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By Alameda County Environmental Health at 10:24 am, Jul 19, 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

July 16, 2013

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

Re: Former Texaco Service Station 211253  
930 Springtown Boulevard  
Livermore, California  
ACEHS Case No. RO0189

I accept the Second 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 First 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 cursive script that reads "Carryl MacLeod".

Carryl MacLeod  
Project Manager

Attachment: Second 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>

July 16, 2013

Reference No. 060058

Mr. Jerry Wickham  
Alameda County Environmental Health Services (ACEH)  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

Re: Second Quarter 2013  
Groundwater Monitoring and Sampling Report  
Former Texaco Station 211253  
930 Springtown Boulevard  
Livermore, California  
ACEH Case RO0189

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Dear Mr. Wickham:

Conestoga-Rovers & Associates (CRA) is submitting this *Second 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 Data Package* is included as Attachment A. Current groundwater monitoring and sampling data are presented in Table 1 and shown on Figures 2 and 3. Eurofins Lancaster Laboratories' *Analytical Results* report is included as Attachment B. Historical groundwater monitoring and sampling data are included as Attachment C.

### **RESULTS OF SECOND QUARTER 2013 EVENT**

On May 20, 2013, G-R monitored and sampled wells per the established schedule. Monitoring wells are divided into three zones based on the screen intervals: shallow zone (wells MW-9, MW-11, MW-14, MW-18, MW-19, and MW-20), intermediate zone (wells MW-10, MW-12, MW-13, MW-16, and MW-17), and deep zone (well MW-15). Groundwater elevation and hydrocarbon concentration maps for the shallow and intermediate zones are illustrated on Figures 2 and 3, respectively.

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Equal  
Employment Opportunity  
Employer

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July 16, 2013

Reference No. 060058

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Results of the current monitoring event indicate the following:

- Groundwater Flow Direction
  - Shallow (Figure 2) Northwest
  - Intermediate (Figure 3) Variable
  - Deep Not Applicable (only 1 well)
- Approximate Depth to Groundwater
  - Shallow Wells 10 to 13 feet below grade (fbg)
  - Intermediate Wells 11 to 15 fbg
  - Deep Well 10.5 fbg

Results of the most recent sampling event are presented below in Table A.

TABLE A: GROUNDWATER ANALYTICAL DATA					
Well ID	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
ESLs	<b>100</b>	<b>1</b>	<b>40</b>	<b>30</b>	<b>20</b>
<i>Shallow Wells</i>					
MW-9	Sampled Semi-Annually				
MW-11	Sampled Semi-Annually				
MW-14	Sampled Semi-Annually				
MW-18	<b>1,200</b>	<b>28</b>	<b>47</b>	<b>52</b>	<b>130</b>
MW-19	<b>4,700</b>	<b>6</b>	<b>2</b>	<b>43</b>	<b>7</b>
MW-20	<b>3,000</b>	<0.5	1	24	<b>30</b>
<i>Intermediate Wells</i>					
MW-10	Sampled Semi-Annually				
MW-12	Sampled Semi-Annually				
MW-13	Sampled Semi-Annually				
MW-16	Sampled Semi-Annually				
MW-17	<50	<0.5	<0.5	<0.5	<0.5
<i>Deep Well</i>					
MW-15	Sampled Semi-Annually				
µg/L	Micrograms per liter				
<	Indicates constituent was not detected at or above stated laboratory reporting limit				
ESLs	Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), <i>Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final</i> , November 2007, revised May 2008. – Table F-1a where groundwater is a potential drinking water source				
Data in <b>bold</b> represent concentrations that exceed applicable ESLs					
Semi-annual wells are sampled during the first and third quarters					



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Between May 2010 and August 2012, light non-aqueous phase liquid (LNAPL) has been detected in shallow well MW-14 at a maximum thickness of 0.34 feet. In May 2012, an absorbent LNAPL sock was installed in well MW-14 as an interim remedial measure. The LNAPL sock is inspected and replaced (if necessary) on a quarterly basis and field data sheets are presented in Attachment A. On May 20, 2013, no evidence of LNAPL was observed on the absorbent sock in MW-14.

### **CONCLUSIONS AND RECOMMENDATIONS**

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

- Based on groundwater elevation data in shallow, intermediate, and deep monitoring wells it appears groundwater monitored at the three depth intervals is hydraulically connected.
- No LNAPL was detected in MW-14 during the second quarter 2013 event.
- Dissolved hydrocarbon concentrations in site wells are generally stable to declining, although dissolved concentrations in MW-19 this quarter increased in comparison to the previous several quarters.

Wells MW-9 through MW-16 are sampled semi-annually during the first and third quarters. Given recently installed wells MW-17 through MW-20 have been sampled quarterly for six quarters since installation, CRA recommends that these wells also be sampled semi-annually.

### **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.



**CONESTOGA-ROVERS  
& ASSOCIATES**

July 16, 2013

Reference No. 060058

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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

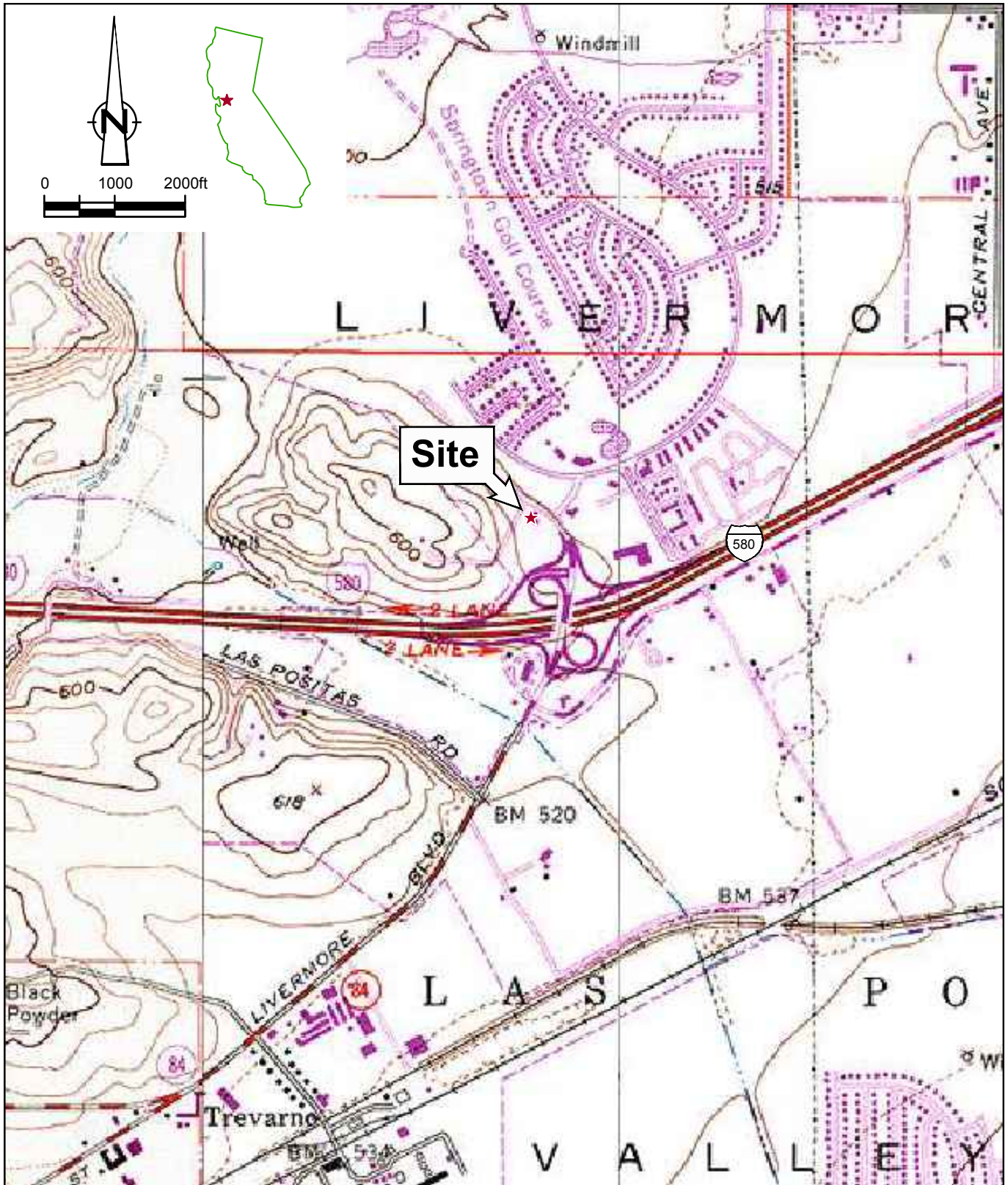


BS/cw/23  
Encl.

Figure 1	Vicinity Map
Figure 2	Groundwater Elevation and Hydrocarbon Concentration Map - Shallow Zone
Figure 3	Groundwater Elevation and Hydrocarbon Concentration Map - Intermediate Zone
Table 1	Groundwater Monitoring and Sampling Data
Attachment A	Monitoring Data Package
Attachment B	Laboratory Analytical Report
Attachment C	Historical Groundwater Monitoring and Sampling Data

cc: Ms. Carryl MacLeod, Chevron (*electronic copy*)  
Mr. Joe Zadik  
Mr. Ken Hilliard  
Mr. Kirk F. Sniff, Esq, Strasburger & Price, LLP

## FIGURES



SOURCE: TOPO MAPS

Figure 1

VICINITY MAP  
 FORMER TEXACO STATION 211253  
 930 SPRINGTOWN BOULEVARD  
*Livermore, California*



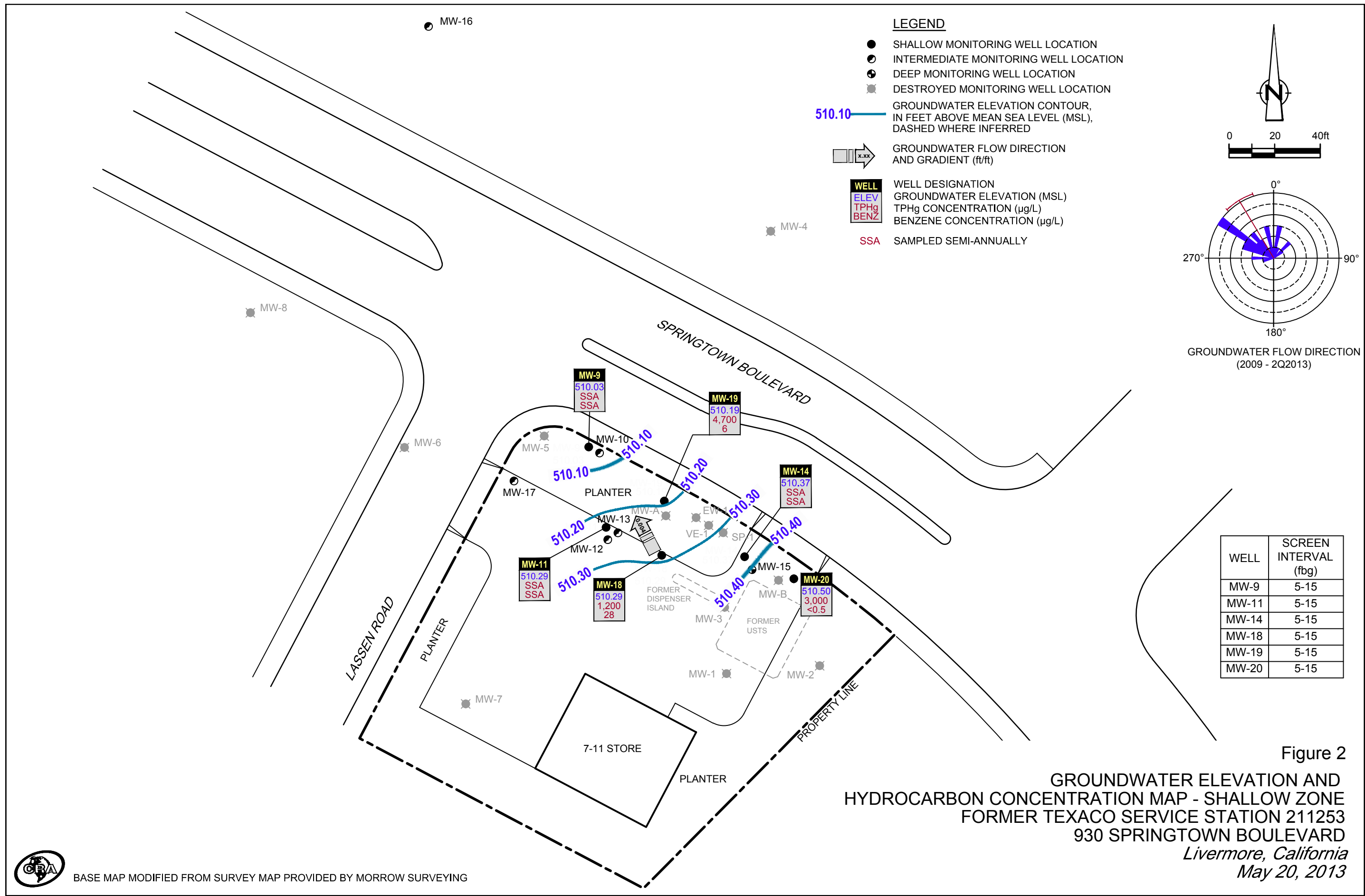


Figure 2  
 GROUNDWATER ELEVATION AND  
 HYDROCARBON CONCENTRATION MAP - SHALLOW ZONE  
 FORMER TEXACO SERVICE STATION 211253  
 930 SPRINGTOWN BOULEVARD  
 Livermore, California  
 May 20, 2013



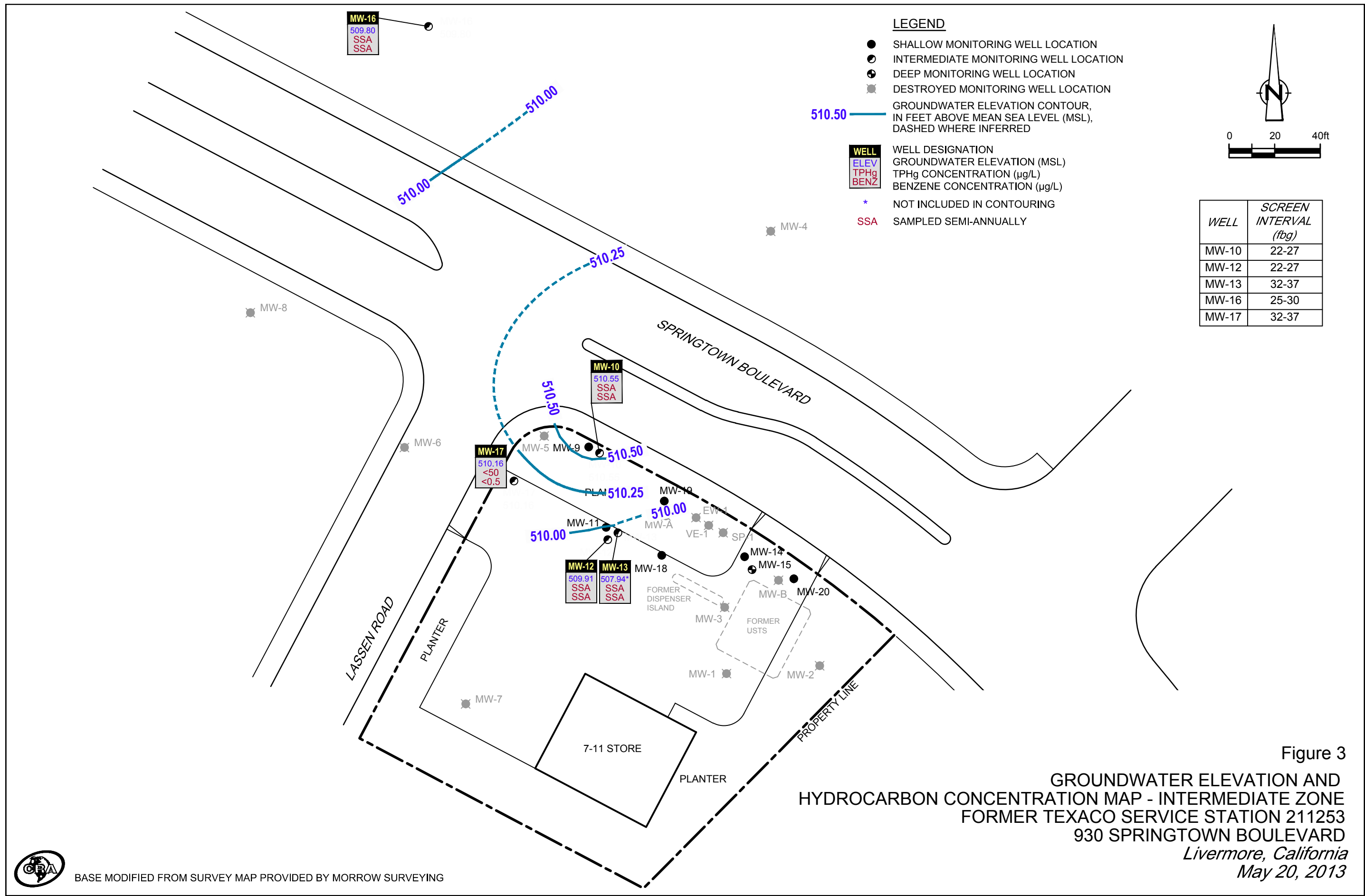


Figure 3  
 GROUNDWATER ELEVATION AND  
 HYDROCARBON CONCENTRATION MAP - INTERMEDIATE ZONE  
 FORMER TEXACO SERVICE STATION 211253  
 930 SPRINGTOWN BOULEVARD  
 Livermore, California  
 May 20, 2013



BASE MODIFIED FROM SURVEY MAP PROVIDED BY MORROW SURVEYING

## TABLE

TABLE 1

**GROUNDWATER MONITORING AND SAMPLING DATA  
FORMER TEXACO SERVICE STATION 211253  
930 SPRINGTOWN BOULEVARD  
LIVERMORE, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS	PRIMARY VOCS				GENERAL CHEMISTRY			
							TPH-GRO	B	T	E	X	Methane	Ferrous iron	Nitrate as Nitrogen	Sulfate
	Units	ft	ft	ft-anst	ft	gallons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-9 <sup>2</sup>	08/24/2010	523.14	13.58	509.56	-	-	3,500	6	8	180	79	-	-	-	-
MW-9 <sup>2</sup>	01/31/2011	523.14	12.31	510.83	-	-	68	<0.5	<0.5	3	<0.5	-	-	-	-
MW-9 <sup>2</sup>	08/09/2011	523.14	12.01	511.13	-	-	54	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-9 <sup>2</sup>	02/09/2012	523.14	13.05	510.09	-	-	5,300	6	7	250	120	-	-	-	-
MW-9 <sup>2.5</sup>	05/10/2012	523.14	12.52	510.62	-	-	-	-	-	-	-	-	-	-	-
MW-9 <sup>2.5</sup>	08/22/2012	523.14	13.45	509.69	-	-	1,300	<5	<5	8	7	2,900	9,200	<250	24,000
MW-9 <sup>2.5</sup>	11/29/2012	523.14	13.30	509.84	-	-	-	-	-	-	-	-	-	-	-
MW-9 <sup>2.5</sup>	02/14/2013	523.14	12.70	510.44	-	-	5,200	<5	<5	37	60	-	-	-	-
<b>MW-9<sup>2.5</sup></b>	<b>05/20/2013</b>	<b>523.14</b>	<b>13.11</b>	<b>510.03</b>	-	-	-	-	-	-	-	-	-	-	-
MW-10 <sup>3</sup>	08/24/2010	523.25	13.07	510.18	-	-	1,300	<0.5	<0.5	2	<0.5	-	-	-	-
MW-10 <sup>3</sup>	01/31/2011	523.25	11.92	511.33	-	-	250	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-10 <sup>3</sup>	08/09/2011	523.25	11.85	511.40	-	-	300	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-10 <sup>3</sup>	02/09/2012	523.25	12.62	510.63	-	-	140	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-10 <sup>3.5</sup>	05/10/2012	523.25	12.26	510.99	-	-	-	-	-	-	-	-	-	-	-
MW-10 <sup>3.5</sup>	08/22/2012	523.25	13.03	510.22	-	-	600	2	0.7	2	2	670	580	<250	24,400
MW-10 <sup>3.5</sup>	11/29/2012	523.25	12.89	510.36	-	-	-	-	-	-	-	-	-	-	-
MW-10 <sup>3.5</sup>	02/14/2013	523.25	12.31	510.94	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
<b>MW-10<sup>3.5</sup></b>	<b>05/20/2013</b>	<b>523.25</b>	<b>12.70</b>	<b>510.55</b>	-	-	-	-	-	-	-	-	-	-	-
MW-11 <sup>2</sup>	08/24/2010	523.42	13.80	509.62	-	-	2,000 J	6	2	9	5	-	-	-	-
MW-11 <sup>2</sup>	01/31/2011	523.42	12.35	511.07	-	-	790	1	<0.5	5	3	-	-	-	-
MW-11 <sup>2</sup>	08/09/2011	523.42	12.06	511.36	-	-	130	<0.5	<0.5	0.9	<0.5	-	-	-	-
MW-11 <sup>2</sup>	02/09/2012	523.42	13.06	510.36	-	-	220	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-11 <sup>2.5</sup>	05/10/2012	523.42	12.58	510.84	-	-	-	-	-	-	-	-	-	-	-
MW-11 <sup>2.5</sup>	08/22/2012	523.42	13.50	509.92	-	-	510	<0.5	<0.5	<0.5	<0.5	760	1,400	<250	59,500
MW-11 <sup>2.5</sup>	11/29/2012	523.42	13.32	510.10	-	-	-	-	-	-	-	-	-	-	-
MW-11 <sup>2.5</sup>	02/14/2013	523.42	12.72	510.70	-	-	110	<0.5	<0.5	<0.5	<0.5	-	-	-	-
<b>MW-11<sup>2.5</sup></b>	<b>05/20/2013</b>	<b>523.42</b>	<b>13.13</b>	<b>510.29</b>	-	-	-	-	-	-	-	-	-	-	-

TABLE 1

**GROUNDWATER MONITORING AND SAMPLING DATA  
FORMER TEXACO SERVICE STATION 211253  
930 SPRINGTOWN BOULEVARD  
LIVERMORE, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS	PRIMARY VOCS				GENERAL CHEMISTRY			
							TPH-GRO	B	T	E	X	Methane	Ferrous iron	Nitrate as Nitrogen	Sulfate
	Units	ft	ft	ft-anst	ft	gallons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-12 <sup>3</sup>	08/24/2010	523.12	12.84	510.28	-	-	18,000	210	650	330	1,900	-	-	-	-
MW-12 <sup>3</sup>	01/31/2011	523.12	12.47	510.65	-	-	9,600	64	180	180	400	-	-	-	-
MW-12 <sup>3</sup>	08/09/2011	523.12	12.19	510.93	-	-	9,000	71	140	170	580	-	-	-	-
MW-12 <sup>3</sup>	02/09/2012	523.12	13.11	510.01	-	-	8,700	85	130	170	590	-	-	-	-
MW-12 <sup>3,5</sup>	05/10/2012	523.12	12.71	510.41	-	-	-	-	-	-	-	-	-	-	-
MW-12 <sup>3,5</sup>	08/22/2012	523.12	13.44	509.68	-	-	8,500	<5	12	120	160	2,000	6,400	<250	3,200
MW-12 <sup>3,5</sup>	11/29/2012	523.12	13.35	509.77	-	-	-	-	-	-	-	-	-	-	-
MW-12 <sup>3,5</sup>	02/14/2013	523.12	12.82	510.30	-	-	7,700	20	83	160	500	-	-	-	-
<b>MW-12<sup>3,5</sup></b>	<b>05/20/2013</b>	<b>523.12</b>	<b>13.21</b>	<b>509.91</b>	-	-	-	-	-	-	-	-	-	-	-
MW-13 <sup>3</sup>	08/24/2010	520.88	13.69	507.19	-	-	13,000	810	710	76	660	-	-	-	-
MW-13 <sup>3</sup>	01/31/2011	520.88	12.21	508.67	-	-	22,000	1,600	1,600	270	1,600	-	-	-	-
MW-13 <sup>3</sup>	08/09/2011	520.88	11.91	508.97	-	-	12,000	1,200	820	120	710	-	-	-	-
MW-13 <sup>3</sup>	02/09/2012	520.88	12.83	508.05	-	-	18,000	1,600	3,700	370	2,200	-	-	-	-
MW-13 <sup>3,5</sup>	05/10/2012	520.88	12.44	508.44	-	-	-	-	-	-	-	-	-	-	-
MW-13 <sup>3,5</sup>	08/22/2012	520.88	13.19	507.69	-	-	35,000	2,000	5,600	340	4,500	8,500	1,200	<250	2,600
MW-13 <sup>3,5</sup>	11/29/2012	520.88	13.06	507.82	-	-	-	-	-	-	-	-	-	-	-
MW-13 <sup>3,5</sup>	02/14/2013	520.88	12.53	508.35	-	-	11,000	380	750	31	1,700	-	-	-	-
<b>MW-13<sup>3,5</sup></b>	<b>05/20/2013</b>	<b>520.88</b>	<b>12.94</b>	<b>507.94</b>	-	-	-	-	-	-	-	-	-	-	-
MW-14 <sup>2</sup>	08/24/2010 <sup>1,**</sup>	520.88	10.36	510.75	0.29	0.00	-	-	-	-	-	-	-	-	-
MW-14 <sup>2</sup>	01/31/2011 <sup>1,**</sup>	520.88	9.96	511.12	0.25	0.00	-	-	-	-	-	-	-	-	-
MW-14 <sup>2</sup>	08/09/2011 <sup>1,**</sup>	520.88	9.67	511.35	0.17	0.00	-	-	-	-	-	-	-	-	-
MW-14 <sup>2</sup>	02/09/2012 <sup>1,**</sup>	520.88	10.69	510.46	0.34	0.00	-	-	-	-	-	-	-	-	-
MW-14 <sup>2,5</sup>	05/10/2012 <sup>1,**</sup>	520.88	10.18	510.91	0.26	0.00	-	-	-	-	-	-	-	-	-
MW-14 <sup>2,5</sup>	05/30/2012	520.88					Sorbent Sock Installed								
MW-14 <sup>2,5</sup>	06/14/2012**	520.88	10.36	510.65	0.16	1.25	-	-	-	-	-	-	-	-	-
MW-14 <sup>2,5</sup>	06/25/2012**	520.88	10.44	510.47	0.04	0.98	-	-	-	-	-	-	-	-	-

TABLE 1

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LIVERMORE, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS	PRIMARY VOCS				GENERAL CHEMISTRY			
							TPH-GRO	B	T	E	X	Methane	Ferrous iron	Nitrate as Nitrogen	Sulfate
	Units	ft	ft	ft-anst	ft	gallons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-14 <sup>2.5</sup>	07/11/2012**	520.88	10.52	510.41	0.06	1.34	-	-	-	-	-	-	-	-	-
MW-14 <sup>2.5</sup>	07/24/2012**	520.88	10.70	510.20	0.02	0.45	-	-	-	-	-	-	-	-	-
MW-14 <sup>2.5</sup>	08/08/2012**	520.88	13.74	507.16	0.03	0.46	-	-	-	-	-	-	-	-	-
MW-14 <sup>2.5</sup>	08/22/2012	520.88	10.78	510.10	-	0.33	22,000	890	990	600	2,600	1,200	1,000	<250	145,000
MW-14 <sup>2.5</sup>	09/04/2012	520.88	10.82	510.06	-	0.16	-	-	-	-	-	-	-	-	-
MW-14 <sup>2.5</sup>	09/21/2012	520.88	10.69	510.19	-	-	-	-	-	-	-	-	-	-	-
MW-14 <sup>2.5</sup>	10/02/2012	520.88	10.65	510.23	-	-	-	-	-	-	-	-	-	-	-
MW-14 <sup>2.5</sup>	10/17/2012	520.88	10.70	510.18	-	-	-	-	-	-	-	-	-	-	-
MW-14 <sup>2.5</sup>	10/29/2012	520.88	10.62	510.26	-	-	-	-	-	-	-	-	-	-	-
MW-14 <sup>2.5</sup>	11/29/2012	520.88	10.68	510.20	-	-	-	-	-	-	-	-	-	-	-
MW-14 <sup>2.5</sup>	02/14/2013	520.88	10.22	510.66	-	-	4,200	170	120	61	410	-	-	-	-
<b>MW-14<sup>2.5</sup></b>	<b>05/20/2013</b>	<b>520.88</b>	<b>10.51</b>	<b>510.37</b>	-	-	-	-	-	-	-	-	-	-	-
MW-15 <sup>4</sup>	08/24/2010	520.87	10.81	510.06	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-15 <sup>4</sup>	01/31/2011	520.87	9.86	511.01	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-15 <sup>4</sup>	08/09/2011	520.87	9.56	511.31	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-15 <sup>4</sup>	02/09/2012	520.87	10.44	510.43	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-15 <sup>4.5</sup>	05/10/2012	520.87	10.05	510.82	-	-	-	-	-	-	-	-	-	-	-
MW-15 <sup>4.5</sup>	08/22/2012	520.87	10.87	510.00	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<10	2,100	267,000
MW-15 <sup>4.5</sup>	11/29/2012	520.87	10.70	510.17	-	-	-	-	-	-	-	-	-	-	-
MW-15 <sup>4.5</sup>	02/14/2013	520.87	10.16	510.71	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
<b>MW-15<sup>4.5</sup></b>	<b>05/20/2013</b>	<b>520.87</b>	<b>10.58</b>	<b>510.29</b>	-	-	-	-	-	-	-	-	-	-	-
MW-16 <sup>3</sup>	08/24/2010	520.50	11.07	509.43	-	-	68	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-16 <sup>3</sup>	01/31/2011	520.50	9.99	510.51	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-16 <sup>3</sup>	08/09/2011	520.50	9.59	510.91	-	-	66	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-16 <sup>3</sup>	02/09/2012	520.50	10.62	509.88	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-16 <sup>3.5</sup>	05/10/2012	520.50	10.18	510.32	-	-	-	-	-	-	-	-	-	-	-
MW-16 <sup>3.5</sup>	08/22/2012	520.50	11.08	509.42	-	-	<50	<0.5	<0.5	<0.5	<0.5	1,000	16	590	49,400

TABLE 1

**GROUNDWATER MONITORING AND SAMPLING DATA  
FORMER TEXACO SERVICE STATION 211253  
930 SPRINGTOWN BOULEVARD  
LIVERMORE, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS	PRIMARY VOCS				GENERAL CHEMISTRY			
							TPH-GRO	B	T	E	X	Methane	Ferrous iron	Nitrate as Nitrogen	Sulfate
	Units	ft	ft	ft-ansl	ft	gallons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-16 <sup>3,5</sup>	11/29/2012	520.50	10.86	509.64	-	-	-	-	-	-	-	-	-	-	-
MW-16 <sup>3,5</sup>	02/14/2013	520.50	10.27	510.23	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
<b>MW-16<sup>3,5</sup></b>	<b>05/20/2013</b>	<b>520.50</b>	<b>10.70</b>	<b>509.80</b>	-	-	-	-	-	-	-	-	-	-	-
MW-17 <sup>3</sup>	02/07/2012	524.81	14.50	510.31	-	-	-	-	-	-	-	-	-	-	-
MW-17 <sup>3</sup>	02/09/2012	524.81	14.58	510.23	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-17 <sup>3</sup>	05/10/2012	524.81	14.10	510.71	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-17 <sup>3</sup>	08/22/2012	524.81	14.54	510.27	-	-	<50	<0.5	<0.5	<0.5	<0.5	25	<10	3,700	77,400
MW-17 <sup>3</sup>	11/29/2012	524.81	14.75	510.06	-	-	<50	<0.5	<0.5	<0.5	<0.5	39	77	3,200	67,900
MW-17 <sup>3</sup>	02/14/2013	524.81	14.25	510.56	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
<b>MW-17<sup>3</sup></b>	<b>05/20/2013</b>	<b>524.81</b>	<b>14.65</b>	<b>510.16</b>	-	-	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	-	-	-	-
MW-18 <sup>2</sup>	02/07/2012	522.40	12.01	510.39	-	-	-	-	-	-	-	-	-	-	-
MW-18 <sup>2</sup>	02/09/2012	522.40	12.06	510.34	-	-	12,000	200	1,300	68	2,200	-	-	-	-
MW-18 <sup>2</sup>	05/10/2012	522.40	11.60	510.80	-	-	6,700	220	390	380	720	-	-	-	-
MW-18 <sup>2</sup>	08/22/2012	522.40	12.50	509.90	-	-	3,600	80	310	170	550	240	2,500	580	143,000
MW-18 <sup>2</sup>	11/29/2012	522.40	12.36	510.04	-	-	2,000	44	25	96	190	320	2,400	<250	117,000
MW-18 <sup>2</sup>	02/14/2013	522.40	11.76	510.64	-	-	3,000	130	5	270	160	-	-	-	-
<b>MW-18<sup>2</sup></b>	<b>05/20/2013</b>	<b>522.40</b>	<b>12.11</b>	<b>510.29</b>	-	-	<b>1,200</b>	<b>28</b>	<b>47</b>	<b>52</b>	<b>130</b>	-	-	-	-
MW-19 <sup>2</sup>	02/07/2012	522.63	12.30	510.33	-	-	-	-	-	-	-	-	-	-	-
MW-19 <sup>2</sup>	02/09/2012	522.63	12.39	510.24	-	-	6,700	4	<3	18	35	-	-	-	-
MW-19 <sup>2</sup>	05/10/2012	522.63	11.92	510.71	-	-	1,500	<0.5	<0.5	0.7	0.9	-	-	-	-
MW-19 <sup>2</sup>	08/22/2012	522.63	12.80	509.83	-	-	1,300	<0.5	<0.5	17	2	1,900	820	<250	32,900
MW-19 <sup>2</sup>	11/29/2012	522.63	12.64	509.99	-	-	58	<0.5	<0.5	<0.5	<0.5	15	1,800	<250	41,200
MW-19 <sup>2</sup>	02/14/2013	522.63	12.08	510.55	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
<b>MW-19<sup>2</sup></b>	<b>05/20/2013</b>	<b>522.63</b>	<b>12.44</b>	<b>510.19</b>	-	-	<b>4,700</b>	<b>6</b>	<b>2</b>	<b>43</b>	<b>7</b>	-	-	-	-
MW-20 <sup>2</sup>	02/07/2012	520.28	9.60	510.68	-	-	-	-	-	-	-	-	-	-	-

TABLE 1

**GROUNDWATER MONITORING AND SAMPLING DATA  
FORMER TEXACO SERVICE STATION 211253  
930 SPRINGTOWN BOULEVARD  
LIVERMORE, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS	PRIMARY VOCS				GENERAL CHEMISTRY			
							TPH-GRO	B	T	E	X	Methane	Ferrous iron	Nitrate as Nitrogen	Sulfate
	Units	ft	ft	ft-amsl	ft	gallons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-20 <sup>2</sup>	02/09/2012	520.28	9.68	510.60	-	-	9,100	3	94	200	600	-	-	-	-
MW-20 <sup>2</sup>	05/10/2012	520.28	9.32	510.96	-	-	3,900	<5	28	42	230	-	-	-	-
MW-20 <sup>2</sup>	08/22/2012	520.28	10.12	510.16	-	-	4,800	<5	42	120	320	37	2,800	<250	234,000
MW-20 <sup>2</sup>	11/29/2012	520.28	9.99	510.29	-	-	4,200	<0.5	9	41	95	23	11,100	<250	131,000
MW-20 <sup>2</sup>	02/14/2013	520.28	9.43	510.85	-	-	2,000	<5	<5	<5	<5	-	-	-	-
MW-20 <sup>2</sup>	05/20/2013	520.28	9.78	510.50	-	-	3,000	<0.5	1	24	30	-	-	-	-
QA	08/24/2010	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
QA	01/31/2011	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
QA	08/09/2011	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
QA	02/09/2012	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
QA	05/10/2012	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
QA	08/22/2012	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
QA	11/29/2012	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
QA	02/14/2013	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
QA	05/20/2013	-	-	-	-	-	<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
- ft = Feet
- µg/L = Micrograms per Liter
- TPH-GRO = Total petroleum hydrocarbons - gasoline range organics
- VOCs = Volatile organic compounds
- B = Benzene

**GROUNDWATER MONITORING AND SAMPLING DATA  
FORMER TEXACO SERVICE STATION 211253  
930 SPRINGTOWN BOULEVARD  
LIVERMORE, CALIFORNIA**

Location	Date	TOC	DTW	GWE	LNAPL	LNAPL REMOVED	HYDROCARBONS	PRIMARY VOCS				GENERAL CHEMISTRY			
							TPH-GRO	B	T	E	X	Methane	Ferrous iron	Nitrate as Nitrogen	Sulfate
Units		ft	ft	ft-amsl	ft	gallons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L

T = Toluene

E = Ethylbenzene

X = Xylenes (Total)

-- = Not available / not applicable

<x = Not detected above laboratory method detection limit

J = Estimated concentration

\* TOC elevations were surveyed on July 22, 2009, by Morrow Surveying. Vertical datum is NAVD 88 from GPS Observations.

\*\* GWE was corrected for the presence of LNAPL; correction factor:  $[(TOC - DTW) + (LNAPL \times 0.80)]$ .

1 Not sampled due to the presence of LNAPL.

2 Shallow well

3 Intermediate well

4 Deep well

5 Sampled semi-annually during the first and third quarters



ATTACHMENT A

MONITORING DATA PACKAGE



# GETTLER-RYAN INC.



## TRANSMITTAL

May 30, 2013  
G-R #385867

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 Texaco Service Station  
930 Springtown Blvd.  
Livermore, California  
(Site #211253)**

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package Second Quarter Event of May 20, 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/211253

### WELL CONDITION STATUS SHEET

Client/Facility #: Chevron #211253  
 Site Address: 930 Springtown Blvd.  
 City: Livermore, CA

Job #: 385867  
 Event Date: 5.20.13  
 Sampler: FT

WELL ID	Vault Frame Condition	Gasket/O-Ring (M) Missing (R) Replaced	BOLTS (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y <input checked="" type="checkbox"/> N	REPLACE CAP Y <input checked="" type="checkbox"/> N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y <input checked="" type="checkbox"/> N
MW-9	OK						→			Emco 12" x 12"	
MW-10	OK						→				
MW-11	OK						→				
MW-12	OK	M	OK				→				
MW-13	OK						→				
MW-14	OK						→				
MW-15	OK						→				
MW-16	OK						→				
MW-17	OK						→				
MW-18	OK						→				
MW-19	OK						→				
MW-20	OK						→	↓	↓		↓

Comments \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

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

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

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

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

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

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

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



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867  
 Site Address: 930 Springtown Blvd. Event Date: 5.20.13 (inclusive)  
 City: Livermore, CA Sampler: FR

Well ID: MW-9 Date Monitored: 5.20.13

Well Diameter: 4

Total Depth: 14.47 ft.

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

Depth to Water: 13.11 ft.  Check if water column is less then 0.50 ft.

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

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

### Purge Equipment:

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

### Sampling Equipment:

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

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

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

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

### LABORATORY INFORMATION

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

COMMENTS: MLO

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



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867  
 Site Address: 930 Springtown Blvd. Event Date: 5-20-13 (inclusive)  
 City: Livermore, CA Sampler: FT

Well ID: MW-10 Date Monitored: 5-20-13

Well Diameter: 4

Total Depth: 26.42 ft.

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

Depth to Water: 12.70 ft.  Check if water column is less than 0.50 ft.

13.72 x VF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

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

### Purge Equipment:

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

### Sampling Equipment:

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

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

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

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

### LABORATORY INFORMATION

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

COMMENTS: M10



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867  
 Site Address: 930 Springtown Blvd. Event Date: 5.20.13 (inclusive)  
 City: Livermore, CA Sampler: FT

Well ID: MW- 11  
 Well Diameter: 4 in.  
 Total Depth: 14.60 ft.  
 Depth to Water: 13.13 ft.  
1.47 xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 5-20-13

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 \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

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 voe vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)

COMMENTS: M/O

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



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867  
 Site Address: 930 Springtown Blvd. Event Date: 5-20-13 (inclusive)  
 City: Livermore, CA Sampler: F.T.

Well ID: MW-12  
 Well Diameter: 4 in.  
 Total Depth: 26.66 ft.  
 Depth to Water: 13.21 ft.  
3.45 xVF = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 5.20.13

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 \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

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)

COMMENTS: M10

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





# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867  
 Site Address: 930 Springtown Blvd. Event Date: 5.20.13 (inclusive)  
 City: Livermore, CA Sampler: FT

Well ID: MW-13  
 Well Diameter: 4 in.  
 Total Depth: 36.62 ft.  
 Depth to Water: 12.94 ft.  
23.68 xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 5.20.13

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 \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

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 1gal	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)

COMMENTS: M10

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



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867  
 Site Address: 930 Springtown Blvd. Event Date: 5.20.13 (inclusive)  
 City: Livermore, CA Sampler: ET

Well ID: MW-14  
 Well Diameter: 4 in.  
 Total Depth: 14.40 ft.  
 Depth to Water: 10.51 ft.  
3.89 xVF = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 5.20.13

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 \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

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)

COMMENTS: Mb  
SOCK IN WELL

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



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867  
 Site Address: 930 Springtown Blvd. Event Date: 5-20-13 (inclusive)  
 City: Livermore, CA Sampler: FT

Well ID: MW-15  
 Well Diameter: 4 in.  
 Total Depth: 45.90 ft.  
 Depth to Water: 10.58 ft.  
35.32 xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 5-20-13

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 \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

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)

COMMENTS: M10

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



# GETTLER - RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867  
 Site Address: 930 Springtown Blvd. Event Date: 5.20.13 (inclusive)  
 City: Livermore, CA Sampler: FT

Well ID MW-16  
 Well Diameter 4 in.  
 Total Depth 29.19 ft.  
 Depth to Water 10.70 ft.  
18.49 xVF \_\_\_\_\_ = \_\_\_\_\_ x3 case volume = Estimated Purge Volume: \_\_\_\_\_ gal.

Date Monitored: 5.20.13

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 \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

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)

COMMENTS: ML0

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



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867  
 Site Address: 930 Springtown Blvd. Event Date: 5-20-13 (inclusive)  
 City: Livermore, CA Sampler: FR

Well ID: MW-17  
 Well Diameter: 4 in.  
 Total Depth: 37.05 ft.  
 Depth to Water: 19.65 ft.  
22.40 xVF .66 = 14.78

Date Monitored: 5-20-13

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]: 19.13 x3 case volume = Estimated Purge Volume: 44.0 gal.

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

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

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

Start Time (purge): 1410 Weather Conditions: SUNNY  
 Sample Time/Date: 1640 15-20-13 Water Color: CLEAN Odor: Y 10  
 Approx. Flow Rate: 2.5 gpm. Sediment Description: NONE  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 15.35

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - <u>US</u> )	Temperature (° / F)	D.O. (mg/L)	ORP (mV)
<u>1416</u>	<u>14.5</u>	<u>7.42</u>	<u>632</u>	<u>21.2</u>	_____	_____
<u>1422</u>	<u>29.0</u>	<u>7.39</u>	<u>641</u>	<u>20.8</u>	_____	_____
<u>1429</u>	<u>44.0</u>	<u>7.35</u>	<u>652</u>	<u>20.4</u>	_____	_____

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-17</u>	<u>6 x voa vial</u>	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO(8015)/BTEX(8260)</u>

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

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



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867  
 Site Address: 930 Springtown Blvd. Event Date: 5.20.13 (inclusive)  
 City: Livermore, CA Sampler: FT

Well ID: MW-18  
 Well Diameter: 4 in.  
 Total Depth: 14.87 ft.  
 Depth to Water: 12.11 ft.

Date Monitored: 5.20.13

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.

2.76 xVF .66 = 1.82 x3 case volume = Estimated Purge Volume: 5.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.66

### Purge Equipment:

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

### Sampling Equipment:

Disposable Bailer   
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

Start Time (purge): 1450 Weather Conditions: SUNNY  
 Sample Time/Date: 1520 / 5.20.13 Water Color: CLEAN Odor: Ⓟ / N MODERATE  
 Approx. Flow Rate: / gpm. Sediment Description: NONE  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 12.18

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - <u>DS</u> )	Temperature ( <u>Ⓟ</u> / F )	D.O. (mg/L)	ORP (mV)
<u>1456</u>	<u>15</u>	<u>7.52</u>	<u>752</u>	<u>19.6</u>	/	/
<u>1502</u>	<u>3.0</u>	<u>7.49</u>	<u>760</u>	<u>19.0</u>	/	/
<u>1509</u>	<u>5.0</u>	<u>7.45</u>	<u>768</u>	<u>18.8</u>	/	/

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-18</u>	<u>6</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO(8015)/BTEX(8260)</u>

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

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



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867  
 Site Address: 930 Springtown Blvd. Event Date: 5.20.13 (inclusive)  
 City: Livermore, CA Sampler: FT

Well ID: MW-19 Date Monitored: 5.20.13

Well Diameter: 4 in.

Total Depth: 14.90 ft.

Depth to Water: 12.44 ft.

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

Check if water column is less than 0.50 ft.

2.44 xVF .66 = 1.62 x3 case volume = Estimated Purge Volume: 5.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.93

### Purge Equipment:

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

### Sampling Equipment:

Disposable Bailer   
 Pressure Bailer \_\_\_\_\_  
 Discrete Bailer \_\_\_\_\_  
 Peristaltic Pump \_\_\_\_\_  
 QED Bladder Pump \_\_\_\_\_  
 Other: \_\_\_\_\_

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

Start Time (purge): 1240 Weather Conditions: SUNNY  
 Sample Time/Date: 1325 / 5.20.13 Water Color: BAN. Odor: DI SLIGHT  
 Approx. Flow Rate: - gpm. Sediment Description: S. SILTY  
 Did well de-water? NO If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 12.92

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - <u>IS</u> )	Temperature (° / F)	D.O. (mg/L)	ORP (mV)
<u>1246</u>	<u>1.5</u>	<u>7.30</u>	<u>660</u>	<u>19.2</u>	/	/
<u>1251</u>	<u>3.0</u>	<u>7.28</u>	<u>671</u>	<u>18.7</u>	/	/
<u>1258</u>	<u>5.0</u>	<u>7.32</u>	<u>682</u>	<u>18.2</u>	/	/

### LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-19</u>	<u>6</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO(8015)/BTEX(8260)</u>

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

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



# GETTLER-RYAN INC.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867  
 Site Address: 930 Springtown Blvd. Event Date: 5.20.13 (inclusive)  
 City: Livermore, CA Sampler: ET

Well ID: MW-20 Date Monitored: 5.20.13  
 Well Diameter: 4  
 Total Depth: 14.92 ft.  
 Depth to Water: 9.78 ft.  Check if water column is less than 0.50 ft.  
5.14 xVF .66 = 3.39 x3 case volume = Estimated Purge Volume: 10.0 gal.  
 Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.80

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): 1540 Weather Conditions: SUNNY  
 Sample Time/Date: 1625 5.20.13 Water Color: Gray Odor: DIN MODERATE  
 Approx. Flow Rate: \_\_\_\_\_ gpm. Sediment Description: S-SILT  
 Did well de-water? No If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal. DTW @ Sampling: 10.05

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - <del>US</del> )	Temperature (°/ F)	D.O. (mg/L)	ORP (mV)
<u>1547</u>	<u>3.5</u>	<u>7.35</u>	<u>695</u>	<u>19.1</u>	/	/
<u>1555</u>	<u>7.0</u>	<u>7.28</u>	<u>705</u>	<u>18.8</u>	/	/
<u>1603</u>	<u>10.0</u>	<u>7.24</u>	<u>712</u>	<u>18.5</u>	/	/

### LABORATORY INFORMATION

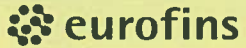
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-20</u>	<u>6</u> x vov vial	<u>YES</u>	<u>HCL</u>	<u>LANCASTER</u>	<u>TPH-GRO(8015)/BTEX(8260)</u>

### COMMENTS:

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



# Chevron California Region Analysis Request/Chain of Custody



**Lancaster Laboratories**

Acct. # \_\_\_\_\_

For Eurofins Lancaster Laboratories use only  
 Group # \_\_\_\_\_ Sample # \_\_\_\_\_  
 Instructions on reverse side correspond with circled numbers.

052213-02

1 of 1

1 Client Information				4 Matrix				5 Analyses Requested										
Facility #		WBS		<input type="checkbox"/> Sediment <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Surface  <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air	<input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Oil	Total Number of Containers	BTEX <del>SMIPE</del> 8021 8260 8260 TPH-GRO 8015 8260 TPH-DRO 8015 without Silica Gel Cleanup TPH-DRO 8015 with Silica Gel Cleanup 8260 Full Scan Oxygenates Total Lead Method Dissolved Lead Method											
SS#211253-OML G-R#385867 Global ID#T0600101353																		
Site Address 930 SPRINGTOWN BLVD., LIVERMORE, CA																		
Chevron PM CM		Lead Consultant CRASE 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 FRANK TERRINONI																		
2 Sample Identification		3 Collected		Grab	Composite	Soil	Water	Oil	Total Number of Containers	BTEX <del>SMIPE</del> 8021 8260 8260	TPH-GRO 8015 8260	TPH-DRO 8015 without Silica Gel Cleanup	TPH-DRO 8015 with Silica Gel Cleanup	8260 Full Scan	Oxygenates	Total Lead Method	Dissolved Lead Method	
Soil Depth	Date	Time																
QA		5.20.13					W		2	X	X							
MW-17			1640	X					6	X	X							
MW-18			1520	X					6	X	X							
MW-19			1325	X					6	X	X							
MW-20			1625	X			↓		6	X	X							

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

**6 Remarks**

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

<b>7 Turnaround Time Requested (TAT)</b> (please circle) Standard 5 day 4 day 72 hour 48 hour 24 hour	Relinquished by <i>Frank Terrinoni</i>	Date 5.20.13	Time 1815	Received by GETTLER-RYAN FRIDGE	Date 05-21-13	Time 0700
	Relinquished by <i>[Signature]</i>	Date 0522-13	Time 1246	Received by A. Adger	Date 22 MAY 13	Time 1246

<b>8 Data Package</b> (circle if required) Type I - Full Type VI (Raw Data)	EDD (circle if required) EDF/EDD EDFFLAT (default) Other: _____	Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____	Received by _____	Date _____	Time _____
		Temperature Upon Receipt _____ °C		Custody Seals Intact? Yes No	

ATTACHMENT B

LABORATORY ANALYTICAL REPORT

## ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17601

Prepared for:

Chevron  
L4310  
6001 Bollinger Canyon Rd.  
San Ramon CA 94583

June 05, 2013

Project: 211253

Submittal Date: 05/23/2013  
Group Number: 1391984  
PO Number: 0015118372  
Release Number: MACLEOD  
State of Sample Origin: CA

Client Sample Description

QA-T-130520 NA Water  
MW-17-W-130520 Grab Groundwater  
MW-18-W-130520 Grab Groundwater  
MW-19-W-130520 Grab Groundwater  
MW-20-W-130520 Grab Groundwater

Lancaster Labs (LLD) #

7067354  
7067355  
7067356  
7067357  
7067358

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  
ELECTRONIC COPY TO  
ELECTRONIC COPY TO

CRA c/o Gettler-Ryan  
Chevron c/o CRA  
Chevron  
CRA

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

Respectfully Submitted,



Jill M. Parker  
Senior Specialist

(717) 556-7262

Sample Description: QA-T-130520 NA Water  
 Facility# 211253 Job# 385867 GRD  
 930 Springtown-Livermore T0600101353

LLI Sample # WW 7067354  
 LLI Group # 1391984  
 Account # 10904

Project Name: 211253

Collected: 05/20/2013

Chevron

Submitted: 05/23/2013 09:50

L4310

Reported: 06/05/2013 12:28

6001 Bollinger Canyon Rd.  
 San Ramon CA 94583

1253T

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l ug/l</b>					
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>GC Volatiles SW-846 8015B ug/l ug/l</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D131492AA	05/29/2013 12:39	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D131492AA	05/29/2013 12:39	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13143C20A	05/26/2013 19:13	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13143C20A	05/26/2013 19:13	Catherine J Schwarz	1

Sample Description: MW-17-W-130520 Grab Groundwater  
 Facility# 211253 Job# 385867 GRD  
 930 Springtown-Livermore T0600101353

LLI Sample # WW 7067355  
 LLI Group # 1391984  
 Account # 10904

Project Name: 211253

Collected: 05/20/2013 16:40 by FT Chevron  
 Submitted: 05/23/2013 09:50 L4310  
 Reported: 06/05/2013 12:28 6001 Bollinger Canyon Rd.  
 San Ramon CA 94583

25317

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l ug/l</b>					
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
<b>GC Volatiles SW-846 8015B ug/l ug/l</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D131492AA	05/29/2013 13:24	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D131492AA	05/29/2013 13:24	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13143C20A	05/26/2013 23:37	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13143C20A	05/26/2013 23:37	Catherine J Schwarz	1

Sample Description: MW-18-W-130520 Grab Groundwater  
 Facility# 211253 Job# 385867 GRD  
 930 Springtown-Livermore T0600101353

LLI Sample # WW 7067356  
 LLI Group # 1391984  
 Account # 10904

Project Name: 211253

Collected: 05/20/2013 15:20 by FT Chevron  
 Submitted: 05/23/2013 09:50 L4310  
 Reported: 06/05/2013 12:28 6001 Bollinger Canyon Rd.  
 San Ramon CA 94583

25318

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l ug/l</b>					
10943	Benzene	71-43-2	28	0.5	1
10943	Ethylbenzene	100-41-4	52	0.5	1
10943	Toluene	108-88-3	47	0.5	1
10943	Xylene (Total)	1330-20-7	130	0.5	1
<b>GC Volatiles SW-846 8015B ug/l ug/l</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	1,200	50	1

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D131492AA	05/29/2013 14:32	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D131492AA	05/29/2013 14:32	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13150A07A	05/31/2013 01:51	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13150A07A	05/31/2013 01:51	Catherine J Schwarz	1

Sample Description: MW-19-W-130520 Grab Groundwater  
 Facility# 211253 Job# 385867 GRD  
 930 Springtown-Livermore T0600101353

LLI Sample # WW 7067357  
 LLI Group # 1391984  
 Account # 10904

Project Name: 211253

Collected: 05/20/2013 13:25 by FT Chevron  
 Submitted: 05/23/2013 09:50 L4310  
 Reported: 06/05/2013 12:28 6001 Bollinger Canyon Rd.  
 San Ramon CA 94583

25319

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l ug/l</b>					
10943	Benzene	71-43-2	6	0.5	1
10943	Ethylbenzene	100-41-4	43	0.5	1
10943	Toluene	108-88-3	2	0.5	1
10943	Xylene (Total)	1330-20-7	7	0.5	1
<b>GC Volatiles SW-846 8015B ug/l ug/l</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	4,700	250	5

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D131492AA	05/29/2013 14:55	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D131492AA	05/29/2013 14:55	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13153A20A	06/02/2013 17:03	Catherine J Schwarz	5
01146	GC VOA Water Prep	SW-846 5030B	1	13153A20A	06/02/2013 17:03	Catherine J Schwarz	5



Sample Description: MW-20-W-130520 Grab Groundwater  
 Facility# 211253 Job# 385867 GRD  
 930 Springtown-Livermore T0600101353

LLI Sample # WW 7067358  
 LLI Group # 1391984  
 Account # 10904

Project Name: 211253

Collected: 05/20/2013 16:25 by FT Chevron  
 Submitted: 05/23/2013 09:50 L4310  
 Reported: 06/05/2013 12:28 6001 Bollinger Canyon Rd.  
 San Ramon CA 94583

25320

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B ug/l</b>					
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	24	0.5	1
10943	Toluene	108-88-3	1	0.5	1
10943	Xylene (Total)	1330-20-7	30	0.5	1
<b>GC Volatiles SW-846 8015B ug/l</b>					
01728	TPH-GRO N. CA water C6-C12	n.a.	3,000	50	1

### General Sample Comments

State of California Lab Certification No. 2501

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D131492AA	05/29/2013 15:18	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D131492AA	05/29/2013 15:18	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	2	13153A20A	06/02/2013 16:41	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13153A20A	06/02/2013 16:41	Catherine J Schwarz	1

## Quality Control Summary

Client Name: Chevron  
Reported: 06/05/13 at 12:28 PM

Group Number: 1391984

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: D131492AA	Sample number(s): 7067354-7067358							
Benzene	N.D.	0.5	ug/l	84		77-121		
Ethylbenzene	N.D.	0.5	ug/l	93		79-120		
Toluene	N.D.	0.5	ug/l	91		79-120		
Xylene (Total)	N.D.	0.5	ug/l	95		77-120		
Batch number: 13143C20A	Sample number(s): 7067354-7067355							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	91	88	75-135	4	30
Batch number: 13150A07A	Sample number(s): 7067356							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	94	103	75-135	9	30
Batch number: 13153A20A	Sample number(s): 7067357-7067358							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	84	87	75-135	4	30

### Sample Matrix Quality Control

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

<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: D131492AA	Sample number(s): 7067354-7067358 UNSPK: 7067355								
Benzene	97	88	72-134	10	30				
Ethylbenzene	103	96	71-134	7	30				
Toluene	101	94	80-125	7	30				
Xylene (Total)	105	98	79-125	7	30				

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: UST VOCs by 8260B - Water

Batch number: D131492AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7067354	99	95	101	99

\*- 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: 06/05/13 at 12:28 PM

Group Number: 1391984

### Surrogate Quality Control

7067355	98	95	99	98
7067356	98	93	101	99
7067357	96	94	98	99
7067358	100	95	100	102
Blank	98	95	101	98
LCS	100	100	100	98
MS	101	101	100	97
MSD	97	100	100	97

Limits: 80-116                      77-113                      80-113                      78-113

Analysis Name: TPH-GRO N. CA water C6-C12  
Batch number: 13143C20A  
Trifluorotoluene-F

7067354	84
7067355	85
Blank	85
LCS	107
LCSD	105

Limits: 63-135

Analysis Name: TPH-GRO N. CA water C6-C12  
Batch number: 13150A07A  
Trifluorotoluene-F

7067356	95
Blank	83
LCS	90
LCSD	93

Limits: 63-135

Analysis Name: TPH-GRO N. CA water C6-C12  
Batch number: 13153A20A  
Trifluorotoluene-F

7067357	107
7067358	158*
Blank	81
LCS	102
LCSD	106

Limits: 63-135

\*- Outside of specification

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

# Chevron California Region Analysis Request/Chain of Custody



**Lancaster Laboratories**

Acct. # 10904

For Eurofins Lancaster Laboratories use only  
 Group # 1391984 Sample # 7067354-58852213-02  
 Instructions on reverse side correspond with circled numbers.

1 of 1

1 Client Information				4 Matrix				5 Analyses Requested										6 Remarks				
Facility # <u>WBS</u> SS# <u>211253-OML</u> G-R# <u>385867</u> Global ID# <u>T0600101353</u>				<input type="checkbox"/> Sediment <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Surface				<input checked="" type="checkbox"/> 8260 <input type="checkbox"/> 8021 <input type="checkbox"/> 8260 <input checked="" type="checkbox"/> 8015 <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 Oxygenates Total Lead Method Dissolved Lead Method										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				
Site Address <u>930 SPRINGTOWN BLVD., LIVERMORE, CA</u>				<input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air				Total Number of Containers										(6) Remarks Please forward the lab results directly to the Lead Consultant and cc: G-R.				
Chevron PM <u>CM</u> <u>CRASB</u>				<input type="checkbox"/> Oil				BTEX TPH-GRO TPH-DRO 8015 without Silica Gel Cleanup TPH-DRO 8015 with Silica Gel Cleanup 8260 Full Scan Oxygenates Total Lead Dissolved Lead														
Consultant/Office <u>Getter-Ryan, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568</u>				Lead Consultant <u>Silva</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>FRANK TERRINONI</u>																						
2 Sample Identification		3 Soil Depth	3 Collected		3 Grab	3 Composite	4 Matrix				5 Analyses Requested										6 Remarks	
			Date	Time			Soil	Water	Oil	Total Number of Containers	BTEX	TPH-GRO	TPH-DRO 8015 without Silica Gel Cleanup	TPH-DRO 8015 with Silica Gel Cleanup	8260 Full Scan	Oxygenates	Total Lead	Dissolved Lead				
QA			5.20.13					W		2	X	X										
MW-17				1640	X					6	X	X										
MW-18				1520	X					6	X	X										
MW-19				1325	X					6	X	X										
MW-20				1625	X					6	X	X										
(7) Turnaround Time Requested (TAT) (please circle)				Relinquished by <u>Frank Terrinoni</u>				Date <u>5.20.13</u>		Time <u>1815</u>		Received by <u>GETTLER-RYAN FRIDGE</u>				Date <u>05-21-13</u>		Time <u>0700</u>				
Standard 5 day 4 day 72 hour 48 hour 24 hour				Relinquished by <u>[Signature]</u>				Date <u>05-22-13</u>		Time <u>1200</u>		Received by <u>A. Aulger</u>				Date <u>22 MAY 13</u>		Time <u>1200</u>				
(8) Data Package (circle if required)				Relinquished by Commercial Carrier <u>UPS</u> <u>FedEx</u> <u>Other</u> <u>1638</u>				Date <u>22 MAY 13</u>		Time <u>1638</u>		Received by <u>UPS</u>				Date _____		Time _____				
Type I - Full Type VI (Raw Data)				EDD (circle if required) EDF/EDD EDF/FLAT (default) Other: _____				Temperature Upon Receipt <u>2.1</u> °C				Custody Seals Intact? <u>Yes</u> No										

# Explanation of Symbols and Abbreviations

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

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

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

**>** greater than

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

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

**ppb** parts per billion

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

## U.S. EPA CLP Data Qualifiers:

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

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

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

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

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

**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 LANCASTER LABORATORIES 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 LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES 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 Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ATTACHMENT C

HISTORICAL GROUNDWATER MONITORING AND SAMPLING DATA

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Texaco Service Station #211253  
930 Springtown Boulevard  
Livermore, California

<b>WELL ID/ DATE</b>	<b>TOC* (ft.)</b>	<b>DTW (ft.)</b>	<b>GWE (msl)</b>	<b>SPHT (ft.)</b>	<b>SPH REMOVED (gallons)</b>	<b>TPH-GRO (µg/L)</b>	<b>B (µg/L)</b>	<b>T (µg/L)</b>	<b>E (µg/L)</b>	<b>X (µg/L)</b>
<b>MW-9</b>										
07/23/09 <sup>1</sup>	523.14	13.00	510.14	0.00	0.00	5,200	4	5	310	100
11/09/09	523.14	12.70	510.44	0.00	0.00	240	4	4	2	5
02/22/10	523.14	11.93	511.21	0.00	0.00	<50	<0.5	<0.5	<0.5	<0.5
<b>05/24/10</b>	<b>523.14</b>	<b>12.22</b>	<b>510.92</b>	<b>0.00</b>	<b>0.00</b>	<b>6,200</b>	<b>9</b>	<b>5</b>	<b>470</b>	<b>110</b>
<b>MW-10</b>										
07/23/09 <sup>1</sup>	522.76	12.59	510.17	0.00	0.00	16,000	220	440	440	660
11/09/09	522.76	12.30	510.46	0.00	0.00	2,800	1	2 <sup>3</sup>	30	30
02/22/10	522.76	11.52	511.24	0.00	0.00	3,600	9	2	61	10
<b>05/24/10</b>	<b>522.76</b>	<b>11.82</b>	<b>510.94</b>	<b>0.00</b>	<b>0.00</b>	<b>3,000</b>	<b>12</b>	<b>3</b>	<b>110</b>	<b>22</b>
<b>MW-11</b>										
07/23/09 <sup>1</sup>	523.25	13.05	510.20	0.00	0.00	5,400	25	28	62	66
11/09/09	523.25	12.73	510.52	0.00	0.00	1,100	3	0.6 <sup>3</sup>	2	2
02/22/10	523.25	11.96	511.29	0.00	0.00	1,400	2	<0.5	5	0.9
<b>05/24/10</b>	<b>523.25</b>	<b>12.27</b>	<b>510.98</b>	<b>0.00</b>	<b>0.00</b>	<b>1,700</b>	<b>1</b>	<b>&lt;0.5</b>	<b>10</b>	<b>0.6</b>
<b>MW-12</b>										
07/23/09 <sup>1</sup>	523.42	13.03	510.41**	0.02	5.01 <sup>2</sup>	48,000	340	3,100	1,300	7,600
11/09/09	523.42	12.78	510.64	0.00	0.00	18,000	290	560	22	3,100
02/22/10	523.42	12.13	511.29	0.00	0.00	14,000	190	590	310	1,400
<b>05/24/10</b>	<b>523.42</b>	<b>12.38</b>	<b>511.04</b>	<b>0.00</b>	<b>0.00</b>	<b>17,000</b>	<b>150</b>	<b>530</b>	<b>320</b>	<b>1,400</b>
<b>MW-13</b>										
07/23/09 <sup>1</sup>	523.12	12.75	510.37	0.00	0.00	52,000	760	6,200	980	13,000
11/09/09	523.12	12.51	510.61	0.00	0.00	12,000	340	1,300	16	1,700
02/22/10	523.12	11.87	511.25	0.00	0.00	13,000	630	600	22	960
<b>05/24/10</b>	<b>523.12</b>	<b>12.10</b>	<b>511.02</b>	<b>0.00</b>	<b>0.00</b>	<b>15,000</b>	<b>950</b>	<b>670</b>	<b>130</b>	<b>790</b>

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Texaco Service Station #211253  
930 Springtown Boulevard  
Livermore, California

<b>WELL ID/ DATE</b>	<b>TOC* (ft.)</b>	<b>DTW (ft.)</b>	<b>GWE (msl)</b>	<b>SPHT (ft.)</b>	<b>SPH REMOVED (gallons)</b>	<b>TPH-GRO (µg/L)</b>	<b>B (µg/L)</b>	<b>T (µg/L)</b>	<b>E (µg/L)</b>	<b>X (µg/L)</b>
<b>MW-14</b>										
07/23/09 <sup>1</sup>	520.88	10.40	510.48	0.00	0.00	8,400	230	460	180	670
11/09/09	520.88	10.11	510.77	0.00	0.00	23,000	1,800	1,900	750	2,600
02/22/10	520.88	9.37	511.51	0.00	0.00	48,000	3,600	7,900	2,100	9,400
<b>05/24/10</b>	<b>520.88</b>	<b>9.88</b>	<b>511.25**</b>	<b>0.31</b>	<b>0.00</b>	<b>NOT SAMPLED DUE TO THE PRESENCE OF SPH</b>				<b>--</b>
<b>MW-15</b>										
07/23/09 <sup>1</sup>	520.87	10.33	510.54	0.00	0.00	2,500	6	17	16	320
11/09/09	520.87	10.18	510.69	0.00	0.00	20,000	110	590	370	4,900
02/22/10	520.87	9.48	511.39	0.00	0.00	66	<0.5	3	1	6
<b>05/24/10</b>	<b>520.87</b>	<b>9.83</b>	<b>511.04</b>	<b>0.00</b>	<b>0.00</b>	<b>70</b>	<b>1</b>	<b>8</b>	<b>1</b>	<b>8</b>
<b>MW-16</b>										
07/23/09 <sup>1</sup>	520.50	10.63	509.87	0.00	0.00	430	0.6	<0.5	<0.5	<0.5
11/09/09	520.50	10.31	510.19	0.00	0.00	180	<0.5	<0.5	<0.5	<0.5
02/22/10	520.50	9.63	510.87	0.00	0.00	<50	<0.5	<0.5	<0.5	<0.5
<b>05/24/10</b>	<b>520.50</b>	<b>9.88</b>	<b>510.62</b>	<b>0.00</b>	<b>0.00</b>	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>
<b>QA</b>										
07/23/09	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5
11/09/09	--	--	--	--	--	<50	<0.5	1 <sup>4</sup>	<0.5	<0.5
02/22/10	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5
<b>05/24/10</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>



**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Former Texaco Service Station #211253  
930 Springtown Boulevard  
Livermore, California

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**EXPLANATIONS:**

TOC = Top of Casing  
(ft.) = Feet

DTW = Depth to Water

GWE = Groundwater Elevation

SPHT = Separate Phase Hydrocarbon Thickness

(msl) = Mean Sea Level

TPH = Total Petroleum Hydrocarbons

GRO = Gasoline Range Organics

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

-- = Not Measured/Not Analyzed

QA = Quality Assurance/Trip Blank

(µg/L) = Micrograms per liter

\* TOC elevations were surveyed on July 22, 2009, by Morrow Surveying. Vertical datum is NAVD 88 from GPS Observations.

\*\* GWE has been corrected due to the presence of SPH; correction factor: [(TOC - DTW) + (SPHT x 0.80)].

**ANALYTICAL METHODS:**

TPH-GRO analyzed by EPA Method 8015

BTEX analyzed by EPA Method 8260

<sup>1</sup> Well development performed.

<sup>2</sup> Product + water removed.

<sup>3</sup> The Laboratory report indicates the result reported for toluene in this sample may be attributed to trace amounts of toluene recently found in HCl preserved vials from the manufacturer. The trip blank associated with this sample had a trace toluene detection of 1 ug/l. Please refer to the letter accompanying the lab report for further explanation.

<sup>4</sup> The Laboratory report indicates the result reported for toluene in this trip blank may be attributed to trace amounts of toluene recently found in HCl preserved vials from the manufacturer. Please refer to the letter accompanying the lab report for further explanation.