Carryl MacLeod
Project Manager, Marketing Business Unit

April 25, 2017

RECEIVED
By Alameda County Environmental Health 1:54 pm, May 01, 2017

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

Re: Former Texaco Station (Chevron 307233)
2259 First Street
Livermore, California
ACEHS Case RO0002908

I accept the First Semi-Annual 2017 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 Semi-Annual 2017 Groundwater Monitoring and Sampling Report was prepared by GHD Services, Inc., upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,

Carryl MacLeod
Project Manager

Attachment: First Semi-Annual 2017 Groundwater Monitoring and Sampling Report

Chevron Environmental Management Company
6001 Bollinger Canyon Road, San Ramon, CA 94583
Tel 925 842 3201
CarrylMacLeod@chevron.com

May 1, 2017 Reference No. 312264

Ms. Kitt Soo
Alameda County Environmental Health Services (ACEH)
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577s

Re: First Semi-Annual 2017 - Groundwater Monitoring and Sampling Report
Former Texaco Station (Chevron 307233)
2259 First Street
Livermore, California
ACEHS Case RO0002908

Dear Ms. Soo:

GHD is submitting this *First Semi-Annual 2017 Groundwater Monitoring and Sampling Report* for the site referenced above (Figure 1) on behalf of Chevron Environmental Management Company (CEMC). 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.

1. Results of First Semi-Annual 2017 Event

On March 9, 2017, G-R gauged and sampled the site wells per the established schedule.

Results of the current monitoring event indicate the following:

Shallow Groundwater Flow Direction	West-Northwest
Shallow Hydraulic Gradient	0.14
Deep Groundwater Flow Direction	West-Northwest
Deep Hydraulic Gradient	0.01
Depth to Water - Shallow	12.98 to 22.10 feet below grade
Depth to Water - Deep	12.73 to 14.18 feet below grade

GHD
10969 Trade Center Drive Suite 107 Rancho Cordova California 95670 USA
T 916 889 8900 F 916 889 8999 W www.ghd.com

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

Table A: Groundwater Analytical Data – March 9, 2017

Well ID	TPHd*	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes
ESLs	100	100	1	40	13	20
Deep Zone						
MW-1	<110 / <110	<100	<1	<1	<1	<1
MW-2	<110 / <110	<100	<1	<1	<1	<1
MW-3	<110 / <110	<100	<1	<1	<1	<1
MW-4	**820** / **230**	**3,000**	**6**	<5	8	5
MW-5	**1,200** / <100	<100	<1	<1	<1	<1
MW-6	**140** / <110	**740**	**41**	<1	<1	<1
Shallow Zone						
MW-7	**11,000 / 6,600**	**8,500**	**610**	11	**190**	**120**
MW-8	**1,900** / **1,000**	**3,900**	**18**	2	0.5 J	0.7 J
MW-9	<100 / <100	<100	<1	<1	<1	<1
MW-10	**330** / **110 J**	**2,700**	<5	<5	<5	<5
MW-11	<110 / <110	<100	<1	<1	<1	<1
MW-12	**430** / 78 J	**2,100**	1	<1	0.6 J	<1

µg/L Units in micrograms per liter
ESL Environmental Screening Levels, San Francisco Bay Regional Water Quality Control Board, Tier 1, February 2016
NA Not Analyzed
J Estimated Value
BOLD Concentrations exceed ESLs
* Analyzed with silica gel cleanup / Analyzed with 10-gram column silica gel cleanup with capric acid reverse surrogate

2. Conclusions and Recommendations

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

- Dissolved TPHd, TPHg, and to a lesser extent benzene, are the primary constituents of concern at the site.
- Analytical results in the shallow zone are consistent with historical results which indicate a declining or stable trend.
- No measurable LNAPL was reported in any of the wells sampled during the current event.
- Hydrocarbon concentrations in deep zone wells are consistent with historical results and continue to decline or are stable. Dissolved hydrocarbons in the deep zone are defined downgradient by well MW-2.
- Groundwater elevations have risen in the shallow and deep zones from over 10 feet to over 20 feet since the previous monitoring event.

3. Anticipated Future Activities

G-R will conduct semi-annual monitoring and sampling of site wells during the second half of 2017. GHD will submit a groundwater monitoring and sampling report.

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

Sincerely,

GHD

Brian Silva

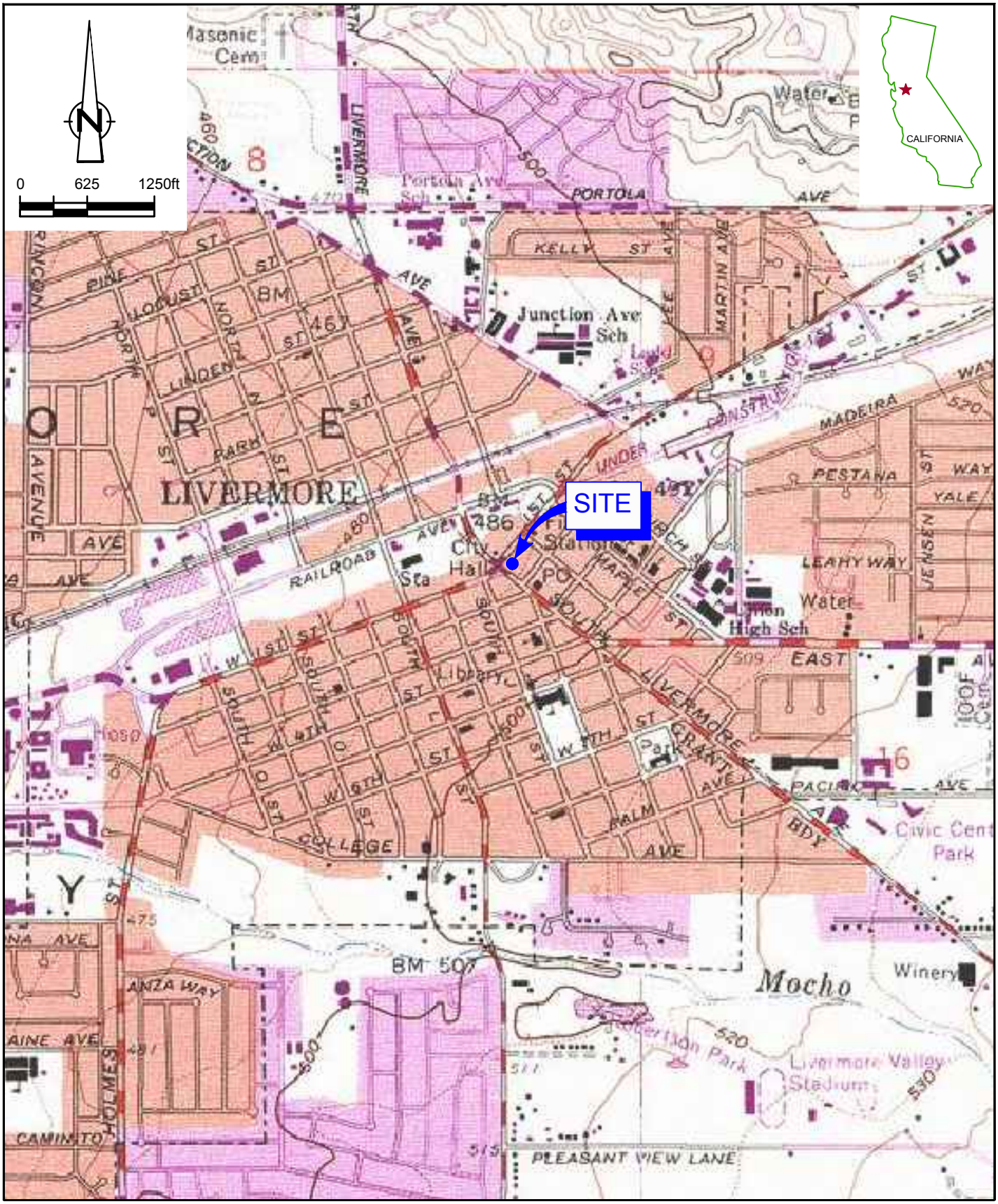
Greg Barclay, PG 6260

BS/cw/43
Encl.

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

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

Figures



SOURCE: TOPO! MAPS

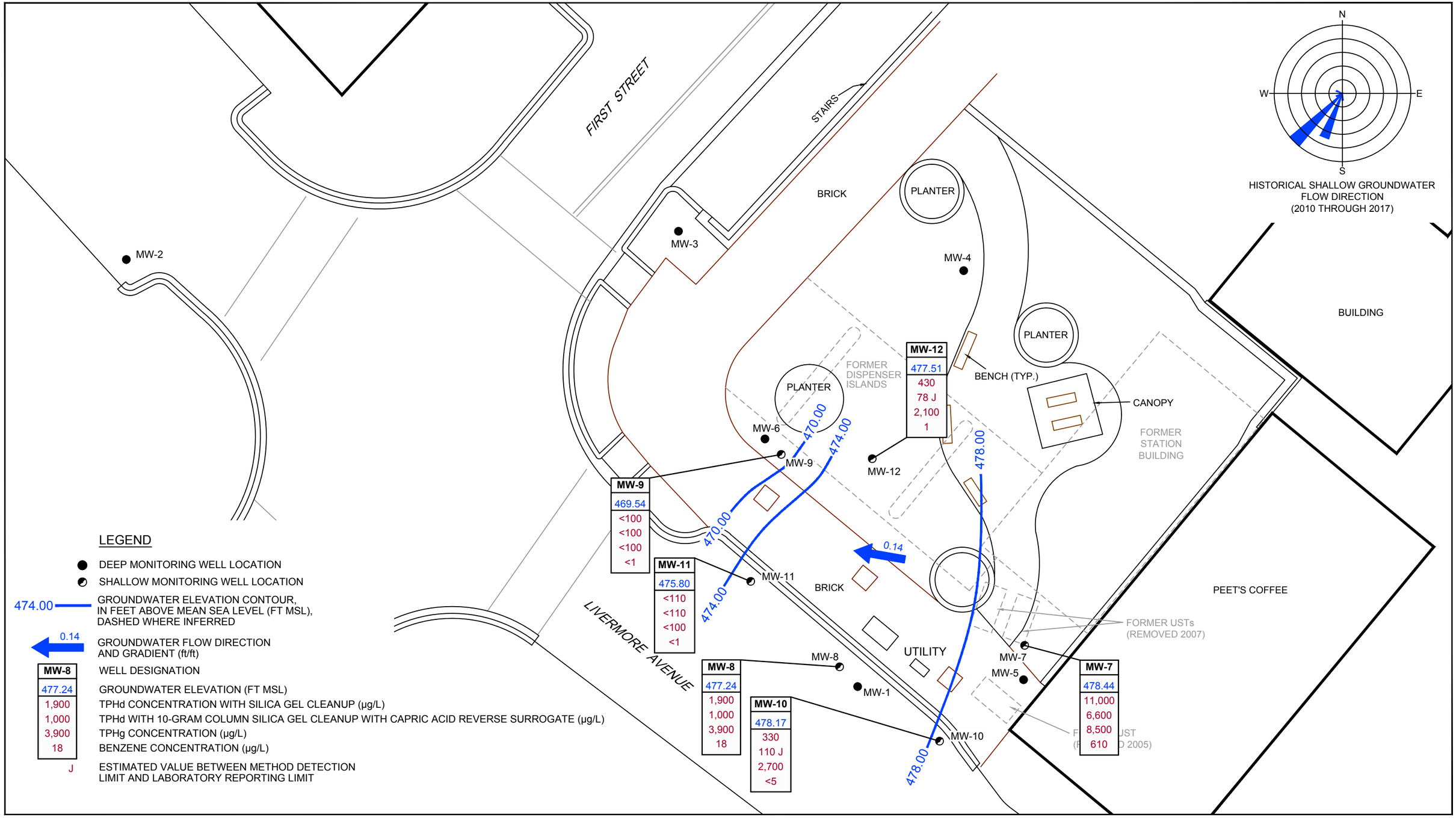
FORMER TEXACO STATION (CHEVRON STATION 307233)
2259 FIRST STREET
LIVERMORE, CALIFORNIA

312264-95
Mar 31, 2017

VICINITY MAP

FIGURE 1

CAD File: P:\drawings\312000s\312264\312264-REPORTS\312264-95(043)\312264-95(043)GN\312264-95(043)GN-WA001.DWG



BASE MAP MODIFIED BY DRAWING FROM MORROW SURVEYING.

0 10 20ft

FORMER TEXACO STATION (CHEVRON STATION 307233)
2259 FIRST STREET
LIVERMORE, CALIFORNIA

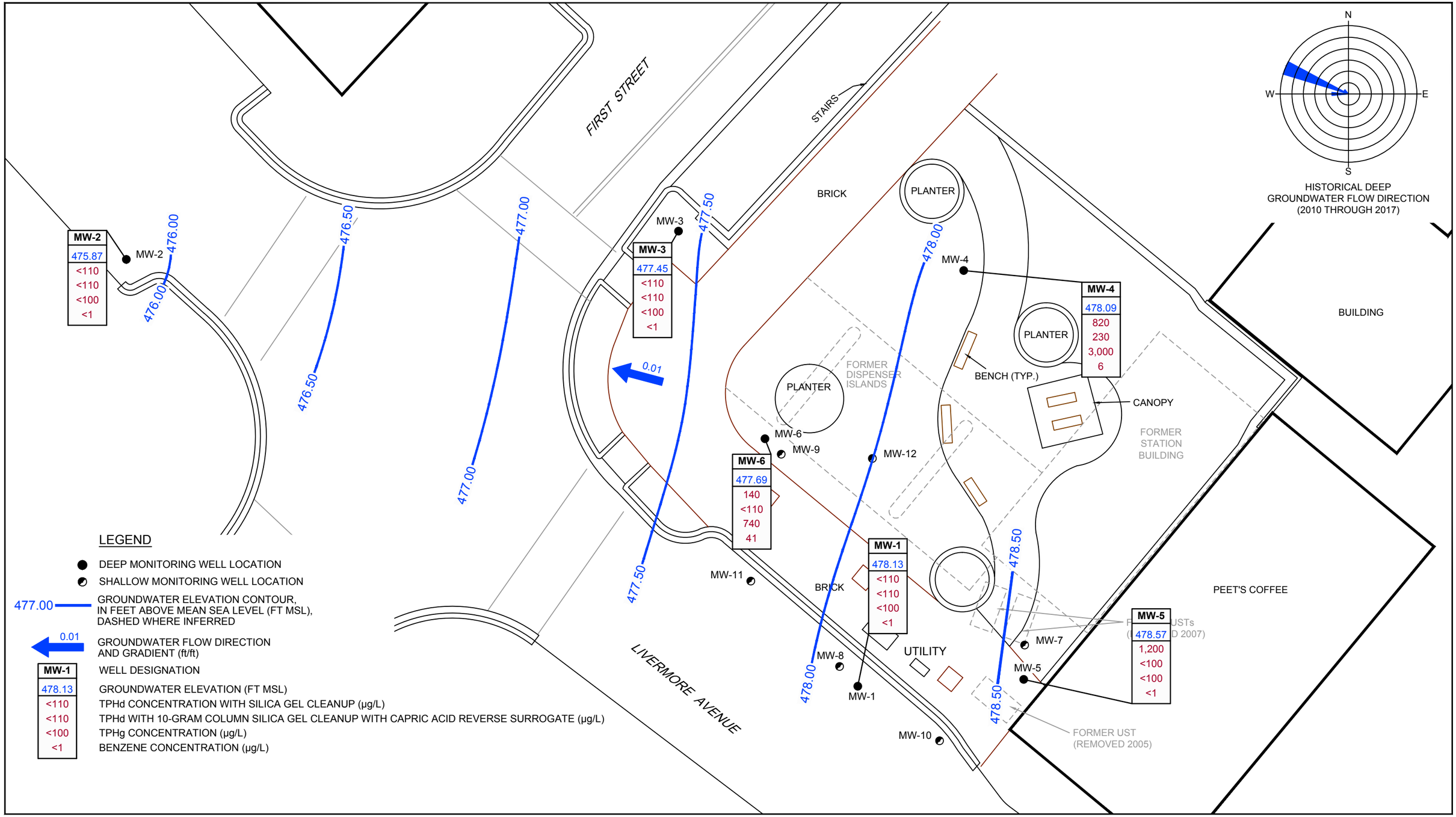
SHALLOW-ZONE GROUNDWATER ELEVATION CONTOUR AND HYDROCARBON CONCENTRATION MAP - MARCH 9, 2017

312264-95

Apr 17, 2017

FIGURE 2

CAD File: P:\drawings\312000s\312264\312264-REPORTS\312264-95(043)\312264-95(043)GN\312264-95(043)GN-WA002.DWG



LEGEND

- DEEP MONITORING WELL LOCATION
- SHALLOW MONITORING WELL LOCATION
- 477.00 — GROUNDWATER ELEVATION CONTOUR, IN FEET ABOVE MEAN SEA LEVEL (FT MSL), DASHED WHERE INFERRED
- 0.01 — GROUNDWATER FLOW DIRECTION AND GRADIENT (ft/ft)

MW-1	
478.13	GROUNDWATER ELEVATION (FT MSL)
<110	TPHd CONCENTRATION WITH SILICA GEL CLEANUP (µg/L)
<110	TPHd WITH 10-GRAM COLUMN SILICA GEL CLEANUP WITH CAPRIC ACID REVERSE SURROGATE (µg/L)
<100	TPHg CONCENTRATION (µg/L)
<1	BENZENE CONCENTRATION (µg/L)

WELL DESIGNATION

BASE MAP MODIFIED BY DRAWING FROM MORROW SURVEYING.

0 10 20ft

FORMER TEXACO STATION (CHEVRON STATION 307233)
2259 FIRST STREET
LIVERMORE, CALIFORNIA

DEEP-ZONE GROUNDWATER ELEVATION CONTOUR AND HYDROCARBON CONCENTRATION MAP - MARCH 9, 2017

312264-95
Apr 17, 2017

FIGURE 3

CAD File: P:\drawings\312000s\312264\312264-REPORTS\312264-95(043)\312264-95(043)GN\312264-95(043)GN-WA003.DWG

Table

Table 1

Groundwater Monitoring and Sampling Data
Former Texaco Station (Chevron 307233)
2259 First Street
Livermore, California

							HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY							
Location	Date	TOC	DTW	GWE	LNAPL T	LNAPL REMOVED	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	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	09/09/2013[4]	490.86	34.08	456.78	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-1	12/09/2013[7]	490.86	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	03/27/2014[4]	490.86	35.48	455.38	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-1	06/19/2014[7]	490.86	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	09/11/2014	490.86	51.68	439.18	0.00	0.00	-	57 J / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-1	03/24/2015[4]	490.86	41.07	449.79	0.00	0.00	-	270 / 73 J	370	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-1	09/24/2015[4]	490.86	52.82	438.04	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-1	03/10/2016[4]	490.86	41.22	449.64	0.00	0.00	<50	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-1	11/10/2016[4]	490.86	35.83	455.03	0.00	0.00	-	<110 / <110	<100	<1	<1	<1	<1	-	-	-	-	-	-	-	-
MW-1	**03/09/2017[4]**	**490.86**	**12.73**	**478.13**	**0.00**	**0.00**	**-**	**<110 / <110**	**<100**	**<1**	**<1**	**<1**	**<1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
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	-	-	-	-	-	-	-	-

Table 1

Groundwater Monitoring and Sampling Data
Former Texaco Station (Chevron 307233)
2259 First Street
Livermore, California

							HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY							
Location	Date	TOC	DTW	GWE	LNAPL T	LNAPL REMOVED	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
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	-	-	-	-	-	-	-	-
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	09/09/2013[4]	489.43	34.76	454.67	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-2	12/09/2013[7]	489.43	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	03/27/2014[4]	489.43	35.84	453.59	0.00	0.00	-	91 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-2	06/19/2014[7]	489.43	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	09/11/2014	489.43	52.06	437.37	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-2	03/24/2015[4]	489.43	41.58	447.85	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-2	09/24/2015[4]	489.43	53.17	436.26	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-2	03/10/2016[4]	489.43	41.75	447.68	0.00	0.00	170	96 J / 100	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-2	11/10/2016[4]	489.43	36.33	453.10	0.00	0.00	-	86 J / <100	<100	<1	<1	<1	<1	-	-	-	-	-	-	-	-
MW-2	**03/09/2017[4]**	**489.43**	**13.56**	**475.87**	**0.00**	**0.00**	**-**	**<110 / <110**	**<100**	**<1**	**<1**	**<1**	**<1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
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	-	-	-	-

Table 1

Groundwater Monitoring and Sampling Data
Former Texaco Station (Chevron 307233)
2259 First Street
Livermore, California

							HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY							
Location	Date	TOC	DTW	GWE	LNAPL T	LNAPL REMOVED	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
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	09/09/2013[4]	490.38	34.38	456.00	0.00	0.00	-	250 / 170	910	50	1	0.7	2	-	-	-	-	-	-	-	-
MW-3	12/09/2013[7]	490.38	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	03/27/2014[4]	490.38	35.68	454.70	0.00	0.00	-	660 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-3	06/19/2014[7]	490.38	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	09/11/2014	490.38	51.88	438.50	0.00	0.00	-	250 / 110	1,500	26	1	0.8 J	2	-	-	-	-	-	-	-	-
MW-3	03/24/2015[4]	490.38	41.33	449.05	0.00	0.00	-	2,700 / 1,600	2,100	1	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-3	09/24/2015[4]	490.38	53.11	437.27	0.00	0.00	-	74 J / <50	77 J	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-3	03/10/2016[4]	490.38	41.48	448.90	0.00	0.00	700	260 / 170	770	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-3	11/10/2016[4]	490.38	36.11	454.27	0.00	0.00	-	160 / <110	<100	<1	<1	<1	<1	-	-	-	-	-	-	-	-
MW-3	**03/09/2017[4]**	**490.38**	**12.93**	**477.45**	**0.00**	**0.00**	**-**	**<110 / <110**	**<100**	**<1**	**<1**	**<1**	**<1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
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	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-

Table 1

Groundwater Monitoring and Sampling Data
Former Texaco Station (Chevron 307233)
2259 First Street
Livermore, California

							HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY							
Location	Date	TOC	DTW	GWE	LNAPL T	LNAPL REMOVED	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
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	09/09/2013[4]	492.27	35.67	456.60	0.00	0.00	-	76 / 65	190	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-4	12/09/2013[7]	492.27	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	03/27/2014[4]	492.27	37.05	455.22	0.00	0.00	-	750 / 530	3,000	2	0.8	4	3	-	-	-	-	-	-	-	-
MW-4	06/19/2014[7]	492.27	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	09/11/2014	492.27	53.21	439.06	0.00	0.00	-	760 / 400	2,700	4	2	5	6	-	-	-	-	-	-	-	-
MW-4	03/24/2015[4]	492.27	42.63	449.64	0.00	0.00	-	950 / 510	3,000	4	2	9	6	-	-	-	-	-	-	-	-
MW-4	09/24/2015[4]	492.27	54.30	437.97	0.00	0.00	-	900 / 490	3,500	9	3	8	8	-	-	-	-	-	-	-	-
MW-4	03/10/2016[4]	492.27	42.80	449.47	0.00	0.00	860	550 / 330	3,900	5	1	5	4	-	-	-	-	-	-	-	-
MW-4	11/10/2016	492.27	37.43	454.84	0.00	0.00	-	330	2,400	3	0.7 J	0.9 J	2	-	-	-	-	-	-	-	-
MW-4	**03/09/2017[4]**	**492.27**	**14.18**	**478.09**	**0.00**	**0.00**	**-**	**820 / 230**	**3,000**	**6**	**<5**	**8**	**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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-

Table 1

Groundwater Monitoring and Sampling Data
Former Texaco Station (Chevron 307233)
2259 First Street
Livermore, California

							HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY							
Location	Date	TOC	DTW	GWE	LNAPL T	LNAPL REMOVED	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
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	09/09/2013[4]	491.99	34.79	457.20	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	12/09/2013[7]	491.99	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/27/2014[4]	491.99	36.18	455.81	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	06/19/2014[7]	491.99	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/11/2014	491.99	52.40	439.59	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	03/24/2015[4]	491.99	41.77	450.22	0.00	0.00	-	72 J / <50	170	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	09/24/2015[4]	491.99	53.48	438.51	0.00	0.00	-	<50 / <50	72 J	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	03/10/2016[4]	491.99	41.97	450.02	0.00	0.00	<50	<50 / <50	58 J	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-5	11/10/2016[4]	491.99	36.58	455.41	0.00	0.00	-	<100 / <100	<100	<1	<1	<1	<1	-	-	-	-	-	-	-	-
MW-5	**03/09/2017[4]**	**491.99**	**13.42**	**478.57**	**0.00**	**0.00**	**-**	**1,200 / <100**	**<100**	**<1**	**<1**	**<1**	**<1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 1

Groundwater Monitoring and Sampling Data
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2259 First Street
Livermore, California

							HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY							
Location	Date	TOC	DTW	GWE	LNAPL T	LNAPL REMOVED	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-6	09/09/2013[4]	491.52	35.22	456.30	0.00	0.00	-	120 / 66	110	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-6	12/09/2013[7]	491.52	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/27/2014[4]	491.52	36.58	454.94	0.00	0.00	-	160 / 160	870	<0.5	<0.5	0.6	<0.5	-	-	-	-	-	-	-	-
MW-6	06/19/2014[7]	491.52	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/11/2014	491.52	52.72	438.80	0.00	0.00	-	1600 / 990	1,700	17	0.9 J	0.9 J	0.9 J	-	-	-	-	-	-	-	-
MW-6	03/24/2015[4]	491.52	42.17	449.35	0.00	0.00	-	380 / 230	1,600	4	<0.5	1	0.7 J	-	-	-	-	-	-	-	-
MW-6	09/24/2015[4]	491.52	53.84	437.68	0.00	0.00	-	440 / 240	1,800	18	2	2	6	-	-	-	-	-	-	-	-
MW-6	03/10/2016[4]	491.52	42.32	449.20	0.00	0.00	330	480 / 300	1,300	3	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-6	11/10/2016[4]	491.52	36.95	454.57	0.00	0.00	-	240 / <100	1,200	3	<1	<1	<1	-	-	-	-	-	-	-	-
MW-6	**03/09/2017[4]**	**491.52**	**13.83**	**477.69**	**0.00**	**0.00**	**-**	**140 / <110**	**740**	**41**	**<1**	**<1**	**<1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
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	-	-	-	-	-	-	-	-
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-7	12/09/2013[4,8,9]	492.29	31.78	460.51	0.00	0.00	-	94,000 / 82,000	17,000	2,600	22	400	220	-	-	-	-	-	-	-	-

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Livermore, California

							HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY							
Location	Date	TOC	DTW	GWE	LNAPL T	LNAPL REMOVED	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-7	03/27/2014[4,8,9]	492.29	30.05	462.24	0.00	0.00	-	43,000 / 42,000	18,000	2,900	56	440	250	-	72,000	300	9,500	540,000	-	11,000	100,000
MW-7	06/19/2014[5, 9]	492.29	32.40	459.89	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/11/2014[5, 9]	492.29	32.40	459.89	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/24/2015[3,9]	492.29	31.92	460.37	0.02	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/24/2015[5,9]	492.29	32.40	459.89	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/10/2016[9,4]	492.29	30.28	462.01	0.00	0.00	7,600	11,000 / 8,300	14,000	1,500	26	190	53	-	-	-	-	-	-	-	-
MW-7	11/10/2016[5,9]	492.29	32.09	460.20	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-7	**03/09/2017[4]**	**492.29**	**13.85**	**478.44**	**0.00**	**0.00**	**-**	**11,000 / 6,600**	**8,500**	**610**	**11**	**190**	**120**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	09/09/2013[4]	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-8	12/09/2013[4]	490.89	33.82	457.07	0.00	0.00	-	19,000 / 13,000	6,800	1	0.7	3	0.9	-	<1,500	220	3,200	219,000	-	2,400	22,000
MW-8	03/27/2014[4]	490.89	35.58	455.31	0.00	0.00	-	34,000 / 38,000	6,500	1	1	15	2	-	<1,500	240	9,600	185,000	-	3,400	31,900
MW-8	06/19/2014[5]	490.89	38.52	452.37	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/11/2014[5]	490.89	38.51	452.38	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 1

Groundwater Monitoring and Sampling Data
Former Texaco Station (Chevron 307233)
2259 First Street
Livermore, California

							HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY							
Location	Date	TOC	DTW	GWE	LNAPL T	LNAPL REMOVED	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-8	03/24/2015[5]	490.89	38.35	452.54	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/24/2015[5]	490.89	38.55	452.34	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/10/2016[5]	490.89	38.37	452.52	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	11/10/2016[4]	490.89	36.18	454.71	0.00	0.00	-	35,000 / 22,000	11,000	0.6 J	0.6 J	0.6 J	0.8 J	-	-	-	-	-	-	-	-
MW-8	**03/09/2017[4]**	**490.89**	**13.65**	**477.24**	**0.00**	**0.00**	**-**	**1,900 / 1,000**	**3,900**	**18**	**2**	**0.5 J**	**0.7 J**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
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	09/09/2013[4]	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-9	12/09/2013[4]	491.64	34.81	456.83	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	118,000	<54	<10	299,000	-	<3.0	61,800
MW-9	03/27/2014[4]	491.64	32.99	458.65	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	110,000	<54	82	303,000	-	9.2	132,000
MW-9	06/19/2014[5]	491.64	38.81	452.83	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-9	09/11/2014[11]	491.64	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-9	03/24/2015[4]	491.64	37.14	454.50	0.00	0.00	-	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-9	09/24/2015[11]	491.64	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-9	3/10/2016[4]	491.64	37.49	454.15	0.00	0.00	<50	<50 / <50	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-

Table 1

Groundwater Monitoring and Sampling Data
Former Texaco Station (Chevron 307233)
2259 First Street
Livermore, California

							HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY							
Location	Date	TOC	DTW	GWE	LNAPL T	LNAPL REMOVED	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-9	11/10/2016[4]	491.64	35.43	456.21	0.00	0.00	-	<100 / <100	<100	<1	<1	<1	<1	-	-	-	-	-	-	-	-
MW-9	**03/09/2017[4]**	**491.64**	**22.10**	**469.54**	**0.00**	**0.00**	**-**	**<100 / <100**	**<100**	**<1**	**<1**	**<1**	**<1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	09/09/2013[5]	491.15	31.88	459.27	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	12/09/2013[4]	491.15	28.18	462.97	0.00	0.00	-	5,100 / 3,400	6,500	0.8	2	49	17	-	6,000	180	2,900	255,000	-	2,500	24,800
MW-10	03/27/2014[4]	491.15	26.85	464.30	0.00	0.00	-	2,500 / 2,400	3,200	<0.5	<0.5	12	3	-	8,300	120	2,200	216,000	-	3,000	23,600
MW-10	06/19/2014[5]	491.15	31.89	459.26	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	09/11/2014[5]	491.15	32.04	459.11	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	03/24/2015[5]	491.15	31.46	459.69	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	09/24/2015[11]	491.15	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	3/10/2016[4]	491.15	26.47	464.68	0.00	0.00	240	110 / 53 J	1,200	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
MW-10	11/10/2016[4]	491.15	28.93	462.22	0.00	0.00	-	28,000 / 21,000	3,900	1	1	3	5	-	-	-	-	-	-	-	-
MW-10	**03/09/2017[4]**	**491.15**	**12.98**	**478.17**	**0.00**	**0.00**	**-**	**330 / 110 J**	**2,700**	**<5**	**<5**	**<5**	**<5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
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	-

Table 1

Groundwater Monitoring and Sampling Data
Former Texaco Station (Chevron 307233)
2259 First Street
Livermore, California

							HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY							
Location	Date	TOC	DTW	GWE	LNAPL T	LNAPL REMOVED	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-11	09/09/2013[5]	490.59	34.13	456.46	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	12/09/2013[4]	490.59	31.38	459.21	0.00	0.00	-	220 / <50	100	<0.5	<0.5	<0.5	<0.5	-	72,100	<54	230	284,000	-	210	43,900
MW-11	03/27/2014[4]	490.59	31.05	459.54	0.00	0.00	-	230 / 77	<50	<0.5	<0.5	<0.5	<0.5	-	47,600	<54	280	262,000	-	34	36,200
MW-11	06/19/2014[5]	490.59	34.23	456.36	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	09/11/2014[5]	490.59	34.22	456.37	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	03/24/2015[5]	490.59	34.05	456.54	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	09/24/2015[5]	490.59	34.35	456.24	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	03/10/2016[5]	490.59	34.25	456.34	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	11/10/2016[5]	490.59	34.18	456.41	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	**03/09/2017[5]**	**490.59**	**14.79**	**475.80**	**0.00**	**0.00**	**-**	**<110 / <110**	**<100**	**<1**	**<1**	**<1**	**<1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
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	09/09/2013[4]	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
MW-12	12/09/2013[4]	493.72	24.68	469.04	0.00	0.00	-	670 / 260	2,500	19	3	2	1	-	14,900	<54	880	577,000	-	890	70,800
MW-12	03/27/2014[4]	493.72	24.82	468.90	0.00	0.00	-	1,000 / 230	2,100	5	2	1	2	-	3,100	<54	4,300	580,000	-	780	71,800
MW-12	06/19/2014[4]	493.72	28.09	465.63	0.00	0.00	-	1,000 / 260	3,000	23	2	18	13	-	-	-	-	-	-	-	-
MW-12	09/11/2014[4]	493.72	31.53	462.19	0.00	0.00	-	640 / 240	2,400	14	1	6	4	-	-	-	-	-	-	-	-
MW-12	03/24/2015[4]	493.72	29.88	463.84	0.00	0.00	-	720 / 240	1,300	9	0.8 J	1	2	-	-	-	-	-	-	-	-
MW-12	09/24/2015[4]	493.72	29.92	463.80	0.00	0.00	-	640 / 190	2,800	10	1	1	2	-	-	-	-	-	-	-	-
MW-12	03/10/2016[4]	493.72	26.73	466.99	0.00	0.00	670	490 / 160	2,400	5	0.6 J	0.9 J	0.9 J	-	-	-	-	-	-	-	-
MW-12	11/10/2016[4]	493.72	27.03	466.69	0.00	0.00	-	480 / 210	2,400	0.7 J	<1	0.7 J	<1	-	-	-	-	-	-	-	-
MW-12	**03/09/2017[4]**	**493.72**	**16.21**	**477.51**	**0.00**	**0.00**	**-**	**430 / 78 J**	**2,100**	**1**	**<1**	**0.6 J**	**<1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Table 1

Groundwater Monitoring and Sampling Data
Former Texaco Station (Chevron 307233)
2259 First Street
Livermore, California

							HYDROCARBONS			PRIMARY VOCS				GENERAL CHEMISTRY							
Location	Date	TOC	DTW	GWE	LNAPL T	LNAPL REMOVED	TPH-DRO	TPH-DRO w/ Si Gel	TPH-GRO	B	T	E	X	Nitrate Nitrogen	Sulfate	Total sulfide (dissolved)	Ferrous Iron	Alkalinity, total (as CaCO3)	Alkalinity, phenolphthalein	Methane	Calcium
	Units	ft	ft	ft-amsl	ft	gal	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
QA	05/27/2010	-	-	-			-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	09/13/2010	-	-	-			-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	12/20/2010	-	-	-			-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	03/07/2011	-	-	-			-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	06/06/2011	-	-	-			-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	06/22/2011	-	-	-			-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	09/19/2011	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	03/12/2012	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-
QA	12/09/2013	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	03/27/2014	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	06/19/2014	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	09/11/2014	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	03/24/2015	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	09/24/2015	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	03/10/2016	-	-	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-
QA	11/10/2016	-	-	-	-	-	-	-	<100	<1	<1	<1	<1	-	-	-	-	-	-	-	-
QA	**03/09/2017**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**<100**	**<1**	**<1**	**<1**	**<1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

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

Table 1

Groundwater Monitoring and Sampling Data
Former Texaco Station (Chevron 307233)
2259 First Street
Livermore, California

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

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

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

J = Estimated value; the result is ≥ the method detection limit (MDL) and < limit of quantitation (LOQ)

1 Well development performed.

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

3 Monitored only due to the presence of NAPL.

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

5 Insufficient water to sample.

6 Sulfate canister in well

7 Monitoring and sampled during the first and third quarters only

8 Insufficient water for purging, so a grab-groundwater sample was collected

9 Skimmer in well

10 Monitored only

11 Dry Well

Attachment A
Groundwater Monitoring and Sampling Data Package

GETTLER-RYAN INC.

TRANSMITTAL

March 15, 2017
G-R #17155876

TO: Mr. Brian Silva
GHD
10969 Trade Center Drive, Suite 107
Rancho Cordova, California 95670

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6805 Sierra Court, Suite G
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 **First Semi-Annual Event of March 9, 2017**

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.

6805 Sierra Court, Suite G • Dublin, CA 94568 • (925) 551-7555 • Fax (925) 551-7888
1050 Riverside Parkway, Suite 115, West Sacramento, CA 95605 • (916) 851-1830 • Fax (916) 851-1536

WELL CONDITION STATUS SHEET

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

Job #: **17155876**
Event Date: 3-9-17
Sampler: ML

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retaped	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/N	REPLACE CAP Y/N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y/N
MW-3	OK	→	→	→	→	→	→	N	N	~~Emco/8"/2~~ Morrison 6"/2	
MW-4	OK	→	→	2-B	OK	→	→	↓	↓	Morrison/6"/2	
MW-5	OK	→	R-2	OK	→	→	→	↓	↓	Emco/12"/2	
MW-6	OK	→	→	2-B	OK	→	→	↓	↓	Morrison/6"/2	
MW-9	OK	→	→	2-B	OK	→	→	↓	↓	" "	
MW-12	OK	→	→	1-B	OK	→	→	↓	↓	Universal/8"/2	

Comments

WELL CONDITION STATUS SHEET

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

Job #: 17155876
Event Date: 3.9.17
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=Retaped	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y (N)	REPLACE CAP Y (N)	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y (N)
MW-1	OK									EMCO/12"/2	
MW-2	OK									" " "	
MW-7	OK			S2I	OK					MORRISON/6"/2	
MW-8	OK									EMCO/12"/2	
MW-10	OK									8" BOX/2	
MW-11	OK			B2I	OK					UNIVERSAL/8"/2	

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. Total well depths are measured annually.

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 #307233 | Job Number: 17155876
Site Address: 2259 First Street | Event Date: 3.9.17 (inclusive)
City: Livermore, CA | Sampler: FT

Well ID: MW-1 | Date Monitored: 3.9.17
Well Diameter: 2 in.
Total Depth: 58.87 ft.
Depth to Water: 12.73 ft.

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

☐ Check if water column is less then 0.50 ft.

46.14 xVF .17 = 7.84 x3 case volume = Estimated Purge Volume: 24.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.95

Purge Equipment:		Sampling Equipment:	
Disposable Bailer		Disposable Bailer	✓
Stainless Steel Bailer	✓	Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		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: ltr
Amt Removed from Well: ltr
Water Removed: ltr

Start Time (purge): 0950 | Weather Conditions: SUNNY
Sample Time/Date: 1012 / 3.9.17 | Water Color: CLEAR Odor: Y / (N)
Approx. Flow Rate: ≈2.0 gpm. | Sediment Description: NONE
Did well de-water? NO | If yes, Time: ____ Volume: ____ gal. DTW @ Sampling: 13.05

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0954	8.0	7.65	864	19.4		
0958	16.0	7.61	871	19.5		
1002	24.0	7.59	880	20.3	✓	✓

LABORATORY INFORMATION

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

COMMENTS: EVACO 12" OL

Add/Replaced Gasket: ____ Add/Replaced Bolt: ____ Add/Replaced Lock: ____ Add/Replaced Plug: ____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 | Job Number: 17155876
Site Address: 2259 First Street | Event Date: 3.9.17 (inclusive)
City: Livermore, CA | Sampler: FT

Well ID: MW-2 | Date Monitored: 3.9.17
Well Diameter: 2 in.
Total Depth: 58.69 ft.
Depth to Water: 13.56 ft.

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

☐ Check if water column is less then 0.50 ft.

45.13 xVF .17 = 7.67 x3 case volume = Estimated Purge Volume: 23.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 22.58

Purge Equipment:
- Disposable Bailer: ____
- Stainless Steel Bailer: ____
- Stack Pump: ✓
- 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: ____ ltr
Amt Removed from Well: ____ ltr
Water Removed: ____ ltr

Start Time (purge): 0905 | Weather Conditions: Sunny
Sample Time/Date: 0930 / 3.9.17 | Water Color: Clear | Odor: Y / (N)
Approx. Flow Rate: ≈2.0 gpm. | Sediment Description: None
Did well de-water? No | If yes, Time: ____ | Volume: ____ gal. | DTW @ Sampling: 14.60

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0909	8.0	7.69	804	19.5		
0913	16.0	7.65	813	19.9		
0917	23.0	7.61	821	20.2		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	6 x voa vial	YES	HCL	EUROFINS	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	EUROFINS	TPH-DRO w/sgc COLUMN/TPH-DRO w/sgc(8015)

COMMENTS: Enco 12" DL

Add/Replaced Gasket: ____ Add/Replaced Bolt: ____ Add/Replaced Lock: ____ Add/Replaced Plug: ____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 | Job Number: 17155876
Site Address: 2259 First Street | Event Date: 3-9-17 (inclusive)
City: Livermore, CA | Sampler: ML

Well ID: MW-3 | Date Monitored: 3-9-17
Well Diameter: 2 in.
Total Depth: 59.41 ft.
Depth to Water: 12.93 ft.

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

☐ Check if water column is less then 0.50 ft.

46.48 xVF 1.7 = 7.9 x3 case volume = Estimated Purge Volume: 23.7 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 22.22

Purge Equipment:

Disposable Bailer	
Stainless Steel Bailer	
Stack Pump	X
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

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

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

Start Time (purge): 0955 | Weather Conditions: Sunny
Sample Time/Date: 1030 / 3-9-17 | Water Color: Cloudy | Odor: Y / (N)
Approx. Flow Rate: 2 gpm. | Sediment Description: light
Did well de-water? No | If yes, Time: _____ | Volume: _____ gal. | DTW @ Sampling: 16.89

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0959	8	6.82	713	17.6		
1003	16	6.85	730	18.0		
1007	24	6.91	726	18.2		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	6 x voa vial	YES	HCL	EUROFINS	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	EUROFINS	TPH-DRO w/sgc COLUMN/TPH-DRO w/sgc(8015)

COMMENTS: _____

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: **Chevron #307233** Job Number: **17155876**
Site Address: **2259 First Street** Event Date: 3-9-17 (inclusive)
City: **Livermore, CA** Sampler: ML

Well ID **MW- 4**
Well Diameter **2** in.
Total Depth 58.93 ft.
Depth to Water 14.18 ft.
44.75 xVF .17 = 7.6 x3 case volume = Estimated Purge Volume: 22.8 gal.
Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 23.13

Date Monitored: 3-9-17

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

☐ Check if water column is less then 0.50 ft.

Purge Equipment:		Sampling Equipment:	
Disposable Bailer		Disposable Bailer	X
Stainless Steel Bailer		Pressure Bailer	
Stack Pump	X	Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		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: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 1050 Weather Conditions: Sunny
Sample Time/Date: 1120 / 3-9-17 Water Color: Cloudy Odor: Y / N STRONG
Approx. Flow Rate: 2 gpm. Sediment Description: light
Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 17.18

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1054	8	6.76	791	17.0		
1058	16	6.85	802	17.2		
1102	24	6.87	805	17.5		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 4	6 x voa vial	YES	HCL	EUROFINS	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	EUROFINS	TPH-DRO w/sgc COLUMN/TPH-DRO w/sgc(8015)

COMMENTS: _____

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #307233** Job Number: **17155876**

Site Address: **2259 First Street** Event Date: 3-9-17 (inclusive)

City: **Livermore, CA** Sampler: ML

Well ID **MW-5** Date Monitored: 3-9-17

Well Diameter **2** in.

Total Depth 59.92 ft.

Depth to Water 13.42 ft.

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

☐ Check if water column is less then 0.50 ft.

46.50 xVF 17 = 7.9 x3 case volume = Estimated Purge Volume: 23.7 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 22.72

Purge Equipment:		**Sampling Equipment:**	
Disposable Bailer		Disposable Bailer	X
Stainless Steel Bailer		Pressure Bailer	
Stack Pump	X	Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		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: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 0725 Weather Conditions: Sunny

Sample Time/Date: 0755 / 3-9-17 Water Color: cloudy Odor: Y (N)

Approx. Flow Rate: 2 gpm. Sediment Description: light

Did well de-water? no If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 16.19

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0729	8	7.16	840	14.5		
0733	16	7.24	856	15.1		
0737	24	7.26	851	15.3		

LABORATORY INFORMATION

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

COMMENTS: _____

Add/Replaced Gasket: _____ Add/Replaced Bolt: 2 Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 17155876
Site Address: 2259 First Street Event Date: 3-9-17 (inclusive)
City: Livermore, CA Sampler: ML

Well ID MW-6 Date Monitored: 3-9-17
Well Diameter 2 in.
Total Depth 59.01 ft.
Depth to Water 13.83 ft.

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

☐ Check if water column is less then 0.50 ft.

45.18 xVF .17 = 7.6 x3 case volume = Estimated Purge Volume: 22.8 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 22.86

Purge Equipment:
Disposable Bailer
Stainless Steel Bailer
Stack Pump X
Peristaltic Pump
QED Bladder Pump
Other:

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

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

Start Time (purge): 0815 Weather Conditions: Sunny
Sample Time/Date: 0845 / 3-9-17 Water Color: Cloudy Odor: (Y) (N) Light
Approx. Flow Rate: 2 gpm. Sediment Description: Light
Did well de-water? No If yes, Time: Volume: gal. DTW @ Sampling: 17.16

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0819	8	6.91	872	16.4		
0823	16	6.99	860	16.9		
0827	24	7.10	863	17.2		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	6 x voa vial	YES	HCL	EUROFINS	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	EUROFINS	TPH-DRO w/sgc COLUMN/TPH-DRO w/sgc(8015)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 17155876
Site Address: 2259 First Street Event Date: 3.9.17 (inclusive)
City: Livermore, CA Sampler: FT

Well ID MW-7 Date Monitored: 3.9.17
Well Diameter 2 in.
Total Depth 32.68 ft.
Depth to Water 13.85 ft.

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

☐ Check if water column is less then 0.50 ft.

18.83 xVF .17 = 3.20 x3 case volume = Estimated Purge Volume: 10.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 17.61

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		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: ltr
Amt Removed from Well: ltr
Water Removed: ltr

Start Time (purge): 0815 Weather Conditions: SUNNY
Sample Time/Date: 0845 / 3.9.17 Water Color: CLEAR Odor: (Y) / N STRONG
Approx. Flow Rate: ✓ gpm. Sediment Description: NONE
Did well de-water? No If yes, Time: Volume: gal. DTW @ Sampling: 15.26

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0822	3.5	7.21	856	18.9		
0829	7.0	7.19	863	19.1		
0835	10.0	7.16	871	19.5	✓	✓

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-7	6 x voa vial	YES	HCL	EUROFINS	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	EUROFINS	TPH-DRO w/sgc COLUMN/TPH-DRO w/sgc(8015)

COMMENTS: MORRISON 6" (15F)

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 17155876
Site Address: 2259 First Street Event Date: 3.9.17 (inclusive)
City: Livermore, CA Sampler: FT

Well ID MW-8 Date Monitored: 3.9.17
Well Diameter 2 in.
Total Depth 38.64 ft.
Depth to Water 13.65 ft.

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

☐ Check if water column is less then 0.50 ft.

29.99 xVF .17 = 4.24 x3 case volume = Estimated Purge Volume: 13.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 18.64

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		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: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 1200 Weather Conditions: SUNNY
Sample Time/Date: 1240 / 3.9.17 Water Color: CLEAR Odor: (Y) / N STRONG
Approx. Flow Rate: _____ gpm. Sediment Description: NONE
Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 14.03

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS) mS µmhos/cm)	Temperature (C) / F)	D.O. (mg/L)	ORP (mV)
1208	4.0	7.35	650	20.4		
1216	8.0	7.31	661	20.7		
1226	13.0	7.27	672	21.0	✓	✓

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW- 8	6 x voa vial	YES	HCL	EUROFINS	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	EUROFINS	TPH-DRO w/sgc COLUMN/TPH-DRO w/sgc(8015)

COMMENTS: SHEEN PRESENT IN H2O
EMLC 12" OIL

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 17155876
Site Address: 2259 First Street Event Date: 3-9-17 (inclusive)
City: Livermore, CA Sampler: ML

Well ID MW-9 Date Monitored: 3-9-17
Well Diameter 2 in.
Total Depth 39.85 ft.
Depth to Water 22.10 ft.

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

☐ Check if water column is less then 0.50 ft.

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 25.65

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	X	Disposable Bailer	X
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		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: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 0900 Weather Conditions: Sunny
Sample Time/Date: 0935 13-9-17 Water Color: Light Brown Odor: Y / (N)
Approx. Flow Rate: - gpm. Sediment Description: light
Did well de-water? No If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 23.91

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS) mS umhos/cm	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0908	3	6.81	1245	16.6		
0916	6	6.90	1256	17.0		
0923	9	6.93	1252	17.1		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-9	6 x voa vial	YES	HCL	EUROFINS	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	EUROFINS	TPH-DRO w/sgc COLUMN/TPH-DRO w/sgc(8015)

COMMENTS: _____

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #307233 Job Number: 17155876
Site Address: 2259 First Street Event Date: 3.9.17 (inclusive)
City: Livermore, CA Sampler: FT

Well ID MW-10 Date Monitored: 3.9.17
Well Diameter 2 in.
Total Depth 32.40 ft.
Depth to Water 12.98 ft.

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

☐ Check if water column is less then 0.50 ft.

19.42 xVF .17 = 3.30 x3 case volume = Estimated Purge Volume: 10.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 16.86

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		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: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 1030 Weather Conditions: SUNNY
Sample Time/Date: 1100 / 3.9.17 Water Color: CLEAR Odor: Y / N SLIGHT
Approx. Flow Rate: ~ gpm. Sediment Description: NONE
Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 14.68

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1037	3.5	7.38	705	20.0		
1044	7.0	7.41	715	20.3		
1050	10.0	7.44	721	20.9		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-10	6 x voa vial	YES	HCL	EUROFINS	TPH-GRO(8015)/BTEX(8260)
	2 x 500ml ambers	YES	NP	EUROFINS	TPH-DRO w/sgc COLUMN/TPH-DRO w/sgc(8015)

COMMENTS: 8" Box OK

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #307233 | Job Number: 17155876
Site Address: 2259 First Street | Event Date: 3.9.17 (inclusive)
City: Livermore, CA | Sampler: FT

Well ID: MW-11 | Date Monitored: 3.9.17
Well Diameter: 2 in.
Total Depth: 34.75 ft.
Depth to Water: 14.79 ft.

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

☐ Check if water column is less then 0.50 ft.

19.96 xVF .17 = 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]: 18.78

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		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: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 1115 | Weather Conditions: Sunny
Sample Time/Date: 1145 / 3.9.17 | Water Color: CLEAR | Odor: Y / N | SLIGHT
Approx. Flow Rate: / gpm. | Sediment Description: NONE
Did well de-water? NO | If yes, Time: _____ | Volume: _____ gal. | DTW @ Sampling: 16.35

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1122	3.5	7.43	789	20.1		
1129	7.0	7.46	796	20.4		
1135	10.0	7.48	802	20.8		

LABORATORY INFORMATION

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

COMMENTS: UNIVERSAL 8" (2BF)

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #307233 | Job Number: 17155876
Site Address: 2259 First Street | Event Date: 3-9-17 (inclusive)
City: Livermore, CA | Sampler: ML

Well ID: MW-12 | Date Monitored: 3-9-17
Well Diameter: 2 in.
Total Depth: 34.55 ft.
Depth to Water: 16.21 ft.

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

☐ Check if water column is less then 0.50 ft.

18.34 xVF .17 = 3.1 x3 case volume = Estimated Purge Volume: 9.3 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.87

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	X	Disposable Bailer	X
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		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: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 1135 | Weather Conditions: Sunny
Sample Time/Date: 1210 13-9-17 | Water Color: Cloudy | Odor: (Y) / N light
Approx. Flow Rate: ~ gpm. | Sediment Description: light
Did well de-water? No | If yes, Time: _____ Volume: _____ gal. | DTW @ Sampling: 17.69

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1143	3	7.16	1568	17.8		
1150	6	7.22	1549	18.1		
1158	9.5	7.24	1552	18.4		

LABORATORY INFORMATION

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

COMMENTS: _____

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

Chevron California Region Analysis Request/Chain of Custody

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596

Ø3Ø917-Ø3

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Acct. # _____ Group # _____ Sample # _____

Instructions on reverse side correspond with circled numbers.

1052

SCR #: _____

Client Information

Facility # SS#307233-OML G-R#17155876 Global ID#T0600196622 WBS

Site Address 2259 FIRST STREET, LIVERMORE, CA

Chevron PM CM GHDSB Lead Consultant Stiva

Consultant/Office Getter-Ryan Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568

Consultant Project Mgr. Deanna L. Harding, deanna@grinc.com

Consultant Phone # (925) 551-7444 x180

Sampler MIKE L. Frank T.

Matrix

Soil ☐ Sediment ☐ Water ☒ Ground ☐ Potable ☐ NPDES ☐ Surface ☐ Oil ☐ Air ☐

Analyses Requested

Sample Identification	Soil Depth	Collected Date	Collected Time	Grab	Composite	Total Number of Containers	BTEX + 8260	8021	TPH-GRO 8260	8015	TPH-DRO 8015 without Silica Gel Cleanup	TPH-DRO 8015 with Silica Gel Cleanup	8260 Full Scan	Oxygenates	Total Lead Method	Dissolved Lead Method	TPH-DRO w/sgc
QA		170309		X		2	X		X								
MW-1			1012	X		8	X		X			X					X
MW-2			0930	X		8	X		X			X					X
MW-3			1030	X		8	X		X			X					X
MW-4			1120	X		8	X		X			X					X
MW-5			0755	X		8	X		X			X					X
MW-6			0845	X		8	X		X			X					X
MW-7			0845	X		8	X		X			X					X
MW-8			1240	X		8	X		X			X					X
MW-9			0935	X		8	X		X			X					X

- ☐ 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

Remarks

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

03MAR17 1525

Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | 24 hour

Data Package (circle if required) EDF/EDD

Type I - Full | Type VI (Raw Data)

EDD (circle if required)

EDFFLAT (default) | Other: _____

Relinquished by	Date	Time	Received by	Date	Time
[signature]	17.3.9		[signature]	03MAR17	1525

Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____

Temperature Upon Receipt _____ °C

Custody Seals Intact? Yes No

Chevron California Region Analysis Request/Chain of Custody

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#30917-03

For Eurofins Lancaster Laboratories Environmental use only

Acct. # _____ Group # _____ Sample # _____

Instructions on reverse side correspond with circled numbers.

2 of 2

SCR #: _____

Client Information

Facility # SS#307233-OML G-R#17155876 WBS Global ID#T0600196622

Site Address 2259 FIRST STREET, LIVERMORE, CA

Chevron PM CM

Lead Consultant Stliva

GHDSB

Consultant/Office Getter-Ryan Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568

Consultant Project Mgr. Deanna L. Harding, deanna@grinc.com

Consultant Phone # (925) 551-7444 x180

Sampler Mike L. Frank T

Matrix

Soil ☐ Sediment ☐ Water ☒ Ground ☐ Potable ☐ Surface ☐ NPDES ☐ Oil ☐ Air ☐

Analyses Requested

Sample Identification	Soil Depth	Collected Date	Collected Time	Grab	Composite	Total Number of Containers	BTEX + 8260 ☒ 8021 ☐	TPH-GRO 8260 ☐ 8015 ☒	TPH-DRO 8015 without Silica Gel Cleanup ☐	TPH-DRO 8015 with Silica Gel Cleanup ☒	8260 Full Scan	Oxygenates ____	Total Lead Method ____	Dissolved Lead Method ____	TPH-DRO w/sgc
MW-10		170309	1100	X		8	X	X		X					X
MW-11			1145	X		8	X	X		X					X
MW-12			1210	X		8	X	X		X					X

- ☐ 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

Remarks

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

Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | 24 hour

Data Package (circle if required) **EDF/EDD**

Type I - Full | Type VI (Raw Data)

EDD (circle if required)

EDFFLAT (default) | Other: _____

Relinquished by	Date	Time	Received by	Date	Time
	17.3.9		A. Mahyar	03MAR17	1525

Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____

Received by _____ Date 03MAR17 Time 1525

Temperature Upon Receipt _____ °C

Custody Seals Intact? Yes No

The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

Attachment B
Laboratory Analytical Report

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Analysis Report

REVISED

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

Report Date: March 28, 2017

Project: 307233

Submittal Date: 03/10/2017
Group Number: 1775506
PO Number: 0015235605
Release Number: CMACLEOD
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
QA-T-170309 NA Water	8878333
MW-1-W-170309 Grab Groundwater	8878334
MW-1-W-170309 Grab Groundwater	8878335
MW-2-W-170309 Grab Groundwater	8878336
MW-2-W-170309 Grab Groundwater	8878337
MW-3-W-170309 Grab Groundwater	8878338
MW-3-W-170309 Grab Groundwater	8878339
MW-4-W-170309 Grab Groundwater	8878340
MW-4-W-170309 Grab Groundwater	8878341
MW-5-W-170309 Grab Groundwater	8878342
MW-5-W-170309 Grab Groundwater	8878343
MW-6-W-170309 Grab Groundwater	8878344
MW-6-W-170309 Grab Groundwater	8878345
MW-7-W-170309 Grab Groundwater	8878346
MW-7-W-170309 Grab Groundwater	8878347
MW-8-W-170309 Grab Groundwater	8878348
MW-8-W-170309 Grab Groundwater	8878349
MW-9-W-170309 Grab Groundwater	8878350
MW-9-W-170309 Grab Groundwater	8878351
MW-10-W-170309 Grab Groundwater	8878352
MW-10-W-170309 Grab Groundwater	8878353
MW-11-W-170309 Grab Groundwater	8878354
MW-11-W-170309 Grab Groundwater	8878355
MW-12-W-170309 Grab Groundwater	8878356
MW-12-W-170309 Grab Groundwater	8878357

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

REVISED

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ . To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To	GHD	Attn: Brian Silva
Electronic Copy To	GHD	Attn: Anna Avina
Electronic Copy To	GHD	Attn: Report Contact
Electronic Copy To	Gettler-Ryan Inc.	Attn: Gettler Ryan

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

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Analysis Report

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Sample Description: QA-T-170309 NA Water
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878333
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSLQA

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	ug/l	
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
GC Volatiles	**SW-846 8015B**		ug/l	ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1

Sample Comments

CA ELAP Lab Certification No. 2792

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
10945	BTEX 8260B Water	SW-846 8260B	1	F170795AA	03/20/2017 21:27	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170795AA	03/20/2017 21:27	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17075B20A	03/16/2017 13:14	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	17075B20A	03/16/2017 13:14	Brett W Kenyon	1

*=This limit was used in the evaluation of the final result

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Analysis Report

REVISED

Sample Description: MW-1-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878334
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 10:12 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL01

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	110	1

The reverse surrogate, capric acid, is present at <1%.

Sample Comments

CA ELAP Lab Certification No. 2792

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
10945	BTEX 8260B Water	SW-846 8260B	1	F170795AA	03/20/2017 21:49	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170795AA	03/20/2017 21:49	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17075B20A	03/16/2017 15:03	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	17075B20A	03/16/2017 15:03	Brett W Kenyon	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	170740021A	03/21/2017 00:01	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740021A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

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Analysis Report

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Sample Description: MW-1-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878335
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 10:12 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL-1

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	110	1

Sample Comments

CA ELAP Lab Certification No. 2792

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	2	170740022A	03/17/2017 02:17	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740022A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: MW-2-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878336
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 09:30 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL02

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	110	1

The reverse surrogate, capric acid, is present at <1%.

Sample Comments

CA ELAP Lab Certification No. 2792

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
10945	BTEX 8260B Water	SW-846 8260B	1	F170796AA	03/21/2017 01:59	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170796AA	03/21/2017 01:59	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17075B20A	03/16/2017 15:30	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	17075B20A	03/16/2017 15:30	Brett W Kenyon	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	170740021A	03/21/2017 00:23	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740021A	03/16/2017 09:00	Nadia Bernabe	1

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Analysis Report

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Sample Description: MW-2-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878337
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 09:30 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL-2

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	110	1

Sample Comments

CA ELAP Lab Certification No. 2792

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	2	170740022A	03/17/2017 02:39	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740022A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: MW-3-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878338
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 10:30 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL03

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	110	1

The reverse surrogate, capric acid, is present at <1%.

Sample Comments

CA ELAP Lab Certification No. 2792

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
10945	BTEX 8260B Water	SW-846 8260B	1	F170796AA	03/21/2017 06:33	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170796AA	03/21/2017 06:33	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17079B20A	03/20/2017 13:44	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	17079B20A	03/20/2017 13:44	Brett W Kenyon	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	170740021A	03/21/2017 00:45	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740021A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: MW-3-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878339
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 10:30 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL-3

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	110	1

Sample Comments

CA ELAP Lab Certification No. 2792

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	2	170740022A	03/17/2017 03:00	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740022A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: MW-4-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878340
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 11:20 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10945	Benzene	71-43-2	6	3	5	5
10945	Ethylbenzene	100-41-4	8	3	5	5
10945	Toluene	108-88-3	N.D.	3	5	5
10945	Xylene (Total)	1330-20-7	5	3	5	5
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	3,000	500	1,000	10
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	230	50	100	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.
The reverse surrogate, capric acid, is present at <1%.

Sample Comments

CA ELAP Lab Certification No. 2792

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
10945	BTEX 8260B Water	SW-846 8260B	1	F170796AA	03/21/2017 04:10	Hu Yang	5
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170796AA	03/21/2017 04:10	Hu Yang	5
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17079B20A	03/20/2017 20:34	Brett W Kenyon	10
01146	GC VOA Water Prep	SW-846 5030B	1	17079B20A	03/20/2017 20:34	Brett W Kenyon	10
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	170740021A	03/21/2017 01:07	Thomas C Wildermuth	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740021A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

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Analysis Report

REVISED

Sample Description: MW-4-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878341
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 11:20 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL-4

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	820	50	100	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Sufficient sample was not available to repeat the analysis.

Sample Comments

CA ELAP Lab Certification No. 2792

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	170740022A	03/17/2017 03:22	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740022A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: MW-5-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878342
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 07:55 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	100	1

The reverse surrogate, capric acid, is present at <1%.

Sample Comments

CA ELAP Lab Certification No. 2792

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
10945	BTEX 8260B Water	SW-846 8260B	1	F170796AA	03/21/2017 02:21	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170796AA	03/21/2017 02:21	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17075B53A	03/16/2017 15:30	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	17075B53A	03/16/2017 15:30	Brett W Kenyon	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	170740021A	03/21/2017 01:28	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740021A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: MW-5-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878343
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 07:55 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL-5

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	1,200	50	100	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Sufficient sample was not available to repeat the analysis.

Sample Comments

CA ELAP Lab Certification No. 2792

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	170740022A	03/17/2017 03:44	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740022A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: MW-6-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878344
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 08:45 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL06

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10945	Benzene	71-43-2	41	0.5	1	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	740	50	100	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	110	1

The reverse surrogate, capric acid, is present at <1%.

Sample Comments

CA ELAP Lab Certification No. 2792

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
10945	BTEX 8260B Water	SW-846 8260B	1	F170796AA	03/21/2017 02:42	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170796AA	03/21/2017 02:42	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17075B53A	03/16/2017 15:58	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	17075B53A	03/16/2017 15:58	Brett W Kenyon	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	170740021A	03/21/2017 01:50	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740021A	03/16/2017 09:00	Nadia Bernabe	1

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Analysis Report

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Sample Description: MW-6-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878345
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 08:45 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL-6

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	140	50	110	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Sufficient sample was not available to repeat the analysis.

Sample Comments

CA ELAP Lab Certification No. 2792

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	170740022A	03/17/2017 04:06	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740022A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: MW-7-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878346
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 08:45 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL07

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10945	Benzene	71-43-2	610	5	10	10
10945	Ethylbenzene	100-41-4	190	5	10	10
10945	Toluene	108-88-3	11	5	10	10
10945	Xylene (Total)	1330-20-7	120	5	10	10
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	8,500	2,500	5,000	50
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	6,600	50	110	1
	The reverse surrogate, capric acid, is present at <1%.					

Sample Comments

CA ELAP Lab Certification No. 2792

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
10945	BTEX 8260B Water	SW-846 8260B	1	F170796AA	03/21/2017 04:32	Hu Yang	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170796AA	03/21/2017 04:32	Hu Yang	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17075B53A	03/16/2017 19:13	Brett W Kenyon	50
01146	GC VOA Water Prep	SW-846 5030B	1	17075B53A	03/16/2017 19:13	Brett W Kenyon	50
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	170740021A	03/21/2017 02:55	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740021A	03/16/2017 09:00	Nadia Bernabe	1

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Analysis Report

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Sample Description: MW-7-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878347
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 08:45 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL-7

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	11,000	50	110	1

Sample Comments

CA ELAP Lab Certification No. 2792

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	2	170740022A	03/18/2017 03:45	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740022A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: MW-8-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878348
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 12:40 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL08

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	18		0.5	1	1
10945	Ethylbenzene	100-41-4	0.5	J	0.5	1	1
10945	Toluene	108-88-3	2		0.5	1	1
10945	Xylene (Total)	1330-20-7	0.7	J	0.5	1	1
GC Volatiles	**SW-846 8015B**		**ug/l**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	3,900		250	500	5
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	1,000		50	110	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.
The reverse surrogate, capric acid, is present at <1%.

Sample Comments

CA ELAP Lab Certification No. 2792

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
10945	BTEX 8260B Water	SW-846 8260B	1	F170796AA	03/21/2017 03:04	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170796AA	03/21/2017 03:04	Hu Yang	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17075B53A	03/16/2017 19:41	Brett W Kenyon	5
01146	GC VOA Water Prep	SW-846 5030B	1	17075B53A	03/16/2017 19:41	Brett W Kenyon	5
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	170740021A	03/21/2017 03:17	Thomas C Wildermuth	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740021A	03/16/2017 09:00	Nadia Bernabe	1

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Analysis Report

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Sample Description: MW-8-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878349
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 12:40 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL-8

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		ug/l	ug/l	ug/l	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	1,900	50	110	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Sufficient sample was not available to repeat the analysis.

Sample Comments

CA ELAP Lab Certification No. 2792

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	170740022A	03/18/2017 01:58	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740022A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: MW-9-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878350
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 09:35 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL09

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	100	1

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.
The reverse surrogate, capric acid, is present at <1%.

Sample Comments

CA ELAP Lab Certification No. 2792

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
10945	BTEX 8260B Water	SW-846 8260B	1	F170802AA	03/21/2017 08:38	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170802AA	03/21/2017 08:38	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17075B53A	03/16/2017 16:26	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	17075B53A	03/16/2017 16:26	Brett W Kenyon	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	170740021A	03/21/2017 03:39	Thomas C Wildermuth	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740021A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

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Analysis Report

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Sample Description: MW-9-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878351
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 09:35 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL-9

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	100	1

Sample Comments

CA ELAP Lab Certification No. 2792

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	2	170740022A	03/18/2017 02:19	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740022A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: MW-10-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878352
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 11:00 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL10

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	3	5	5
10945	Ethylbenzene	100-41-4	N.D.	3	5	5
10945	Toluene	108-88-3	N.D.	3	5	5
10945	Xylene (Total)	1330-20-7	N.D.	3	5	5
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	2,700	50	100	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	110 J	50	110	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.
The reverse surrogate, capric acid, is present at <1%.

Sample Comments

CA ELAP Lab Certification No. 2792

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
10945	BTEX 8260B Water	SW-846 8260B	1	F170801AA	03/21/2017 09:56	Anita M Dale	5
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170801AA	03/21/2017 09:56	Anita M Dale	5
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17079B20A	03/20/2017 14:11	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	17079B20A	03/20/2017 14:11	Brett W Kenyon	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	170740021A	03/21/2017 04:00	Thomas C Wildermuth	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740021A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: MW-10-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878353
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 11:00 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FS-10

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	330	50	110	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Sufficient sample was not available to repeat the analysis.

Sample Comments

CA ELAP Lab Certification No. 2792

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	170740022A	03/18/2017 02:40	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740022A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: MW-11-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878354
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 11:45 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL11

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10945	Benzene	71-43-2	N.D.	0.5	1	1
10945	Ethylbenzene	100-41-4	N.D.	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	100	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	110	1

The reverse surrogate, capric acid, is present at <1%.

Sample Comments

CA ELAP Lab Certification No. 2792

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
10945	BTEX 8260B Water	SW-846 8260B	1	F170801AA	03/21/2017 08:51	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170801AA	03/21/2017 08:51	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17075B53A	03/16/2017 17:21	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	17075B53A	03/16/2017 17:21	Brett W Kenyon	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	170740021A	03/21/2017 04:22	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740021A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: MW-11-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878355
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 11:45 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FS-11

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	110	1

Sample Comments

CA ELAP Lab Certification No. 2792

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	2	170740022A	03/18/2017 03:02	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740022A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: MW-12-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878356
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 12:10 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FSL12

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	**ug/l**	
10945	Benzene	71-43-2	1	0.5	1	1
10945	Ethylbenzene	100-41-4	0.6 J	0.5	1	1
10945	Toluene	108-88-3	N.D.	0.5	1	1
10945	Xylene (Total)	1330-20-7	N.D.	0.5	1	1
GC Volatiles	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	2,100	50	100	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**ug/l**	**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	78 J	50	100	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary.
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.
The reverse surrogate, capric acid, is present at <1%.

Sample Comments

CA ELAP Lab Certification No. 2792

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
10945	BTEX 8260B Water	SW-846 8260B	1	F170801AA	03/21/2017 10:18	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F170801AA	03/21/2017 10:18	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	17079B20A	03/20/2017 14:38	Brett W Kenyon	1
01146	GC VOA Water Prep	SW-846 5030B	1	17079B20A	03/20/2017 14:38	Brett W Kenyon	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	170740021A	03/21/2017 04:44	Thomas C Wildermuth	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740021A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

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Analysis Report

REVISED

Sample Description: MW-12-W-170309 Grab Groundwater
Facility# 307233 Job# 17155876 GRD
2259 First St-Livermore T0600196622

LL Sample # WW 8878357
LL Group # 1775506
Account # 10904

Project Name: 307233

Collected: 03/09/2017 12:10 by ML

Submitted: 03/10/2017 10:30
Reported: 03/28/2017 15:02

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

FS-12

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		ug/l	ug/l	ug/l	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	430	50	100	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Sufficient sample was not available to repeat the analysis.

Sample Comments

CA ELAP Lab Certification No. 2792

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	170740022A	03/18/2017 03:23	Amy Lehr	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	170740022A	03/16/2017 09:00	Nadia Bernabe	1

*=This limit was used in the evaluation of the final result

REVISED

Quality Control Summary

Client Name: Chevron
Reported: 03/28/2017 15:02

Group Number: 1775506

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.

Method Blank

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
Batch number: F170795AA	Sample number(s): 8878333-8878334		
Benzene	N.D.	0.5	1
Ethylbenzene	N.D.	0.5	1
Toluene	N.D.	0.5	1
Xylene (Total)	N.D.	0.5	1
Batch number: F170796AA	Sample number(s): 8878336,8878338,8878340,8878342,8878344,8878346,8878348		
Benzene	N.D.	0.5	1
Ethylbenzene	N.D.	0.5	1
Toluene	N.D.	0.5	1
Xylene (Total)	N.D.	0.5	1
Batch number: F170801AA	Sample number(s): 8878352,8878354,8878356		
Benzene	N.D.	0.5	1
Ethylbenzene	N.D.	0.5	1
Toluene	N.D.	0.5	1
Xylene (Total)	N.D.	0.5	1
Batch number: F170802AA	Sample number(s): 8878350		
Benzene	N.D.	0.5	1
Ethylbenzene	N.D.	0.5	1
Toluene	N.D.	0.5	1
Xylene (Total)	N.D.	0.5	1
Batch number: 17075B20A	Sample number(s): 8878333-8878334,8878336		
TPH-GRO N. CA water C6-C12	N.D.	50	100
Batch number: 17075B53A	Sample number(s): 8878342,8878344,8878346,8878348,8878350,8878354		
TPH-GRO N. CA water C6-C12	N.D.	50	100
Batch number: 17079B20A	Sample number(s): 8878338,8878340,8878352,8878356		
TPH-GRO N. CA water C6-C12	N.D.	50	100
Batch number: 170740021A	Sample number(s): 8878334,8878336,8878338,8878340,8878342,8878344,8878346,8878348,8878350,8878352,8878354,8878356		
TPH-DRO CA C10-C28 w/ Si Gel	200	50	100
Batch number: 170740022A	Sample number(s): 8878335,8878337,8878339,8878341,8878343,8878345,8878347,8878349,8878351,8878353,8878355,8878357		
TPH-DRO CA C10-C28 w/ Si Gel	380	50	100

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

REVISED

Quality Control Summary

Client Name: Chevron
Reported: 03/28/2017 15:02

Group Number: 1775506

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: F170795AA	Sample number(s): 8878333-8878334								
Benzene	20	18.47			92		78-120		
Ethylbenzene	20	18.12			91		78-120		
Toluene	20	18.27			91		80-120		
Xylene (Total)	60	54.28			90		80-120		
Batch number: F170796AA	Sample number(s): 8878336,8878338,8878340,8878342,8878344,8878346,8878348								
Benzene	20	18.9			95		78-120		
Ethylbenzene	20	19.18			96		78-120		
Toluene	20	19.35			97		80-120		
Xylene (Total)	60	58.51			98		80-120		
Batch number: F170801AA	Sample number(s): 8878352,8878354,8878356								
Benzene	20	19.47			97		78-120		
Ethylbenzene	20	19.12			96		78-120		
Toluene	20	19.33			97		80-120		
Xylene (Total)	60	57.82			96		80-120		
Batch number: F170802AA	Sample number(s): 8878350								
Benzene	20	19.35			97		78-120		
Ethylbenzene	20	19.32			97		78-120		
Toluene	20	19.9			100		80-120		
Xylene (Total)	60	59.72			100		80-120		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 17075B20A	Sample number(s): 8878333-8878334,8878336								
TPH-GRO N. CA water C6-C12	1100	1089.55	1100	1068.25	99	97	80-120	2	30
Batch number: 17075B53A	Sample number(s): 8878342,8878344,8878346,8878348,8878350,8878354								
TPH-GRO N. CA water C6-C12	1100	1010.62	1100	1000.2	92	91	80-120	1	30
Batch number: 17079B20A	Sample number(s): 8878338,8878340,8878352,8878356								
TPH-GRO N. CA water C6-C12	1100	1045.16	1100	1037.25	95	94	80-120	1	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 170740021A	Sample number(s): 8878334,8878336,8878338,8878340,8878342,8878344,8878346,8878348,8878350,8878352,8878354,8878356								
TPH-DRO CA C10-C28 w/ Si Gel	1600	732.04	1600	900.13	46	56	40-105	21*	20
Batch number: 170740022A	Sample number(s): 8878335,8878337,8878339,8878341,8878343,8878345,8878347,8878349,8878351,8878353,8878355,8878357								
TPH-DRO CA C10-C28 w/ Si Gel	1600	1285.13	1600	1444.15	80	90	40-105	12	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

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Quality Control Summary

Client Name: Chevron
Reported: 03/28/2017 15:02

Group Number: 1775506

MS/MSD

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

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: F170795AA	Sample number(s): 8878333-8878334 UNSPK: P879023									
Benzene	N.D.	20	19.84	20	20.04	99	100	78-120	1	30
Ethylbenzene	N.D.	20	19.71	20	19.76	99	99	78-120	0	30
Toluene	N.D.	20	19.73	20	20.16	99	101	80-120	2	30
Xylene (Total)	N.D.	60	59.06	60	59.45	98	99	80-120	1	30
Batch number: F170796AA	Sample number(s): 8878336,8878338,8878340,8878342,8878344,8878346,8878348 UNSPK: P880636									
Benzene	N.D.	20	19.55	20	19.76	98	99	78-120	1	30
Ethylbenzene	N.D.	20	19.33	20	19.75	97	99	78-120	2	30
Toluene	N.D.	20	19.86	20	20.18	99	101	80-120	2	30
Xylene (Total)	N.D.	60	58.98	60	59.72	98	100	80-120	1	30
Batch number: F170801AA	Sample number(s): 8878352,8878354,8878356 UNSPK: 8878354									
Benzene	N.D.	20	19.72	20	19.95	99	100	78-120	1	30
Ethylbenzene	N.D.	20	19.53	20	19.67	98	98	78-120	1	30
Toluene	N.D.	20	19.78	20	19.57	99	98	80-120	1	30
Xylene (Total)	N.D.	60	58.36	60	58.37	97	97	80-120	0	30
Batch number: F170802AA	Sample number(s): 8878350 UNSPK: 8878350									
Benzene	N.D.	20	19.96	20	19.69	100	98	78-120	1	30
Ethylbenzene	N.D.	20	20.17	20	19.79	101	99	78-120	2	30
Toluene	N.D.	20	20.66	20	20.25	103	101	80-120	2	30
Xylene (Total)	N.D.	60	62.28	60	61.2	104	102	80-120	2	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: BTEX 8260B Water
Batch number: F170795AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8878333	100	99	100	94
8878334	100	100	99	95
Blank	99	100	100	96
LCS	99	102	99	97
MS	100	100	100	97
MSD	99	100	100	97
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX 8260B Water
Batch number: F170796AA

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

REVISED

Quality Control Summary

Client Name: Chevron
Reported: 03/28/2017 15:02

Group Number: 1775506

Surrogate Quality Control (continued)

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

Analysis Name: BTEX 8260B Water
Batch number: F170796AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8878336	100	100	99	95
8878338	101	101	100	95
8878340	100	99	99	97
8878342	100	100	100	94
8878344	97	98	99	100
8878346	99	97	101	98
8878348	98	96	100	113
Blank	100	100	100	96
LCS	99	101	101	99
MS	99	100	99	97
MSD	99	101	100	98
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX 8260B Water
Batch number: F170801AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8878352	99	99	99	95
8878354	101	102	98	93
8878356	98	98	99	113
Blank	100	101	99	95
LCS	100	102	99	97
MS	99	103	100	97
MSD	100	103	99	96
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX 8260B Water
Batch number: F170802AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8878350	101	101	99	94
Blank	100	98	99	93
LCS	98	100	100	98
MS	99	101	99	99
MSD	99	100	100	98
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 17075B20A

	Trifluorotoluene-F
8878333	87
8878334	90
8878336	90
Blank	87

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

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Quality Control Summary

Client Name: Chevron
Reported: 03/28/2017 15:02

Group Number: 1775506

Surrogate Quality Control (continued)

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

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 17075B20A

	Trifluorotoluene-F
LCS	99
LCSD	99
Limits:	63-135

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 17075B53A

	Trifluorotoluene-F
8878342	97
8878344	113
8878346	95
8878348	102
8878350	102
8878354	98
Blank	102
LCS	103
LCSD	102
Limits:	63-135

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 17079B20A

	Trifluorotoluene-F
8878338	83
8878340	96
8878352	118
8878356	131
Blank	87
LCS	96
LCSD	93
Limits:	63-135

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel
Batch number: 170740021A

	Orthoterphenyl
8878334	50
8878336	58
8878338	46
8878340	54
8878342	50
8878344	58
8878346	78
8878348	60
8878350	40*

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

REVISED

Quality Control Summary

Client Name: Chevron
Reported: 03/28/2017 15:02

Group Number: 1775506

Surrogate Quality Control (continued)

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

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel
Batch number: 170740021A

	Orthoterphenyl
8878352	44
8878354	52
8878356	37*
Blank	61
LCS	57
LCSD	70
Limits:	42-126

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel
Batch number: 170740022A

	Orthoterphenyl
8878335	85
8878337	93
8878339	75
8878341	96
8878343	95
8878345	96
8878347	109
8878349	93
8878351	72
8878353	70
8878355	78
8878357	69
Blank	100
LCS	94
LCSD	107
Limits:	42-126

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Chevron California Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 10904 For Eurofins Lancaster Laboratories Environmental use only Group # 1775506 Sample # 8878333-57

Instructions on reverse side correspond with circled numbers.

SCR #:

Client Information

Facility # SS#307233-OML G-R#17155876 WBS Global ID#T0600196622

Site Address 2259 FIRST STREET, LIVERMORE, CA

Chevron PM CM GHDSB Lead Consultant Silva

Consultant/Office Getter-Ryan Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568

Consultant Project Mgr. Deanna L. Harding, deanna@grinc.com

Consultant Phone # (925) 551-7444 x180

Sampler Mike L. Frank T.

Matrix

Soil: Sediment ☐ Soil ☐ Composite ☐

Water: Ground ☒ Potable ☐ NPDES ☐ Surface ☐

Oil ☐ Air ☐

Analyses Requested

Sample Identification	Soil Depth	Collected Date	Collected Time	Grab	Composite	Soil	Water	Oil	Total Number of Containers	BTEX + 8260 ☒ 8021 ☐	TPH-GRO 8260 ☐ 8015 ☒	TPH-DRO 8015 without Silica Gel Cleanup ☐	TPH-DRO 8015 with Silica Gel Cleanup ☒	8260 Full Scan	Oxygenates	Total Lead Method	Dissolved Lead Method	TPH-DRO w/sgc
QA		170309		X			X		2	X	X							
MW-1			1012	X			X		8	X	X		X					X
MW-2			0936	X			X		8	X	X		X					X
MW-3			1030	X			X		8	X	X		X					X
MW-4			1120	X			X		8	X	X		X					X
MW-5			0755	X			X		8	X	X		X					X
MW-6			0845	X			X		8	X	X		X					X
MW-7			0845	X			X		8	X	X		X					X
MW-8			1240	X			X		8	X	X		X					X
MW-9			0935	X			X		8	X	X		X					X

- ☐ 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

Remarks

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

Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | 24 hour

Data Package (circle if required) EDF/EDD

Type I - Full | Type VI (Raw Data)

EDD (circle if required)

EDFFLAT (default) | Other: _____

Relinquished by	Date	Time	Received by	Date	Time
[signature]	17.3.9		[signature]	03MAR17	1525
[signature]	09MAR17	1630	FX		

Relinquished by Commercial Carrier: UPS ____ FedEx ____ Other ____

Received by [signature] Date 3/10/17 Time 1030

Temperature Upon Receipt 0.4-0.9°C

Custody Seals Intact? (Yes) No

The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

Chevron California Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 10904 For Eurofins Lancaster Laboratories Environmental use only Group # 1775506 Sample # 8878333-57
Instructions on reverse side correspond with circled numbers.

Ø3Ø917-Ø3

20 ft

SCR #: _____

Client Information

Facility # SS#307233-OML G-R#17155876 Global ID#T0600196622 WBS

Site Address: 2259 FIRST STREET, LIVERMORE, CA

Chevron PM: CM GHDSB

Lead Consultant: Silva

Consultant/Office: Getter-Ryan Inc., 6805 Sierra Court, Suite G, Dublin, CA 94568

Consultant Project Mgr.: Deanna L. Harding, deanna@grinc.com

Consultant Phone #: (925) 551-7444 x180

Sampler: Mike L. Frank T

Matrix

Soil ☐ Sediment ☐ Water ☒ Ground ☐ Potable ☐ Surface ☐ NPDES ☐ Oil ☐ Air ☐

Analyses Requested

Sample Identification	Soil Depth	Collected Date	Collected Time	Grab	Composite	Total Number of Containers	BTEX + 8260 ☒ / 8021 ☐	TPH-GRO 8260 ☐ / 8015 ☒	TPH-DRO 8015 without Silica Gel Cleanup ☐	TPH-DRO 8015 with Silica Gel Cleanup ☒ (Column)	8260 Full Scan	Oxygenates	Total Lead	Dissolved Lead	TPH-DRO w/sgc
MW-10		170309	1100	X		8	X	X		X					X
MW-11		"	1145	X		8	X	X		X					X
MW-12		"	1210	X		8	X	X		X					X

- ☐ 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

Remarks

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

Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | 24 hour

Data Package (circle if required) **EDF/EDD**

Type I - Full | Type VI (Raw Data)

EDD (circle if required)

EDFFLAT (default) | Other: _____

Relinquished by	Date	Time	Received by	Date	Time
[signature]	17.3.9		[signature]	Ø3MAR17	1525
[signature]	Ø9MAR17	1638	FX		
Relinquished by Commercial Carrier: UPS ____ FedEx ____ Other ____			[signature]	3/10/17	1030

Temperature Upon Receipt 0.4 - 0.9 °C

Custody Seals Intact? Yes / No

The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7050 0316

eurofins | Lancaster Laboratories Environmental

Sample Administration Receipt Documentation Log

Doc Log ID: 177759

Group Number(s): 1775506

Client: Chevron

Delivery and Receipt Information

Delivery Method:	BASC	Arrival Timestamp:	03/10/2017 10:30
Number of Packages:	2	Number of Projects:	1
State/Province of Origin:	CA		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	2
Paperwork Enclosed:	Yes	Trip Blank Type:	HCl
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Tanya Brasch (24906) at 14:27 on 03/10/2017

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	0.4	DT	Wet	Y	Bagged	N
2	DT131	0.9	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425
T 717-656-2300
F 717-656-2681
www.LancasterLabs.cor

Explanation of Symbols and Abbreviations

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

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

< less than

> 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.

Laboratory Data Qualifiers:

C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…
W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) 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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