 19:50	Daniel S Smith	50

Sample Description: MW-9-W-130909 NA Water
 Facility# 307233 Job# 385876 GRD
 2259 First St-Livermore T0600196622 MW-9

LL Sample # WW 7191102
 LL Group # 1417507
 Account # 10904

Project Name: 307233

Collected: 09/09/2013 13:35 by JL Chevron
 Submitted: 09/10/2013 09:15 L4310
 Reported: 09/18/2013 13:34 6001 Bollinger Canyon Rd.
 San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
Wet Chemistry					
		SM 3500-Fe B modified-1997	ug/l	ug/l	
08344	Ferrous Iron	n.a.	84	10	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
08344	Ferrous Iron	SM 3500-Fe B modified-1997	1	13255834401A	09/12/2013 19:50	Daniel S Smith	1

Sample Description: MW-12-W-130909 NA Water
 Facility# 307233 Job# 385876 GRD
 2259 First St-Livermore T0600196622 MW-12

LL Sample # WW 7191103
 LL Group # 1417507
 Account # 10904

Project Name: 307233

Collected: 09/09/2013 14:10 by JL Chevron
 Submitted: 09/10/2013 09:15 L4310
 Reported: 09/18/2013 13:34 6001 Bollinger Canyon Rd.
 San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
Wet Chemistry					
		SM 3500-Fe B modified-1997	ug/l	ug/l	
08344	Ferrous Iron	n.a.	4,500	250	25

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
08344	Ferrous Iron	SM 3500-Fe B modified-1997	1	13255834401A	09/12/2013 19:50	Daniel S Smith	25

Chevron California Region Analysis Request/Chain of Custody



Lancaster Laboratories

Acct. # 10904

For Eurofins Lancaster Laboratories use only
 Group # 1417507 Sample # 7191101-03

Instructions on reverse side correspond with circled numbers.

1 Please forward the lab results directly to the Lead Consultant and cc: G-R. Facility # <u>SS#307233-OML G-R#385876 Global ID#T0600196622</u> WBS Site Address <u>2259 FIRST STREET, LIVERMORE, CA</u> Chevron PM <u>CM</u> CRASB Lead Consultant <u>Silva</u> Consultant/Office <u>Getter-Ryan, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568</u> Consultant Project Mgr. <u>Deanna L. Harding, (deanna@grinc.com), (925) 551-7444 x180</u> Consultant Phone # <u>(916) 889-8908 x</u> Sampler <u>JOE D. LEWIS</u>				4 Matrix Sediment <input type="checkbox"/> Potable <input type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/>			5 Analyses Requested Total Number of Containers BTEX + MTBE 8021 <input type="checkbox"/> 8260 <input type="checkbox"/> TPH-GRO 8015 <input type="checkbox"/> 8260 <input type="checkbox"/> TPH-DRO 8015 without Silica Gel Cleanup <input type="checkbox"/> TPH-DRO 8015 with Silica Gel Cleanup <input type="checkbox"/> 8260 Full Scan <input type="checkbox"/> Oxygenates _____ Total Lead _____ Dissolved Lead _____ Method _____ Method _____ <u>Ferrous Iron (SM 20 35.00 Re B)</u>											
2 Sample Identification		Soil Depth	Collected Date Time		Grab <input type="checkbox"/> Composite <input type="checkbox"/>	Soil <input type="checkbox"/>	Water <input checked="" type="checkbox"/>	Oil <input type="checkbox"/>	6 Remarks Please report DRO w/sgc using 10 grams of silica and also report 1 gram shake results									
MW-8 MW-9 MW-12		↓ ↓	9/9/13 1230 ↓ 1335 ↓ 1410		↓	↓	↓	XXX XXX										

SCR #: _____

- Results in Dry Weight
- J value reporting needed
- Must meet lowest detection limits possible for 8260 compounds
- 8021 MTBE Confirmation
- Confirm highest hit by 8260
- Confirm all hits by 8260
- Run _____ oxy's on highest hit
- Run _____ oxy's on all hits

7 Turnaround Time Requested (TAT) (please circle) Standard <input checked="" type="radio"/> 5 day 4 day 72 hour 48 hour 24 hour			Relinquished by <u>P. Souza</u> Date <u>9/9/13</u> Time <u>1500</u>		Received by _____ Date _____ Time _____			
8 Data Package (circle if required) Type I - Full _____ Type VI (Raw Data) _____			EDD (circle if required) <u>EDF/EDD</u> EDF/FLAT (default) _____ Other: _____		Relinquished by Commercial Carrier: UPS _____ FedEx <input checked="" type="checkbox"/> Other _____ Temperature Upon Receipt <u>1.1</u> °C		Received by <u>Cash</u> Date <u>9/10/13</u> Time <u>0915</u> Custody Seals Intact? <input checked="" type="radio"/> Yes <input type="radio"/> No	

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
µg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m³	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

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

ppb parts per billion

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

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

- A** TIC is a possible aldol-condensation product
- B** Analyte was also detected in the blank
- C** Pesticide result confirmed by GC/MS
- D** Compound quantitated on a diluted sample
- E** Concentration exceeds the calibration range of the instrument
- N** Presumptive evidence of a compound (TICs only)
- P** Concentration difference between primary and confirmation columns $>25\%$
- U** Compound was not detected
- X,Y,Z** Defined in case narrative

Inorganic Qualifiers

- B** Value is $<$ CRDL, but \geq IDL
- E** Estimated due to interference
- M** Duplicate injection precision not met
- N** Spike sample not within control limits
- S** Method of standard additions (MSA) used for calculation
- U** Compound was not detected
- W** Post digestion spike out of control limits
- *** Duplicate analysis not within control limits
- +** Correlation coefficient for MSA <0.995

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

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

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

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

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

September 24, 2013

Project: 307233

Submittal Date: 09/12/2013

Group Number: 1418516

PO Number: 0015118372

Release Number: SHRILL HOPKINS

State of Sample Origin: CA

Client Sample Description

Lancaster Labs (LL) #

MW-1-W-130909 NA Groundwater	7195778
MW-1-W-130909 NA Groundwater	7195779
MW-2-W-130909 NA Groundwater	7195780
MW-2-W-130909 NA Groundwater	7195781
MW-3-W-130909 NA Groundwater	7195782
MW-3-W-130909 NA Groundwater	7195783
MW-4-W-130909 NA Groundwater	7195784
MW-4-W-130909 NA Groundwater	7195785
MW-5-W-130909 NA Groundwater	7195786
MW-5-W-130909 NA Groundwater	7195787
MW-6-W-130909 NA Groundwater	7195788
MW-6-W-130909 NA Groundwater	7195789
MW-8-W-130909 NA Groundwater	7195790
MW-8-W-130909 NA Groundwater	7195791
MW-9-W-130909 NA Groundwater	7195792
MW-9-W-130909 NA Groundwater	7195793
MW-12-W-130909 NA Groundwater	7195794
MW-12-W-130909 NA Groundwater	7195795
QA-T-130909 NA Water	7195796

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

ELECTRONIC COPY TO
ELECTRONIC COPY TO
ELECTRONIC COPY TO

Chevron c/o CRA
Chevron
CRA

Attn: Report Contact
Attn: Anna Avina
Attn: Brian Silva

COPY TO
ELECTRONIC
COPY TO

Gettler-Ryan Inc.

Attn: Gettler Ryan

Respectfully Submitted,



Amek Carter
Specialist

(717) 556-7252

Sample Description: MW-1-W-130909 NA Groundwater
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 7195778
LL Group # 1418516
Account # 10904

Project Name: 307233

Collected: 09/09/2013 10:40 by JDL Chevron
L4310
Submitted: 09/12/2013 18:25 6001 Bollinger Canyon Rd.
Reported: 09/24/2013 15:53 San Ramon CA 94583

FLC01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles SW-846 8015B					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
GC Petroleum SW-846 8015B					
Hydrocarbons w/Si					
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	F132632AA	09/20/2013 15:33	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132632AA	09/20/2013 15:33	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13260A20A	09/18/2013 04:23	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13260A20A	09/18/2013 04:23	Marie D Beamenderfer	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	132570003A	09/19/2013 00:49	Christine E Dolman	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570003A	09/15/2013 09:20	Kelli M Barto	1

Sample Description: MW-1-W-130909 NA Groundwater
 Facility# 307233 Job# 385876 GRD
 2259 First St-Livermore T0600196622

LL Sample # WW 7195779
 LL Group # 1418516
 Account # 10904

Project Name: 307233

Collected: 09/09/2013 10:40 by JDL Chevron
 Submitted: 09/12/2013 18:25 L4310
 Reported: 09/24/2013 15:53 6001 Bollinger Canyon Rd.
 San Ramon CA 94583

FLQ01

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

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	132570004A	09/16/2013 22:41	Michele D Hamilton	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570004A	09/15/2013 09:20	Kelli M Barto	1

Sample Description: MW-2-W-130909 NA Groundwater
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 7195780
LL Group # 1418516
Account # 10904

Project Name: 307233

Collected: 09/09/2013 14:37 by JDL Chevron
L4310
Submitted: 09/12/2013 18:25 6001 Bollinger Canyon Rd.
Reported: 09/24/2013 15:53 San Ramon CA 94583

FLC02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles SW-846 8015B					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
GC Petroleum SW-846 8015B					
Hydrocarbons w/Si					
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	F132632AA	09/20/2013 15:55	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132632AA	09/20/2013 15:55	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13260A20A	09/18/2013 04:49	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13260A20A	09/18/2013 04:49	Marie D Beamenderfer	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	132570003A	09/19/2013 01:11	Christine E Dolman	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570003A	09/15/2013 09:20	Kelli M Barto	1

Sample Description: MW-2-W-130909 NA Groundwater
 Facility# 307233 Job# 385876 GRD
 2259 First St-Livermore T0600196622

LL Sample # WW 7195781
 LL Group # 1418516
 Account # 10904

Project Name: 307233

Collected: 09/09/2013 14:37 by JDL Chevron
 Submitted: 09/12/2013 18:25 L4310
 Reported: 09/24/2013 15:53 6001 Bollinger Canyon Rd.
 San Ramon CA 94583

FLQ02

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

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	132570004A	09/16/2013 23:03	Michele D Hamilton	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570004A	09/15/2013 09:20	Kelli M Barto	1

Sample Description: MW-3-W-130909 NA Groundwater
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 7195782
LL Group # 1418516
Account # 10904

Project Name: 307233

Collected: 09/09/2013 13:22 by JDL Chevron
L4310
Submitted: 09/12/2013 18:25 6001 Bollinger Canyon Rd.
Reported: 09/24/2013 15:53 San Ramon CA 94583

FLC03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B ug/l ug/l					
10943	Benzene	71-43-2	50	0.5	1
10943	Ethylbenzene	100-41-4	0.7	0.5	1
10943	Toluene	108-88-3	1	0.5	1
10943	Xylene (Total)	1330-20-7	2	0.5	1
GC Volatiles SW-846 8015B ug/l ug/l					
01728	TPH-GRO N. CA water C6-C12	n.a.	910	50	1
GC Petroleum Hydrocarbons w/Si SW-846 8015B ug/l ug/l					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	170	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	F132632AA	09/20/2013 16:17	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132632AA	09/20/2013 16:17	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13260A07A	09/17/2013 23:48	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13260A07A	09/17/2013 23:48	Marie D Beamenderfer	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	132570003A	09/19/2013 01:34	Christine E Dolman	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570003A	09/15/2013 09:20	Kelli M Barto	1

Sample Description: MW-3-W-130909 NA Groundwater
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 7195783
LL Group # 1418516
Account # 10904

Project Name: 307233

Collected: 09/09/2013 13:22 by JDL Chevron
L4310
Submitted: 09/12/2013 18:25 6001 Bollinger Canyon Rd.
Reported: 09/24/2013 15:53 San Ramon CA 94583

FLQ03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons w/Si	SW-846 8015B	ug/l	ug/l	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	250	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	132570004A	09/16/2013 23:26	Michele D Hamilton	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	132570004A	09/15/2013 09:20	Kelli M Barto	1

Sample Description: MW-4-W-130909 NA Groundwater
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 7195784
LL Group # 1418516
Account # 10904

Project Name: 307233

Collected: 09/09/2013 12:22 by JDL Chevron
L4310
Submitted: 09/12/2013 18:25 6001 Bollinger Canyon Rd.
Reported: 09/24/2013 15:53 San Ramon CA 94583

FLC04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles SW-846 8015B					
01728	TPH-GRO N. CA water C6-C12	n.a.	190	50	1
GC Petroleum SW-846 8015B					
Hydrocarbons w/Si					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	65	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	F132632AA	09/20/2013 16:39	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132632AA	09/20/2013 16:39	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13260A07A	09/18/2013 00:13	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13260A07A	09/18/2013 00:13	Marie D Beamenderfer	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	132570003A	09/19/2013 01:57	Christine E Dolman	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570003A	09/15/2013 09:20	Kelli M Barto	1

Sample Description: MW-4-W-130909 NA Groundwater
 Facility# 307233 Job# 385876 GRD
 2259 First St-Livermore T0600196622

LL Sample # WW 7195785
 LL Group # 1418516
 Account # 10904

Project Name: 307233

Collected: 09/09/2013 12:22 by JDL Chevron
 Submitted: 09/12/2013 18:25 L4310
 Reported: 09/24/2013 15:53 6001 Bollinger Canyon Rd.
 San Ramon CA 94583

FLQ04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons w/Si	SW-846 8015B	ug/l	ug/l	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	76	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	132570004A	09/16/2013 23:48	Michele D Hamilton	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570004A	09/15/2013 09:20	Kelli M Barto	1

Sample Description: MW-5-W-130909 NA Groundwater
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 7195786
LL Group # 1418516
Account # 10904

Project Name: 307233

Collected: 09/09/2013 11:55 by JDL Chevron
L4310
Submitted: 09/12/2013 18:25 6001 Bollinger Canyon Rd.
Reported: 09/24/2013 15:53 San Ramon CA 94583

FLC05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles SW-846 8015B					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
GC Petroleum SW-846 8015B					
Hydrocarbons w/Si					
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	F132632AA	09/20/2013 17:01	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132632AA	09/20/2013 17:01	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13260A07A	09/18/2013 00:39	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13260A07A	09/18/2013 00:39	Marie D Beamenderfer	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	132570003A	09/19/2013 02:19	Christine E Dolman	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570003A	09/15/2013 09:20	Kelli M Barto	1

Sample Description: MW-5-W-130909 NA Groundwater
 Facility# 307233 Job# 385876 GRD
 2259 First St-Livermore T0600196622

LL Sample # WW 7195787
 LL Group # 1418516
 Account # 10904

Project Name: 307233

Collected: 09/09/2013 11:55 by JDL Chevron
 Submitted: 09/12/2013 18:25 L4310
 Reported: 09/24/2013 15:53 6001 Bollinger Canyon Rd.
 San Ramon CA 94583

FLQ05

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

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	132570004A	09/17/2013 00:11	Michele D Hamilton	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570004A	09/15/2013 09:20	Kelli M Barto	1

Sample Description: MW-6-W-130909 NA Groundwater
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 7195788
LL Group # 1418516
Account # 10904

Project Name: 307233

Collected: 09/09/2013 11:01 by JDL Chevron
L4310
Submitted: 09/12/2013 18:25 6001 Bollinger Canyon Rd.
Reported: 09/24/2013 15:53 San Ramon CA 94583

FLC06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B ug/l					
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles SW-846 8015B ug/l					
01728	TPH-GRO N. CA water C6-C12	n.a.	110	50	1
GC Petroleum SW-846 8015B ug/l					
Hydrocarbons w/Si					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	66	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	Z132632AA	09/20/2013 11:34	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z132632AA	09/20/2013 11:34	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13260A07A	09/18/2013 01:05	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13260A07A	09/18/2013 01:05	Marie D Beamenderfer	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	132570003A	09/19/2013 02:42	Christine E Dolman	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570003A	09/15/2013 09:20	Kelli M Barto	1

Sample Description: MW-6-W-130909 NA Groundwater
 Facility# 307233 Job# 385876 GRD
 2259 First St-Livermore T0600196622

LL Sample # WW 7195789
 LL Group # 1418516
 Account # 10904

Project Name: 307233

Collected: 09/09/2013 11:01 by JDL Chevron
 Submitted: 09/12/2013 18:25 L4310
 Reported: 09/24/2013 15:53 6001 Bollinger Canyon Rd.
 San Ramon CA 94583

FLQ06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons w/Si	SW-846 8015B	ug/l	ug/l	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	120	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	132570004A	09/17/2013 00:34	Michele D Hamilton	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570004A	09/15/2013 09:20	Kelli M Barto	1

Sample Description: MW-8-W-130909 NA Groundwater
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 7195790
LL Group # 1418516
Account # 10904

Project Name: 307233

Collected: 09/09/2013 12:30 by JDL Chevron
L4310
Submitted: 09/12/2013 18:25 6001 Bollinger Canyon Rd.
Reported: 09/24/2013 15:53 San Ramon CA 94583

FLC08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles					
10943	Benzene	71-43-2	3	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	0.6	0.5	1
10943	Xylene (Total)	1330-20-7	0.6	0.5	1
GC Volatiles					
01728	TPH-GRO N. CA water C6-C12	n.a.	3,900	50	1
GC Miscellaneous					
07105	Methane	74-82-8	1,000	15	5
GC Petroleum Hydrocarbons w/Si					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	15,000	66	2
The reverse surrogate, capric acid, is present at <1%.					
Metals					
01750	Calcium	7440-70-2	34,700	33.4	1
Wet Chemistry					
00228	Sulfate	14808-79-8	N.D.	1,500	5
12150	Total Alkalinity	n.a.	305,000	700	1
10499	Dissolved Sulfide	n.a.	N.D.	54	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	Z132632AA	09/20/2013 11:58	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z132632AA	09/20/2013 11:58	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13260A07A	09/18/2013 01:30	Marie D Beamenderfer	1

Sample Description: MW-8-W-130909 NA Groundwater
 Facility# 307233 Job# 385876 GRD
 2259 First St-Livermore T0600196622

LL Sample # WW 7195790
 LL Group # 1418516
 Account # 10904

Project Name: 307233

Collected: 09/09/2013 12:30 by JDL

Chevron

L4310

Submitted: 09/12/2013 18:25

6001 Bollinger Canyon Rd.

Reported: 09/24/2013 15:53

San Ramon CA 94583

FLC08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01146	GC VOA Water Prep	SW-846 5030B	1	13260A07A	09/18/2013 01:30	Marie D Beamenderfer	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B modified	1	132620002A	09/19/2013 21:45	Elizabeth J Marin	5
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	132570003A	09/19/2013 17:57	Christine E Dolman	2
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570003A	09/15/2013 09:20	Kelli M Barto	1
01750	Calcium	SW-846 6010B	1	132601848009	09/20/2013 18:45	John P Hook	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848009	09/18/2013 10:56	James L Mertz	1
00228	Sulfate	EPA 300.0	1	13262347901A	09/19/2013 15:34	Sandra J Miller	5
12150	Total Alkalinity	SM 2320 B-1997	1	13256002105A	09/13/2013 20:47	Michele L Graham	1
10499	Dissolved Sulfide	SM 4500-S2 D-2000	1	13259023001A	09/16/2013 11:40	Michele L Graham	1

Sample Description: MW-8-W-130909 NA Groundwater
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 7195791
LL Group # 1418516
Account # 10904

Project Name: 307233

Collected: 09/09/2013 12:30 by JDL Chevron
L4310
Submitted: 09/12/2013 18:25 6001 Bollinger Canyon Rd.
Reported: 09/24/2013 15:53 San Ramon CA 94583

FLQ08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons w/Si	SW-846 8015B	ug/l	ug/l	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	21,000	66	2

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	132570004A	09/17/2013 12:37	Michele D Hamilton	2
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570004A	09/15/2013 09:20	Kelli M Barto	1

Sample Description: MW-9-W-130909 NA Groundwater
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 7195792
LL Group # 1418516
Account # 10904

Project Name: 307233

Collected: 09/09/2013 13:35 by JDL Chevron
L4310
Submitted: 09/12/2013 18:25 6001 Bollinger Canyon Rd.
Reported: 09/24/2013 15:53 San Ramon CA 94583

FLC09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles					
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
GC Miscellaneous					
07105	Methane	74-82-8	N.D.	3.0	1
GC Petroleum Hydrocarbons w/Si					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1
The reverse surrogate, capric acid, is present at <1%.					
Metals					
01750	Calcium	7440-70-2	74,300	33.4	1
Wet Chemistry					
00228	Sulfate	14808-79-8	133,000	6,000	20
12150	Total Alkalinity	n.a.	321,000	700	1
10499	Dissolved Sulfide	n.a.	N.D.	54	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	Z132632AA	09/20/2013 12:22	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z132632AA	09/20/2013 12:22	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13260A07A	09/18/2013 01:56	Marie D Beamenderfer	1

Sample Description: MW-9-W-130909 NA Groundwater
 Facility# 307233 Job# 385876 GRD
 2259 First St-Livermore T0600196622

LL Sample # WW 7195792
 LL Group # 1418516
 Account # 10904

Project Name: 307233

Collected: 09/09/2013 13:35 by JDL

Chevron

L4310

Submitted: 09/12/2013 18:25

6001 Bollinger Canyon Rd.

Reported: 09/24/2013 15:53

San Ramon CA 94583

FLC09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01146	GC VOA Water Prep	SW-846 5030B	1	13260A07A	09/18/2013 01:56	Marie D Beamenderfer	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B modified	1	132620002A	09/19/2013 14:06	Elizabeth J Marin	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	132570003A	09/19/2013 03:05	Christine E Dolman	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570003A	09/15/2013 09:20	Kelli M Barto	1
01750	Calcium	SW-846 6010B	1	132601848009	09/20/2013 18:48	John P Hook	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848009	09/18/2013 10:56	James L Mertz	1
00228	Sulfate	EPA 300.0	1	13263347601A	09/20/2013 18:56	Christopher D Meeks	20
12150	Total Alkalinity	SM 2320 B-1997	1	13256002105A	09/13/2013 21:25	Michele L Graham	1
10499	Dissolved Sulfide	SM 4500-S2 D-2000	1	13259023001A	09/16/2013 11:40	Michele L Graham	1

Sample Description: MW-9-W-130909 NA Groundwater
 Facility# 307233 Job# 385876 GRD
 2259 First St-Livermore T0600196622

LL Sample # WW 7195793
 LL Group # 1418516
 Account # 10904

Project Name: 307233

Collected: 09/09/2013 13:35 by JDL Chevron
 L4310
 Submitted: 09/12/2013 18:25 6001 Bollinger Canyon Rd.
 Reported: 09/24/2013 15:53 San Ramon CA 94583

FLQ09

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

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	132570004A	09/17/2013 00:56	Michele D Hamilton	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570004A	09/15/2013 09:20	Kelli M Barto	1

Sample Description: MW-12-W-130909 NA Groundwater
Facility# 307233 **Job#** 385876 GRD
 2259 First St-Livermore T0600196622

LL Sample # WW 7195794
LL Group # 1418516
Account # 10904

Project Name: 307233

Collected: 09/09/2013 14:10 by JDL Chevron
 L4310
 Submitted: 09/12/2013 18:25 6001 Bollinger Canyon Rd.
 Reported: 09/24/2013 15:53 San Ramon CA 94583

FLC12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B ug/l ug/l					
10943	Benzene	71-43-2	33	0.5	1
10943	Ethylbenzene	100-41-4	19	0.5	1
10943	Toluene	108-88-3	2	0.5	1
10943	Xylene (Total)	1330-20-7	14	0.5	1
GC Volatiles SW-846 8015B ug/l ug/l					
01728	TPH-GRO N. CA water C6-C12	n.a.	3,300	50	1
GC Miscellaneous SW-846 8015B modified ug/l ug/l					
07105	Methane	74-82-8	960	15	5
GC Petroleum Hydrocarbons w/Si SW-846 8015B ug/l ug/l					
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	280	50	1
The reverse surrogate, capric acid, is present at <1%.					
Metals SW-846 6010B ug/l ug/l					
01750	Calcium	7440-70-2	69,200	33.4	1
Wet Chemistry EPA 300.0 ug/l ug/l					
00228	Sulfate	14808-79-8	9,500	1,500	5
SM 2320 B-1997 ug/l as CaCO3 ug/l as CaCO3					
12150	Total Alkalinity	n.a.	559,000	700	1
SM 4500-S2 D-2000 ug/l ug/l					
10499	Dissolved Sulfide	n.a.	N.D.	54	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	Z132631AA	09/20/2013 07:46	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z132631AA	09/20/2013 07:46	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13260A07A	09/18/2013 02:22	Marie D Beamenderfer	1

Sample Description: MW-12-W-130909 NA Groundwater
 Facility# 307233 Job# 385876 GRD
 2259 First St-Livermore T0600196622

LL Sample # WW 7195794
 LL Group # 1418516
 Account # 10904

Project Name: 307233

Collected: 09/09/2013 14:10 by JDL

Chevron

L4310

Submitted: 09/12/2013 18:25

6001 Bollinger Canyon Rd.

Reported: 09/24/2013 15:53

San Ramon CA 94583

FLC12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01146	GC VOA Water Prep	SW-846 5030B	1	13260A07A	09/18/2013 02:22	Marie D Beamenderfer	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B modified	1	132620002A	09/19/2013 22:03	Elizabeth J Marin	5
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	132570003A	09/19/2013 03:27	Christine E Dolman	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570003A	09/15/2013 09:20	Kelli M Barto	1
01750	Calcium	SW-846 6010B	1	132601848009	09/20/2013 18:52	John P Hook	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848009	09/18/2013 10:56	James L Mertz	1
00228	Sulfate	EPA 300.0	1	13263347601A	09/20/2013 18:24	Christopher D Meeks	5
12150	Total Alkalinity	SM 2320 B-1997	1	13256002105A	09/13/2013 21:32	Michele L Graham	1
10499	Dissolved Sulfide	SM 4500-S2 D-2000	1	13259023001A	09/16/2013 11:40	Michele L Graham	1

Sample Description: MW-12-W-130909 NA Groundwater
 Facility# 307233 Job# 385876 GRD
 2259 First St-Livermore T0600196622

LL Sample # WW 7195795
 LL Group # 1418516
 Account # 10904

Project Name: 307233

Collected: 09/09/2013 14:10 by JDL Chevron
 Submitted: 09/12/2013 18:25 L4310
 Reported: 09/24/2013 15:53 6001 Bollinger Canyon Rd.
 San Ramon CA 94583

FLQ12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons w/Si	SW-846 8015B	ug/l	ug/l	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	720	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	132570004A	09/17/2013 01:19	Michele D Hamilton	1
11180	Low Vol Ext (W) w/SG	SW-846 3510C	1	132570004A	09/15/2013 09:20	Kelli M Barto	1

Sample Description: QA-T-130909 NA Water
Facility# 307233 Job# 385876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 7195796
LL Group # 1418516
Account # 10904

Project Name: 307233

Collected: 09/09/2013

Chevron

Submitted: 09/12/2013 18:25

L4310

Reported: 09/24/2013 15:53

6001 Bollinger Canyon Rd.
San Ramon CA 94583

FLCQA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B ug/l ug/l					
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles SW-846 8015B ug/l ug/l					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
The response for a target analyte(s) in the bracketing continuing calibration verification standard is outside the QC acceptance limits. The client was contacted and the data reported.					

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	Z132632AA	09/20/2013 08:22	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z132632AA	09/20/2013 08:22	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13260C20A	09/18/2013 21:09	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13260C20A	09/18/2013 21:09	Marie D Beamenderfer	1

Quality Control Summary

Client Name: Chevron
Reported: 09/24/13 at 03:53 PM

Group Number: 1418516

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: F132632AA	Sample number(s): 7195778, 7195780, 7195782, 7195784, 7195786							
Benzene	N.D.	0.5	ug/l	87		78-120		
Ethylbenzene	N.D.	0.5	ug/l	87		79-120		
Toluene	N.D.	0.5	ug/l	92		80-120		
Xylene (Total)	N.D.	0.5	ug/l	90		80-120		
Batch number: Z132631AA	Sample number(s): 7195794							
Benzene	N.D.	0.5	ug/l	89		78-120		
Ethylbenzene	N.D.	0.5	ug/l	91		79-120		
Toluene	N.D.	0.5	ug/l	92		80-120		
Xylene (Total)	N.D.	0.5	ug/l	92		80-120		
Batch number: Z132632AA	Sample number(s): 7195788, 7195790, 7195792, 7195796							
Benzene	N.D.	0.5	ug/l	86		78-120		
Ethylbenzene	N.D.	0.5	ug/l	91		79-120		
Toluene	N.D.	0.5	ug/l	90		80-120		
Xylene (Total)	N.D.	0.5	ug/l	92		80-120		
Batch number: 13260A07A	Sample number(s): 7195782, 7195784, 7195786, 7195788, 7195790, 7195792, 7195794							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	111	113	75-135	1	30
Batch number: 13260A20A	Sample number(s): 7195778, 7195780							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	113	107	75-135	5	30
Batch number: 13260C20A	Sample number(s): 7195796							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	108	113	75-135	5	30
Batch number: 132620002A	Sample number(s): 7195790, 7195792, 7195794							
Methane	N.D.	3.0	ug/l	101		80-120		
Batch number: 132570003A	Sample number(s): 7195778, 7195780, 7195782, 7195784, 7195786, 7195788, 7195790, 7195792, 7195794							
TPH-DRO CA C10-C28 w/ Si Gel	N.D.	32.	ug/l	82	76	43-120	8	20
Batch number: 132570004A	Sample number(s): 7195779, 7195781, 7195783, 7195785, 7195787, 7195789, 7195791, 7195793, 7195795							
TPH-DRO CA C10-C28 w/ Si Gel	N.D.	32.	ug/l	100	98	43-120	2	20
Batch number: 132601848009	Sample number(s): 7195790, 7195792, 7195794							
Calcium	N.D.	33.4	ug/l	101		90-110		
Batch number: 13262347901A	Sample number(s): 7195790							
Sulfate	N.D.	300.	ug/l	101		90-110		

*- Outside of specification

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

Quality Control Summary

Client Name: Chevron Group Number: 1418516
Reported: 09/24/13 at 03:53 PM

<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: 13263347601A Sulfate	N.D.	300.	Sample number(s): 7195792, 7195794 ug/l	104	106	90-110	2	20
Batch number: 13256002105A Total Alkalinity	N.D.	700.	Sample number(s): 7195790, 7195792, 7195794 ug/l as CaCO3	99		90-110		
Batch number: 13259023001A Dissolved Sulfide	N.D.	54.	Sample number(s): 7195790, 7195792, 7195794 ug/l	99		90-110		

Sample Matrix Quality Control

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

<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: F132632AA	Sample number(s): 7195778, 7195780, 7195782, 7195784, 7195786 UNSPK: P195759								
Benzene	99	100	72-134	0	30				
Ethylbenzene	101	100	71-134	2	30				
Toluene	101	101	80-125	0	30				
Xylene (Total)	100	99	79-125	1	30				
Batch number: Z132631AA	Sample number(s): 7195794 UNSPK: 7195794								
Benzene	69*	77	72-134	3	30				
Ethylbenzene	79	81	71-134	1	30				
Toluene	93	90	80-125	2	30				
Xylene (Total)	89	89	79-125	0	30				
Batch number: Z132632AA	Sample number(s): 7195788, 7195790, 7195792, 7195796 UNSPK: P192963								
Benzene	91	90	72-134	0	30				
Ethylbenzene	93	92	71-134	1	30				
Toluene	94	94	80-125	0	30				
Xylene (Total)	94	93	79-125	0	30				
Batch number: 132620002A	Sample number(s): 7195790, 7195792, 7195794 UNSPK: P194851								
Methane	68	60	35-157	10	20				
Batch number: 132601848009	Sample number(s): 7195790, 7195792, 7195794 UNSPK: P194852 BKG: P194852								
Calcium	86 (2)	87 (2)	81-118	0	20	29,700	28,500	4	20
Batch number: 13262347901A	Sample number(s): 7195790 UNSPK: P194903 BKG: P194903								
Sulfate	129*		90-110			60,500	59,500	2	20
Batch number: 13263347601A	Sample number(s): 7195792, 7195794 UNSPK: P195247 BKG: P195247								
Sulfate	124*		90-110			12,200	12,800	5 (1)	20
Batch number: 13256002105A	Sample number(s): 7195790, 7195792, 7195794 UNSPK: P194859 BKG: P194859								
Total Alkalinity	94		10-159			95,400	96,400	1	5
Batch number: 13259023001A	Sample number(s): 7195790, 7195792, 7195794 UNSPK: P197764 BKG: P197764								
Dissolved Sulfide	77	77	42-131	0	16	N.D.	N.D.	0 (1)	5

*- Outside of specification

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

Quality Control Summary

Client Name: Chevron
Reported: 09/24/13 at 03:53 PM

Group Number: 1418516

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: F132632AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7195778	101	95	99	91
7195780	99	100	100	92
7195782	97	97	101	99
7195784	98	97	100	96
7195786	98	94	101	93
Blank	99	97	100	92
LCS	98	99	101	98
MS	99	100	99	98
MSD	99	98	100	96
Limits:	80-116	77-113	80-113	78-113

Analysis Name: UST VOCs by 8260B - Water
Batch number: Z132631AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7195794	98	96	101	105
Blank	101	95	101	98
LCS	99	100	100	99
MS	98	97	101	105
MSD	98	98	100	105
Limits:	80-116	77-113	80-113	78-113

Analysis Name: UST VOCs by 8260B - Water
Batch number: Z132632AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7195788	99	97	100	100
7195790	98	96	101	103
7195792	100	96	101	98
7195796	100	97	101	98
Blank	99	98	100	98
LCS	99	100	100	100
MS	101	100	100	100
MSD	100	99	100	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 13260A07A
Trifluorotoluene-F

7195782	104
7195784	83
7195786	83

*- 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: 09/24/13 at 03:53 PM

Group Number: 1418516

Surrogate Quality Control

7195788	83
7195790	133
7195792	84
7195794	150*
Blank	91
LCS	96
LCSD	98

Limits: 63-135

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 13260A20A
Trifluorotoluene-F

7195778	82
7195780	91
Blank	84
LCS	98
LCSD	86

Limits: 63-135

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 13260C20A
Trifluorotoluene-F

7195796	84
Blank	89
LCS	89
LCSD	95

Limits: 63-135

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel
Batch number: 132570003A
Orthoterphenyl

7195778	80
7195780	78
7195782	78
7195784	72
7195786	77
7195788	54
7195790	98
7195792	76
7195794	79
Blank	82
LCS	78
LCSD	73

Limits: 46-131

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel
Batch number: 132570004A
Orthoterphenyl

*- 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: 09/24/13 at 03:53 PM

Group Number: 1418516

Surrogate Quality Control

7195779	95
7195781	94
7195783	101
7195785	99
7195787	93
7195789	76
7195791	144*
7195793	81
7195795	95
Blank	97
LCS	102
LCSD	101

Limits: 46-131

Analysis Name: Volatile Headspace Hydrocarbon
Batch number: 132620002A
Propene

7195790	85
7195792	49
7195794	83
Blank	90
LCS	91
MS	56
MSD	51

Limits: 42-131

*- Outside of specification

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

Chevron California Region Analysis Request/Chain of Custody



Lancaster Laboratories

091113-03
500

Acct. # 10904

For Eurofins Lancaster Laboratories use only
Group # 1418516 Sample # 1195778-96
Instructions on reverse side correspond with circled numbers.

1011

1 Please forward the lab results directly to the Lead Consultant and cc: G-R. Facility # SS#307233-OML G-R#385876 Global ID#T0600196622 WBS Site Address 2259 FIRST STREET, LIVERMORE, CA Chevron PM CM CRASB Lead Consultant Silva Consultant/Office Getter-Ryan, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568 Consultant Project Mgr. Deanna L. Harding, (deanna@grinc.com), (925) 551-7444 x180 Consultant Phone # (916) 889-8908 x Sampler JOE D. LEWIS & Frank T.				4 Matrix Sediment <input type="checkbox"/> Potable <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Soil <input type="checkbox"/> NPDES <input type="checkbox"/> Surface <input type="checkbox"/> Oil <input type="checkbox"/> Air <input type="checkbox"/>			5 Analyses Requested Total Number of Containers BTEX + 8021 <input type="checkbox"/> 8260 <input checked="" type="checkbox"/> TPH-GRO 8015 <input checked="" type="checkbox"/> 8260 <input type="checkbox"/> TPH-DRO <input type="checkbox"/> W/SGC COLLECTED TPH-DRO 8015 with Silica Gel Cleanup <input checked="" type="checkbox"/> 8260 Full Scan Oxygenates Total Lead Dissolved Lead Sulfate, Dissolved Sulfide TOTAL ALKALINITY Calcium Dissolved METHANE										SCR #: _____ <input type="checkbox"/> Results in Dry Weight <input type="checkbox"/> J value reporting needed <input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds <input type="checkbox"/> 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																																																																			
2 Sample Identification <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Sample</th> <th rowspan="2">Soil Depth</th> <th colspan="2">Collected</th> <th rowspan="2">Grab</th> <th rowspan="2">Composite</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </thead> <tbody> <tr><td>MW-1</td><td></td><td>9/9/13</td><td>1040</td><td></td><td></td></tr> <tr><td>MW-2</td><td></td><td></td><td>1437</td><td></td><td></td></tr> <tr><td>MW-3</td><td></td><td></td><td>1322</td><td></td><td></td></tr> <tr><td>MW-4</td><td></td><td></td><td>1222</td><td></td><td></td></tr> <tr><td>MW-5</td><td></td><td></td><td>1155</td><td></td><td></td></tr> <tr><td>MW-6</td><td></td><td></td><td>1101</td><td></td><td></td></tr> <tr><td>MW-8</td><td></td><td></td><td>1230</td><td></td><td></td></tr> <tr><td>MW-9</td><td></td><td></td><td>1335</td><td></td><td></td></tr> <tr><td>MW-12</td><td></td><td></td><td>1410</td><td></td><td></td></tr> <tr><td>QA</td><td></td><td>✓</td><td>NA</td><td></td><td></td></tr> </tbody> </table>				Sample	Soil Depth	Collected		Grab	Composite	Date	Time	MW-1		9/9/13	1040			MW-2			1437			MW-3			1322			MW-4			1222			MW-5			1155			MW-6			1101			MW-8			1230			MW-9			1335			MW-12			1410			QA		✓	NA			3 Soil <input type="checkbox"/> Water <input checked="" type="checkbox"/> Oil <input type="checkbox"/>			6 Remarks Please report DRO w/sgc using 10 grams of silica and also report 1 gram shake results SAMPLES DROPPED OFF TO LANCASTER IN RICHMOND, CA 09-11-13@1345 									
Sample	Soil Depth	Collected				Grab	Composite																																																																													
		Date	Time																																																																																	
MW-1		9/9/13	1040																																																																																	
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7 Turnaround Time Requested (TAT) (please circle) Standard <input checked="" type="radio"/> 5 day 72 hour <input type="radio"/> 48 hour <input type="radio"/> 24 hour				Relinquished by Joe P. Genova Date 9/9/13 Time 1516			Received by Joe P. Genova Date 9.9.13 Time 1516			Relinquished by Joe P. Genova Date 9.9.13 Time 1630			Received by GETTLER-RYAN FRIDGE Date 09-10-13 Time 0700																																																																							
8 Data Package (circle if required) Type I - Full <input type="checkbox"/> Type VI (Raw Data) <input type="checkbox"/>				EDD (circle if required) EDF/EDD EDFFLAT (default) <input type="checkbox"/> Other: _____			Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____ Temperature Upon Receipt 9/11/13 1630 0.3-1			Received by A. Author Date 11SEP13 Time 1350			Custody Seals Intact? <input checked="" type="radio"/> Yes <input type="radio"/> No																																																																							

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
µg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m³	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

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

ppb parts per billion

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

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

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