

By Alameda County Environmental Health at 4:01 pm, Oct 02, 2013



Carryl MacLeod Project Manager Marketing Business Unit

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

September 26, 2013

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

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

I accept the Third Quarter 2013 Groundwater Monitoring and Sampling Report.

I agree with the conclusions and recommendations presented in this document. The information included is accurate to the best of my knowledge, and appears to meet local agency and Regional Board guidelines. This Third Quarter 2013 Groundwater Monitoring and Sampling Report was prepared by Conestoga Rovers & Associates, upon whose assistance and advice I have relied.

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

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

Sincerely,

Carryl MacLeod Project Manager

Attachment: Third Quarter 2013 Groundwater Monitoring and Sampling Report



10969 Trade Center Drive Rancho Cordova, California 95670

Telephone: (916) 889-8900 Fa

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http://www.craworld.com

September 26, 2013

Reference No. 060058

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

Re: Third Quarter 2013

Groundwater Monitoring and Sampling Report

Former Texaco Station 211253 930 Springtown Boulevard Livermore, California ACEH Case RO0189

Dear Mr. Wickham:

Conestoga-Rovers & Associates (CRA) is submitting this *Third Quarter 2013 Groundwater Monitoring and Sampling Report* for the site referenced above (Figure 1) on behalf of Chevron Environmental Management Company (Chevron). Groundwater monitoring and sampling was performed by Gettler-Ryan Inc. (G-R) of Dublin, California and their *Groundwater Monitoring Data Package* is included as Attachment A. Current groundwater monitoring and sampling data are presented in Table 1 and shown on Figures 2 through 4. Eurofins Lancaster Laboratories Environmental, LLC's *Analytical Results* report is included as Attachment B. Historical groundwater monitoring and sampling data are included as Attachment C.

RESULTS OF THIRD QUARTER 2013 EVENT

On July 30, 2013, G-R monitored and sampled wells per the established schedule. Monitoring wells are divided into three zones based on the screen intervals: shallow zone (wells MW-9, MW-11, MW-14, MW-18, MW-19, and MW-20), intermediate zone (wells MW-10, MW-12, MW-13, MW-16, and MW-17), and deep zone (well MW-15). Groundwater elevation and hydrocarbon concentration maps for the three zones are illustrated on Figures 2, 3, and 4, respectively.

Equal Employment Opportunity Employer



September 26, 2013 Reference No. 060058

Results of the current monitoring event indicate the following:

• Groundwater Flow Direction

Shallow (Figure 2)Intermediate (Figure 3)North-NorthwestNorth-Northeast

o Deep Not Applicable (only 1 well)

Approximate Depth to Groundwater

o Shallow Wells 10 to 14 feet below grade (fbg)

Intermediate WellsDeep Well11 to 15 fbg11 fbg

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

TABLE A: GROUNDWATER ANALYTICAL DATA												
Well ID	TPHg (μg/L)	Benzene (µg/L)	Toluene (μg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)							
ESLs	100	1	40	30	20							
		Shalle	w Wells									
MW-9	5,600	6	4	31	77							
MW-11	320	<0.5	<0.5	<0.5	< 0.5							
MW-14	6,500	370	110	140	430							
MW-18	6,400	270	230	440	1,100							
MW-19	<50	<0.5	<0.5	<0.5	<0.5							
MW-20	2,800	<0.5	3	23	17							
		Interme	diate Wells									
MW-10	170	<0.5	<0.5	<0.5	<0.5							
MW-12	9,000	52	190	160	610							
MW-13	2,800	94	19	22	57							
MW-16	<50	<0.5	<0.5	<0.5	<0.5							
MW-17	<50	<0.5	<0.5	<0.5	<0.5							
Deep Well												
MW-15	<50	<0.5	<0.5	<0.5	0.6							
/T 3.6:	111	•	•	•								

μg/L Micrograms per liter

Indicates constituent was not detected at or above stated laboratory reporting limit

ESLs Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final,

November 2007, revised May 2008. – Table F-1a where groundwater is a potential drinking water source

Data in **bold** represent concentrations that exceed applicable ESLs Semi-annual wells are sampled during the first and third quarters



September 26, 2013 Reference No. 060058

CONCLUSIONS AND RECOMMENDATIONS

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

- Based on groundwater elevation data in shallow, intermediate, and deep monitoring wells it appears groundwater monitored at the three depth intervals is hydraulically connected.
- No LNAPL was detected in MW-14 during the third quarter 2013 event.
- With the exception of total xylenes reported near the laboratory detection limit, no hydrocarbons were reported in deep well MW-15.
- Dissolved hydrocarbon concentrations in site wells are generally stable to declining.

On June 15, 2013, CRA removed the sorbent sock from MW-14 as no LNAPL has been observed in well MW-14 since August 2012.

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

If LNAPL is not present during the fourth quarter 2013 event, CRA will compare site conditions to the low-threat closure policy criteria and if appropriate, prepare and submit a Low-Threat Closure Request.

ANTICIPATED FUTURE ACTIVITIES

Groundwater Monitoring

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



September 26, 2013 Reference No. 060058

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

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Greg Barclay, PG 6260

BS/cw/24 Encl.

Brian Silva

Figure 1 Vicinity Map

Figure 2 Groundwater Elevation and Hydrocarbon Concentration Map –

Shallow Zone

Figure 3 Groundwater Elevation and Hydrocarbon Concentration Map –

Intermediate Zone

Figure 4 Groundwater Elevation and Hydrocarbon Concentration Map –

Deep Zone

Table 1 Groundwater Monitoring and Sampling Data

Attachment A Monitoring Data Package
Attachment B Laboratory Analytical Report

Attachment C Historical Groundwater Monitoring and Sampling Data

cc: Ms. Carryl MacLeod, Chevron (electronic copy)

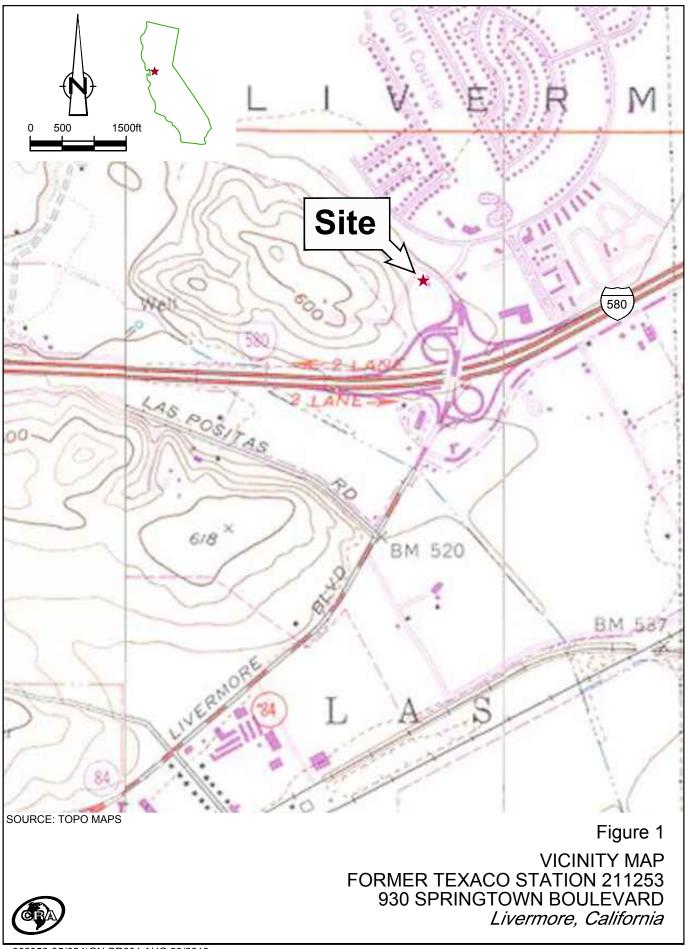
Mr. Joe Zadik

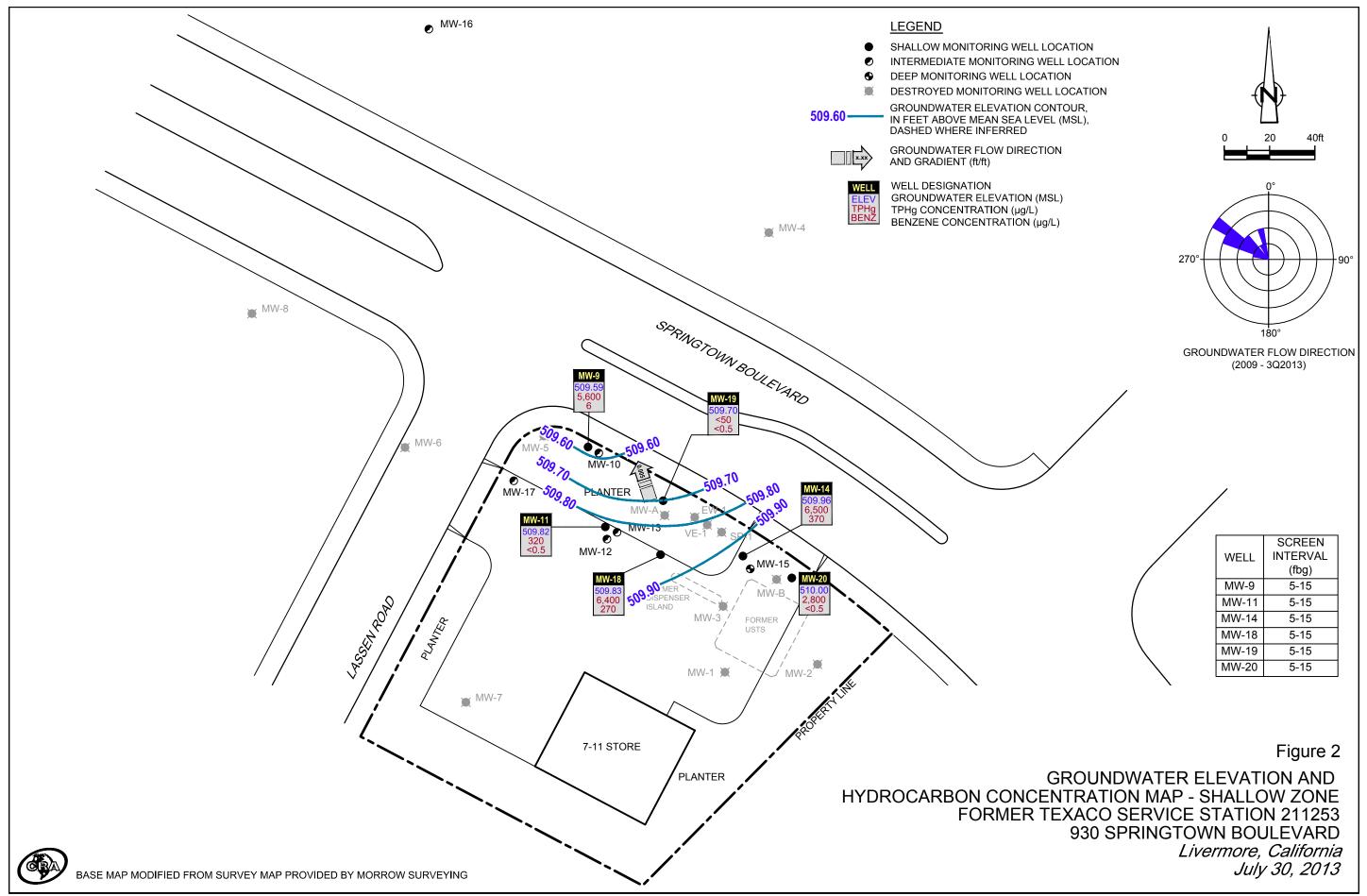
Mr. Ken Hilliard

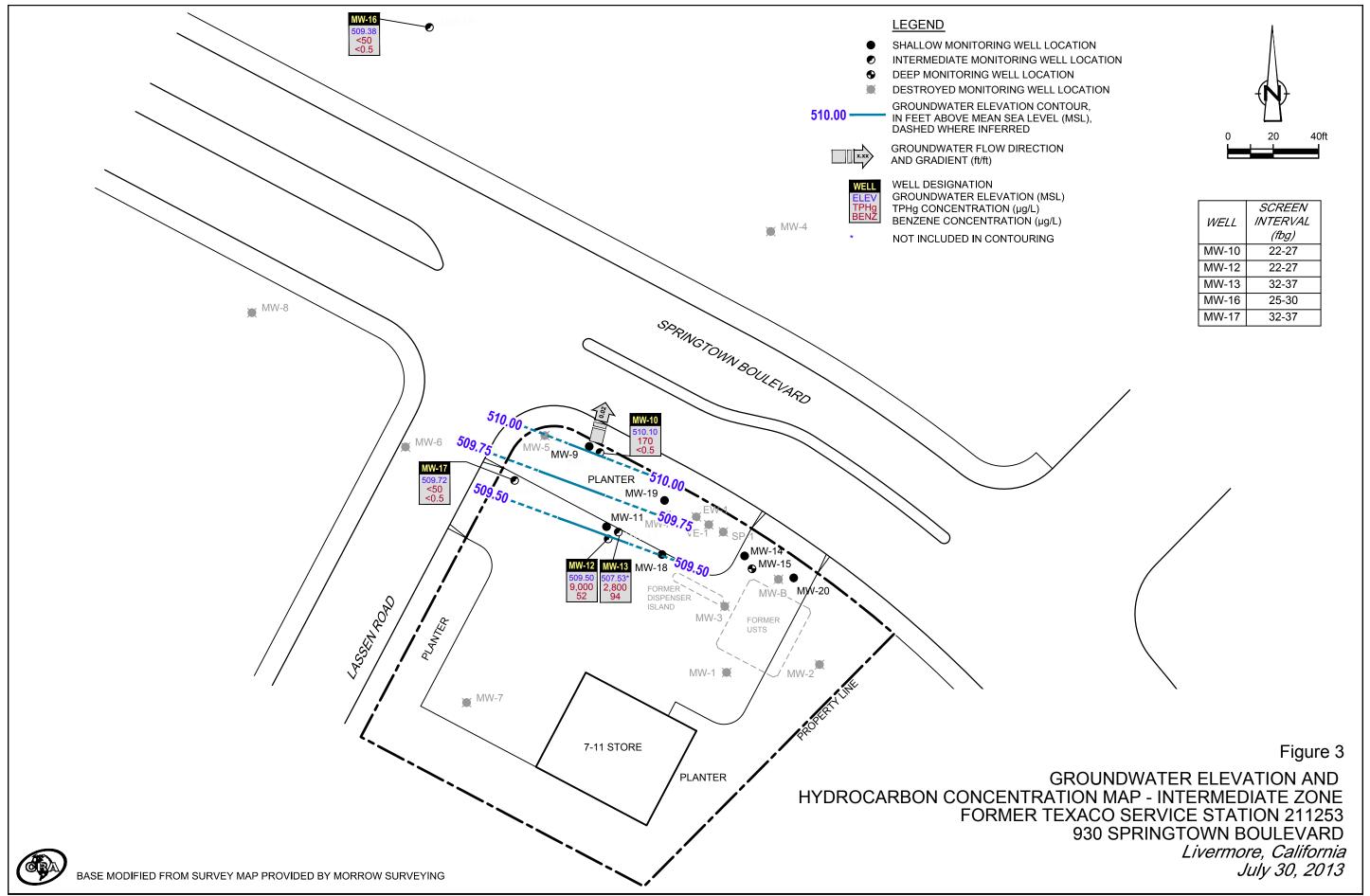
Mr. Kirk F. Sniff, Esq, Strasburger & Price, LLP

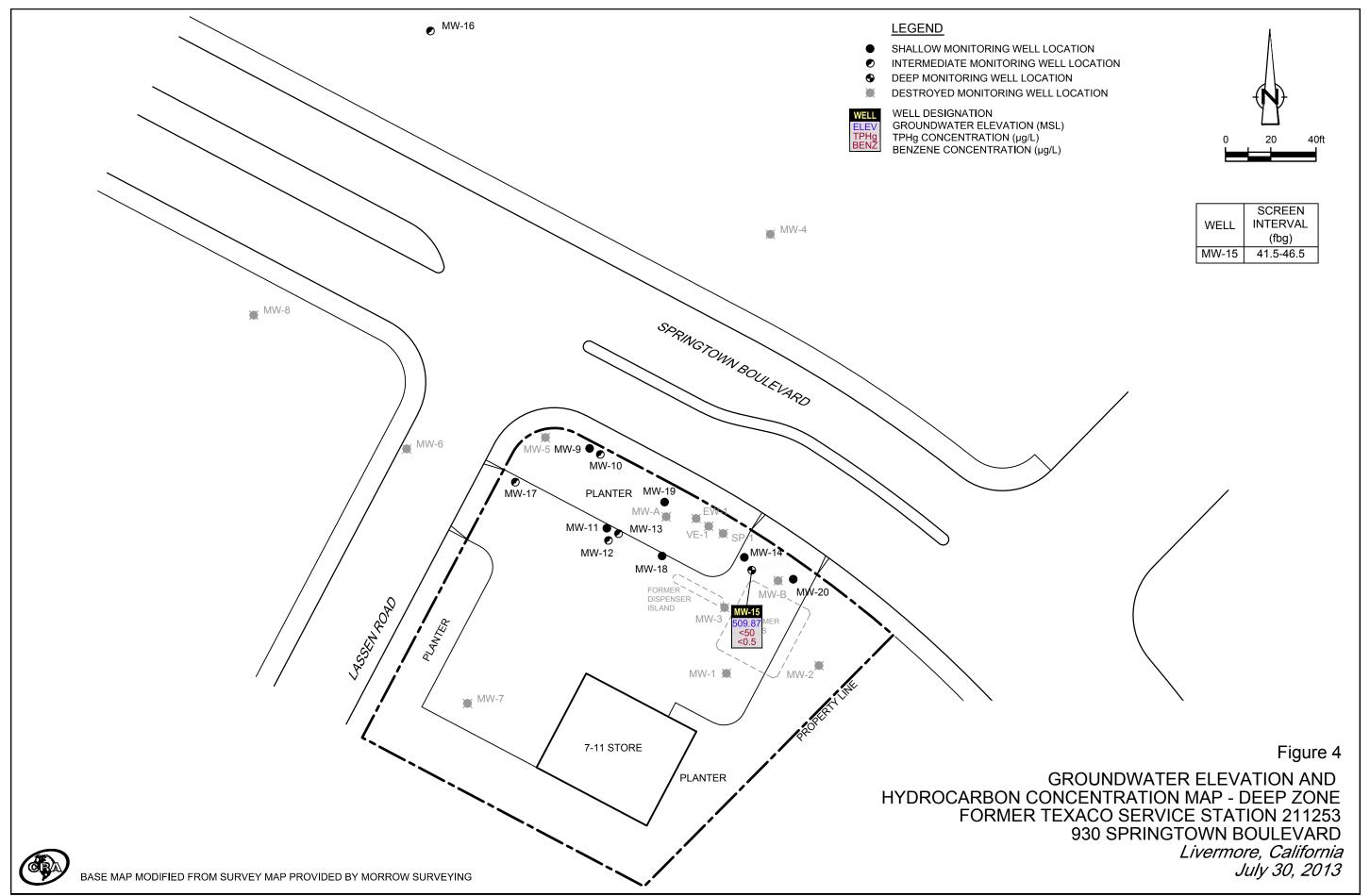
Worldwide Engineering, Environmental, Construction, and IT Services

FIGURES









TABLE

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							HYDROCARBONS	DROCARBONS PRIMARY VOCS GENERA					NERAL C	VERAL CHEMISTRY		
Location	Date	тос	DTW	GWE	LNAPLT	LNAPL REMOVED	TPH-GRO	В	T	E	X	Methane	Ferrous iron	Nitrate as Nitrogen	Sulfate	
	Units	ft	ft	ft-amsl	ft	gallons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
MW-9 ²	08/24/2010	523.14	13.58	509.56	_	_	3,500	6	8	180	79	_	_	_	_	
MW-9 ²	01/31/2011	523.14	12.31	510.83	-	-	68	<0.5	<0.5	3	< 0.5	-	-	-	-	
MW-9 ²	08/09/2011	523.14	12.01	511.13	-	-	54	<0.5	<0.5	<0.5	< 0.5	-	-	-	-	
MW-9 2	02/09/2012	523.14	13.05	510.09	-	-	5,300	6	7	250	120	-	-	-	-	
MW-9 ^{2,5}	05/10/2012	523.14	12.52	510.62	-	-	-	-	-	-	-	-	-	-	-	
MW-9 ^{2,5}	08/22/2012	523.14	13.45	509.69	-	-	1,300	<5	<5	8	7	2,900	9,200	<250	24,000	
MW-9 ^{2,5}	11/29/2012	523.14	13.30	509.84	-	-	-	-	-	-	-	-	-	-	-	
MW-9 ^{2,5}	02/14/2013	523.14	12.70	510.44	-	-	5,200	<5	<5	37	60	-	-	-	-	
MW-9 ^{2,5}	05/20/2013	523.14	13.11	510.03	-	-	-	-	-	-	-	-	-	-	-	
MW-9 2,5	07/30/2013	523.14	13.55	509.59	-	-	5,600	6	4	31	77	-	-	-	-	
MW-10 ³	08/24/2010	523.25	13.07	510.18	-	-	1,300	<0.5	<0.5	2	<0.5	_	_	_	_	
$MW-10^3$	01/31/2011	523.25	11.92	511.33	_	_	250	<0.5	<0.5	<0.5	<0.5	_	_	_	_	
MW-10 ³	08/09/2011	523.25	11.85	511.40	_	_	300	<0.5	<0.5	<0.5	<0.5	_	_	_	_	
$MW-10^3$	02/09/2012	523.25	12.62	510.63	_	_	140	<0.5	<0.5	<0.5	<0.5	_	_	_	_	
MW-10 ^{3,5}	05/10/2012	523.25	12.26	510.99	-	_	-	-	-	-	-	-	_	_	_	
MW-10 ^{3,5}	08/22/2012	523.25	13.03	510.22	-	-	600	2	0.7	2	2	670	580	<250	24,400	
MW-10 ^{3,5}	11/29/2012	523.25	12.89	510.36	-	_	-	-	-	-	-	-	-	-	-	
MW-10 ^{3,5}	02/14/2013	523.25	12.31	510.94	-	-	<50	<0.5	<0.5	<0.5	< 0.5	-	-	-	-	
MW-10 ^{3,5}	05/20/2013	523.25	12.70	510.55	-	-	-	-	-	-	-	-	-	-	-	
MW-10 3,5	07/30/2013	523,25	13.15	510.10	-	-	170	<0.5	<0.5	<0.5	<0.5	-	-	-	-	
MW-11 ²	08/24/2010	523.42	13.80	509.62			2,000 J	6	2	9	5					
MW-11 ²	08/24/2010	523.42	12.35	511.07	-	-	2,000 j 790	1	<0.5	5	3	-	-	-	-	
MW-11 ²	08/09/2011	523.42	12.35	511.07	-	-	130	<0.5	<0.5	0.9	<0.5	-	-	-	-	
MW-11 ²	02/09/2011	523.42	13.06	511.36	-	-	220	<0.5	<0.5	<0.5	<0.5	-	-	-	-	
MW-11 ^{2,5}	05/10/2012	523.42	12.58	510.84	-	_	-	-0.5	-0.5	-	-0.5	-	-	-	-	
MW-11 ^{2,5}	08/22/2012	523.42	13.50	509.92	-	_	- 510	<0.5	<0.5	<0.5	<0.5	- 760	1,400	<250	59,500	
MW-11 ^{2, 5}	11/29/2012	523.42	13.32	510.10	-	_	-	-0.5	-0.5	-0.5	-0.5	-	1,400	-230	59,500	
MW-11 ^{2,5}	02/14/2013	523.42	12.72	510.70	-	-	110	<0.5	<0.5	<0.5	<0.5	-	-	-	-	
11111-11	02/14/2013	J2J.42	14./4	310.70	-	-	110	NO.0	~U.J	~U.J	~0.5	-	-	-	-	

TABLE 1 Page 2 of 6

							HYDROCARBONS PRIMARY VOCS					GE	NERAL C	CHEMIST	RY
Location	Date Units	TOC ft	DTW ft	GWE ft-amsl	tt LNAPLT	suollas ENAPL REMOVED	지7PH-GRO	Β μg/L	T µg/L	E µg/L	X μg/L	Methane	Ferrous iron	Nitrate as Nitrogen	Sulfate
MW-11 ^{2,5}	.= / /				•										
	05/20/2013	523.42	13.13	510.29	-	-	-	-	-	-	-	-	-	-	-
MW-11 ^{2, 5}	07/30/2013	523.42	13.60	509.82	-	-	320	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-12 ³	08/24/2010	523.12	12.84	510.28	-	-	18,000	210	650	330	1,900	_	_	_	_
MW-12 3	01/31/2011	523.12	12.47	510.65	-	-	9,600	64	180	180	400	-	-	-	-
MW-12 3	08/09/2011	523.12	12.19	510.93	-	-	9,000	71	140	170	580	-	-	-	-
MW-12 3	02/09/2012	523.12	13.11	510.01	-	-	8,700	85	130	170	590	-	-	-	-
MW-12 3,5	05/10/2012	523.12	12.71	510.41	-	-	-	-	-	-	-	-	-	-	-
MW-12 3,5	08/22/2012	523.12	13.44	509.68	-	-	8,500	<5	12	120	160	2,000	6,400	<250	3,200
MW-12 3, 5	11/29/2012	523.12	13.35	509.77	-	-	-	-	-	-	-	-	-	-	-
MW-12 ^{3,5}	02/14/2013	523.12	12.82	510.30	-	-	7,700	20	83	160	500	-	-	-	-
MW-12 3, 5	05/20/2013	523.12	13.21	509.91	-	-	-	-	-	-	-	-	-	-	-
MW-12 3,5	07/30/2013	523.12	13.62	509.50	-	-	9,000	52	190	160	610	-	-	-	-
MW-13 ³	08/24/2010	520.88	13.69	507.19	_	_	13,000	810	710	76	660	_	_	_	_
MW-13 ³	01/31/2011	520.88	12.21	508.67	_	_	22,000	1,600	1,600	270	1,600	_	_	_	_
MW-13 ³	08/09/2011	520.88	11.91	508.97	_	_	12,000	1,200	820	120	710	_	_	_	_
MW-13 ³	02/09/2012	520.88	12.83	508.05	_	_	18,000	1,600	3,700	370	2,200	_	_	_	_
MW-13 ^{3,5}	05/10/2012	520.88	12.44	508.44	_	_	-	-	-	-	-	_	_	_	_
MW-13 ^{3,5}	08/22/2012	520.88	13.19	507.69	_	_	35,000	2,000	5,600	340	4,500	8,500	1,200	<250	2,600
MW-13 ^{3,5}	11/29/2012	520.88	13.06	507.82	_	_	-	-	-	_	-	-	-	_	-
MW-13 ^{3,5}	02/14/2013	520.88	12.53	508.35	-	-	11,000	380	750	31	1,700	-	-	-	-
MW-13 3,5	05/20/2013	520.88	12.94	507.94	-	-	-	-	-	-	-	-	-	-	-
MW-13 3,5	07/30/2013	520.88	13.35	507.53	-	-	2,800	94	19	22	57	-	-	-	-
	2012111**														
MW-14 ²	08/24/2010 1,**	520.88	10.36	510.75	0.29	0.00	-	-	-	-	-	-	-	-	-
MW-14 ²	01/31/2011 1,**	520.88	9.96	511.12	0.25	0.00	-	-	-	-	-	-	-	-	-
MW-14 ²	08/09/2011 1,**	520.88	9.67	511.35	0.17	0.00	-	-	-	-	-	-	-	-	-
MW-14 ²	02/09/2012 1,**	520.88	10.69	510.46	0.34	0.00	-	-	-	-	-	-	-	-	-
MW-14 ^{2,5}	05/10/2012 1,**	520.88	10.18	510.91	0.26	0.00	-	-	-	-	-	-	-	-	-

TABLE 1 Page 3 of 6

						HYDROCARBONS PRIMARY VOCS GENERAL CHEMIS						CHEMIST	TRY		
Location	Date Units	TOC ft	DTW ft	GWE ft-amsl	# LNAPLT	suollas	T TPH-GRO	В µg/L	T µg/L	E µg/L	X µg/L	N∕Srl Methane	Ferrous iron	Nitrate as Nitrogen	Sulfate
MW-14 ^{2,5}	05/30/2012	520.88					Sorbo	nt Sock Insta	illad						
MW-14 ^{2,5}	06/14/2012**	520.88	10.36	510.65	0.16	1.25	- 301 <i>b</i> ei	-		_	_	_	_	_	_
MW-14 ^{2,5}	06/25/2012**	520.88	10.44	510.47	0.04	0.98	_	_	_	_	_	_	_	_	_
MW-14 ^{2,5}	07/11/2012**	520.88	10.52	510.41	0.06	1.34	<u>-</u>	_	_	_	_	_	_	_	_
MW-14 ^{2,5}	07/24/2012**	520.88	10.70	510.20	0.02	0.45	-	_	_	_	_	_	_	_	_
MW-14 ^{2,5}	08/08/2012**	520.88	13.74	507.16	0.03	0.46	-	_	-	-	_	-	_	-	-
MW-14 ^{2,5}	08/22/2012	520.88	10.78	510.10	-	0.33	22,000	890	990	600	2,600	1,200	1,000	<250	145,000
MW-14 2,5	09/04/2012	520.88	10.82	510.06	-	0.16	-	-	-	-	-	-	-	-	-
MW-14 2,5	09/21/2012	520.88	10.69	510.19	-	-	-	-	-	-	-	-	-	-	-
MW-14 2,5	10/02/2012	520.88	10.65	510.23	-	-	-	-	-	-	-	-	-	-	-
MW-14 ^{2,5}	10/17/2012	520.88	10.70	510.18	-	-	-	-	-	-	-	-	-	-	-
MW-14 ^{2,5}	10/29/2012	520.88	10.62	510.26	-	-	-	-	-	-	-	-	-	-	-
MW-14 ^{2,5}	11/29/2012	520.88	10.68	510.20	-	-	-	-	-	-	-	-	-	-	-
MW-14 ^{2,5}	02/14/2013	520.88	10.22	510.66	-	-	4,200	170	120	61	410	-	-	-	-
MW-14 ^{2, 5}	05/20/2013	520.88	10.51	510.37	-	-	-	-	-	-	-	-	-	-	-
MW-14 ^{2, 5}	07/30/2013	520.88	10.92	509.96	-	-	6,500	370	110	140	430	-	-	-	-
MW-15 ⁴	08/24/2010	520.87	10.81	510.06	_		<50	<0.5	<0.5	<0.5	<0.5		_		_
MW-15 ⁴	01/31/2011	520.87	9.86	511.01	_	_	<50	<0.5	<0.5	<0.5	<0.5	_	_	_	_
MW-15 ⁴	08/09/2011	520.87	9.56	511.31	_	_	<50	<0.5	<0.5	<0.5	<0.5	_	_	_	_
MW-15 ⁴	02/09/2012	520.87	10.44	510.43	_	_	<50	<0.5	<0.5	<0.5	<0.5	_	_	_	_
MW-15 4,5	05/10/2012	520.87	10.05	510.82	_	_	-	_	_	_	_	_	_	_	_
MW-15 4,5	08/22/2012	520.87	10.87	510.00	_	_	<50	<0.5	<0.5	< 0.5	< 0.5	<5.0	<10	2,100	267,000
MW-15 4,5	11/29/2012	520.87	10.70	510.17	-	-	-	-	-	-	-	-	-	-	-
MW-15 ^{4,5}	02/14/2013	520.87	10.16	510.71	-	-	<50	<0.5	<0.5	< 0.5	< 0.5	-	-	-	-
MW-15 4,5	05/20/2013	520.87	10.58	510.29	-	-	-	-	-	-	-	-	-	-	-
MW-15 4,5	07/30/2013	520.87	11.00	509.87	-	-	<50	<0.5	<0.5	<0.5	0.6	-	-	-	-
MW-16 ³	08/24/2010	520.50	11.07	509.43	-	-	68	<0.5	<0.5	<0.5	<0.5	-	_	-	-
MW-16 3	01/31/2011	520.50	9.99	510.51	-	-	<50	<0.5	<0.5	< 0.5	<0.5	-	-	-	-

TABLE 1 Page 4 of 6

							HYDROCARBONS PRIMARY VOCS GENERAL CHEMIST						TRY		
Location	Date Units	TOC ft	DTW ft	GWE ft-amsl	tf LNAPLT	gallons	₹ TTPH-GRO	В µg/L	T µg/L	E µg/L	X µg/L	AMethane	Ferrous iron	Nitrate as Nitrogen	Sulfate
MW-16 ³	08/09/2011	520.50	9.59	510.91	_	_	66	<0.5	<0.5	<0.5	<0.5		_	_	
MW-16 ³	02/09/2012	520.50	10.62	509.88	_	_	<50	<0.5	<0.5	<0.5	<0.5	_	_	_	_
MW-16 ^{3,5}	05/10/2012	520.50	10.18	510.32	_	_	-	-	-	-	-	_	_	_	_
MW-16 ^{3,5}	08/22/2012	520.50	11.08	509.42	_	_	<50	<0.5	<0.5	<0.5	<0.5	1,000	16	590	49,400
MW-16 ^{3,5}	11/29/2012	520.50	10.86	509.64	_	_	-	-	-	-	-	-	-	-	-
MW-16 ^{3,5}	02/14/2013	520.50	10.27	510.23	_	_	<50	<0.5	<0.5	< 0.5	<0.5	_	_	_	_
MW-16 ^{3,5}	05/20/2013	520.50	10.70	509.80	-	-	-	-	-	-	-	-	-	-	-
MW-16 3, 5	07/30/2013	520.50	11.12	509.38	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
2															
MW-17 ³	02/07/2012	524.81	14.50	510.31	-	-	-	-	-	-	-	-	-	-	-
MW-17 ³	02/09/2012	524.81	14.58	510.23	-	-	<50	< 0.5	< 0.5	< 0.5	< 0.5	-	-	-	-
MW-17 ³	05/10/2012	524.81	14.10	510.71	-	-	<50	< 0.5	< 0.5	< 0.5	< 0.5	-	-	-	-
MW-17 ³	08/22/2012	524.81	14.54	510.27	-	-	<50	<0.5	<0.5	< 0.5	< 0.5	25	<10	3,700	77,400
MW-17 ³	11/29/2012	524.81	14.75	510.06	-	-	<50	< 0.5	< 0.5	< 0.5	< 0.5	39	77	3,200	67,900
MW-17 ³	02/14/2013	524.81	14.25	510.56	-	-	<50	<0.5	<0.5	< 0.5	< 0.5	-	-	-	-
MW-17 ³	05/20/2013	524.81	14.65	510.16	-	-	<50	<0.5	<0.5	< 0.5	< 0.5	-	-	-	-
MW-17 ³	07/30/2013	524.81	15.09	509.72	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-18 ²	02/07/2012	522.40	12.01	510.39	_	_	-	_	_	_	_	_	_	_	_
MW-18 ²	02/09/2012	522.40	12.06	510.34	_	_	12,000	200	1,300	68	2,200	_	_	_	_
MW-18 ²	05/10/2012	522.40	11.60	510.80	_	_	6,700	220	390	380	720	_	_	_	_
MW-18 ²	08/22/2012	522.40	12.50	509.90	_	_	3,600	80	310	170	550	240	2,500	580	143,000
MW-18 ²	11/29/2012	522.40	12.36	510.04	_	_	2,000	44	25	96	190	320	2,400	<250	117,000
MW-18 ²	02/14/2013	522.40	11.76	510.64	_	_	3,000	130	5	270	160	-	-	-	-
MW-18 ²	05/20/2013	522.40	12.11	510.29	_	_	1,200	28	47	52	130	_	_	_	_
MW-18 ²	07/30/2013	522.40	12.57	509.83	-	-	6,400	270	230	440	1,100	-	-	-	-
MW-19 ²	02/07/2012	522.63	12.30	510.33	-	-	-	-	-	-	-	-	-	-	-
MW-19 ²	02/09/2012	522.63	12.39	510.24	-	-	6,700	4	<3	18	35	-	-	-	-
MW-19 ²	05/10/2012	522.63	11.92	510.71	-	-	1,500	< 0.5	< 0.5	0.7	0.9	-	-	-	-

TABLE 1 Page 5 of 6

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

							HYDROCARBONS	BONS PRIMARY VOCS GENERAL CHEMISTRY						TRY	
Location	Date Units	TOC ft	DTW ft	GWE ft-amsl	# LNAPLT	gallons	7€TPH-GRO	B µg/L	T µg/L	E µg/L	X µg/L	Methane	Ferrous iron	Nitrate as Nitrogen	Sulfate
2 500 10 2															
MW-19 ²	08/22/2012	522.63	12.80	509.83	-	-	1,300	<0.5	<0.5	17	2	1,900	820	<250	32,900
MW-19 ²	11/29/2012	522.63	12.64	509.99	-	-	58	<0.5	<0.5	<0.5	<0.5	15	1,800	<250	41,200
MW-19 ²	02/14/2013	522.63	12.08	510.55	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-19 ²	05/20/2013	522.63	12.44	510.19	-	-	4,700	6	2	43	7	-	-	-	-
MW-19 ²	07/30/2013	522.63	12.93	509.70	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
MW-20 ²	02/07/2012	520.28	9.60	510.68	-	_	-	_	-	_	-	_	_	_	-
MW-20 ²	02/09/2012	520.28	9.68	510.60	_	_	9,100	3	94	200	600	_	_	_	_
MW-20 ²	05/10/2012	520.28	9.32	510.96	_	_	3,900	<5	28	42	230	_	_	_	_
MW-20 ²	08/22/2012	520.28	10.12	510.16	_	_	4,800	<5	42	120	320	37	2,800	<250	234,000
MW-20 ²	11/29/2012	520.28	9.99	510.29	_	_	4,200	<0.5	9	41	95	23	11,100	<250	131,000
MW-20 ²	02/14/2013	520.28	9.43	510.85	_	_	2,000	<5	<5	<5	<5	_	-	_	-
MW-20 ²	05/20/2013	520.28	9.78	510.50	_	_	3,000	<0.5	1	24	30	_	_	_	_
MW-20 ²	07/30/2013	520.28	10.28	510.00	-	-	2,800	<0.5	3	23	17	-	-	-	-
QA	08/24/2010	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
QA	01/31/2011	-	-	-	-	-	<50	<0.5	<0.5	<0.5	<0.5	-	-	-	-
QA	08/09/2011	-	-	-	-	-	<50	<0.5	<0.5	<0.5	< 0.5	-	-	-	-
QA	02/09/2012	-	-	-	-	-	<50	<0.5	<0.5	<0.5	< 0.5	-	-	-	-
QA	05/10/2012	-	-	-	-	-	<50	<0.5	<0.5	<0.5	< 0.5	-	-	-	-
QA	08/22/2012	-	-	-	-	-	<50	<0.5	<0.5	<0.5	< 0.5	-	-	-	-
QA	11/29/2012	-	-	-	-	-	<50	<0.5	<0.5	<0.5	< 0.5	-	-	-	-
QA	02/14/2013	-	-	-	-	-	<50	< 0.5	<0.5	< 0.5	< 0.5	-	-	-	-
QA	05/20/2013	-	-	-	-	-	<50	< 0.5	<0.5	< 0.5	< 0.5	-	-	-	-
QA	07/30/2013	-	-	-	-	-	<50	<0.5	< 0.5	< 0.5	< 0.5	-	-	-	-

Abbreviations and Notes:

TOC = Top of casing

TABLE 1 Page 6 of 6

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

							HYDROCARBONS		PRIMAI	RY VOCS		GE	NERAL (CHEMIST	RY
Location	Date	тос	DTW	GWE	LNAPLT	LNAPL REMOVED	TPH-GRO	В	T	E	X	Methane	Ferrous iron	Nitrate as Nitrogen	Sulfate
	Units	ft	ft	ft-amsl	ft	gallons	$\mu g/L$	$\mu g/L$	$\mu g/L$	$\mu g/L$	$\mu g/L$	µg∕L	µg∕L	$\mu g/L$	µg/L

DTW = Depth to water

GWE = Groundwater elevation

(ft-amsl) = Feet above mean sea level

ft = Feet

μg/L = Micrograms per Liter

TPH-GRO = Total petroleum hydrocarbons - gasoline range organics

VOCS = Volatile organic compounds

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes (Total)

-- = Not available / not applicable

<x = Not detected above laboratory method detection limit</p>

J = Estimated concentration

- * TOC elevations were surveyed on July 22, 2009, by Morrow Surveying. Vertical datum is NAVD 88 from GPS Observations.
- ** GWE was corrected for the presence of LNAPL; correction factor: [(TOC DTW) + (LNAPLT x 0.80)].
- Not sampled due to the presence of LNAPL.
- 2 Shallow well
- 3 Intermediate well
- 4 Deep well
- 5 Sampled semi-annually during the first and third quarters

ATTACHMENT A

MONITORING DATA PACKAGE



TRANSMITTAL

August 9, 2013 G-R #385867

TO: Mr. Brian Silva

Conestoga-Rovers & Associates 10969 Trade Center Drive, Suite 107 Rancho Cordova, California 95670

FROM: Deanna L. Harding

Project Coordinator Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568 **RE:** Former Texaco Service Station

930 Springtown Blvd. Livermore, California

(Site #211253)

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package Third Quarter Event of July 30, 2013

COMMENTS:

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

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

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

Trans/211253

WELL CONDITION STATUS SHEET

					** ** ** ** *	ONDITIC	N SIAIOS						
Client/Facility #:						-	Job#:	38586					
Site Address:		ingtown Bl	vd.			-	Event Date:	7-30		3			
City:	Livermo	re, CA					Sampler:		رر			_	
WELL ID	Vault Frame Condition	Gasket/O-Ring (M) Missing (R) Replaced	BOLTS (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)	REPLACI LOCK Y/N	(PLACE CAP //N	WELL VAULT Manufacture/Size/ # of Bolts	т	ctures aken Y / N
MW-9	06		R-2	OK			<i>>></i>	10		10	EMC0/12"/2	1	A
MW-10	OK						9	100		1	1	1/4	<i>//</i>
MW-11	OX						>		-				1
MW-12	OK	R	07				7						
MN-13	OX												
MW-14	OK						2		\prod				
MW-15	OK	Ć					9						-
MW-16	96											+	
MW-17	OR					,						\top	
MW-18	OK						->3					11	
MW-19	OV	Å	R-2	OK					\			11	A
MW-20	OK	→	R-Z					V				1	V
Comments	ji.	- 1912											100

STANDARD OPERATING PROCEDURE -GROUNDWATER SAMPLING

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

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

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

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

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

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

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



C	lient/Facility#:	Chevron #2	11253		Job Number:	385867		
Si	ite Address:	930 Springto	own Blvd		Event Date:	7-30-1	3	(inclusive)
Ci	ity:	Livermore, (Sampler:	MI		(
					, , , , , , , , , , , , , , , , , , ,			
W	/ell ID	MW- 9			ate Monitored:	7-30-	13	
W	ell Diameter	4	-					
To	otal Depth	14.47 ft	-	Volum Factor			0.17 3"= 0.38 1.50 12"= 5.80	
De	epth to Water	13.55 ft	_ 	heck if water column	n is less then 0.50) ft.		
		0.92	Transmitted .	le = 0, le			ume: / 8	gal.
De	epth to Water v	v/ 80% Recharge		Vater Column x 0.20) +				. 90
				·	-	Time Started:_		· · · · · · · · · · · · · · · · · · ·
	rge Equipment:	~	Sa	ampling Equipment:			ed:	
	sposable Bailer		Di	isposable Bailer			ct:	
	ainless Steel Bailer			ressure Bailer			· hickness:	
	ick Pump			etal Filters		1 -	ation/Description:	п
	ction Pump			eristaltic Pump				
	undfos			ED Bladder Pump			orbant Sock (circle	
	ristaltic Pump D Bladder Pump		U	ther:			from Skimmer:	
	er:						from Well:	gal
0						Water Remove	J:	
- 01		26.00				Z N		
	art Time (purge)		7 7 2 11	Weather Cor	- 4: 4 —	5 my		
		e: <u>0925 /</u>				Odor: Ø/N	Medium	
Ap	prox. Flow Rat		gpm.	Sediment De	scription: <u>(</u>	ight	·	
Dic	d well de-water	? <u>10 </u>	yes, Time:	Volun	ne:	gal. DTW @ San	npling: 13.7	70
	Time			Conductivity 5	Temperature	D.O.	ORP	
	(2400 hr.)	Volume (gal.)	рН	(umhos/cm +8)	(© / F)	(mg/L)	(mV)	
	0903	,75	7.78	1.04	19,7			
_	0906	1.5	7.74	1.05	197			
-	0909	2	5.74	1,04	19.2			
				ABORATORY IN				
-	SAMPLE ID MW- 9	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY		NALYSES	
\vdash	IVIVV-	(x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTI	=X(8260)	
—								
-								
							<u> </u>	
						<u> </u>		
CO	MMENTS:					······································		
					:0:			
	 							
A	dd/Replaced Lo	ock:	Add/F	Replaced Plug:		Add/Replaced Bo	olt: 7	· -



Client/Facility#: Site Address: City:	Chevron #211253 930 Springtown Bl Livermore, CA	vd.	Job Number: Event Date: Sampler:	385867 7-30-13 MC	(inclusive)
Well ID Well Diameter Total Depth Depth to Water Depth to Water Purge Equipment: Disposable Bailer Stainless Steel Baile Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	w/ 80% Recharge [(Height of	Volum Factor Check if water colum	(VF) 4"= 0.60 n is less then 0.50 x3 case yolume =	6 5"= 1.02 6"= 1.50 12"= 5.8 Oft. Estimated Purge Volume: 26	gal(2400 hrs)ftftftftftftftftftftgal
Start Time (purge Sample Time/Da Approx. Flow Ra Did well de-wate Time (2400 hr.)	te: 1340 / 7 - 30 te: gpm.	Sediment Dene: 1217 Volur Conductivity MS	Scription:	Odor: Y LOV gal. DTW @ Sampling:	
		LABORATORY IN	FORMATION		
SAMPLE ID	(#) CONTAINER REFRIC		LABORATORY	ANALYSES	
MW- (O	x voa vial YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)	
COMMENTS:					
Add/Replaced i	_ock: Ad	d/Replaced Plug		Add/Replaced Bolt:	,,_,



Client/Facility#: Site Address: City:	Chevron #211253 930 Springtown Bl Livermore, CA	vd.	Job Number: Event Date: Sampler:	385867 7-30-13 ML	(inclusive)
Well ID Well Diameter Total Depth Depth to Water Depth to Water w Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	MW- (4	Volum Factor Check if water column	(VF) 4"= 0.6 in is less then 0.50 x3 case volume =	6 5"= 1.02 6"= 1.50 12"= 5.	gal(2400 hrs)ftftftftftftftgalgal
Start Time (purge): Sample Time/Date Approx. Flow Rate Did well de-water? Time (2400 hr.) ()948 0951 0954	e: 1010 / 7-30 gpm.	Weather Cor Water Color: Sediment Dene: Volume: Volume	Clew scription:	Odor: Y 1 D Sampling: D.O. ORP (mg/L) (mV)	3.72
		LABORATORY IN			
SAMPLE ID, MW-	(#) CONTAINER REFRIG		LANCASTER	ANALYSES TPH-GRO(8015)/BTEX(8260)	
COMMENTS:					
Add/Replaced Lo	ck: Ad	d/Replaced Plug		Add/Penlaced Rolt:	



Client/Facility#:	Chevron #21125	3	Job Number:	385867	
Site Address:	930 Springtown	Blvd.	Event Date:	7.30-13	(inclusive)
City:	Livermore, CA		Sampler:	ML	(
Well ID	MW- 1 2		Date Monitored:	7.30.13	
Well Diameter	4	[Volume 3/4"= 0.0	02 1"= 0.04 2"= 0.17 3	"= 0.38
Total Depth	76,66 ft.		Factor (VF) 4"= 0.6		"= 5.80
Depth to Water	13.62 ft.		column is less then 0.5		• ~
Donth to Miston.				= Estimated Purge Volume: 25	gal.
Depth to water t	w/ 80% Recharge [(Hei	ght of Water Column x	0.20) + DTW]/ <u>C. U.</u>	Time Started:	(2400 hrs)
Purge Equipment:		Sampling Equip	ment:	Time Completed:	(2400 hrs)
Disposable Bailer		Disposable Bailer	_ /	Depth to Product:	
Stainless Steel Bailer		Pressure Bailer		Depth to Water:	
Stack Pump	X	Metal Filters		Hydrocarbon Thickness:	
Suction Pump		Peristaltic Pump		Visual Confirmation/Desc	ription:
Grundfos		QED Bladder Pur	mp	Skimmer / Absorbant Soc	k (circle one)
Peristaltic Pump		Other:		Amt Removed from Skimi	
QED Bladder Pump				Amt Removed from Well:	
Other:				Water Removed:	
Start Time (purge Sample Time/Dai Approx. Flow Rate Did well de-water (2400 hr.)	te: 1100 / 7-3 te: 2 gpm	Conductivity Time: Conductivity Conductivity Conductivity Conductivity Conductivity Conductivity Conductivity Conductivity Conductivity Conductivity	Temperature (9 / F) 2 (/ lo 20.9	Odor: Of N Liver of N	
SAMPLE ID	(#) CONTAINER REF		RY INFORMATION		
MW-12		FRIG. PRESERV. 1	LANCASTER	ANALYSES TPH-GRO(8015)/BTEX(8260)	<u> </u>
\$ C	A vod vidi	1102	LANGASTER	1111-ORO(0013)/B1EX(0200)	
				T. C.	
		 			
COMMENTS:	REPLACED	GASKET			
Add/Replaced L	ock:	Add/Replaced Plu	ıa.	Add/Replaced Bolt:	



Client/Facility#: Chevron #211253	Job Number:	385867	
Site Address: 930 Springtown Blvd.	Event Date:	7-30-13	(inclusive)
City: Livermore, CA	Sampler:	ML	
Well ID MW-13	Date Monitored:	7-30-17	
Well Diameter 4	Volume 3/4"= 0.02	1"= 0.04 2"= 0.17 3"=	0.38
	Factor (VF) 4"= 0.66		
The state of the s	olumn is less then 0.50	. 4	2
Depth to Water w/ 80% Recharge [(Height of Water Column x 0)		Estimated Purge Volume: 45,	gal.
			(2400 hrs)
Purge Equipment: Sampling Equipm	nent:	Time Completed: Depth to Product:	
Disposable Bailer Disposable Bailer		Depth to Water:	
Stainless Steel Bailer Pressure Bailer Stack Pump Metal Filters		Hydrocarbon Thickness:	ft
Stack Pump Metal Filters Suction Pump Peristaltic Pump		Visual Confirmation/Descript	
Grundfos QED Bladder Pum	n		
Peristaltic Pump Other:		Skimmer / Absorbant Sock (
QED Bladder Pump		Amt Removed from Skimme Amt Removed from Well:	
Other:		Water Removed:	

Start Time (purge): 1 (20) Weather	Conditions:	UNI	
Sample Time/Date: 1150/7-30/13 Water C	olor: Clew	Odor: 1 N redin	<u> </u>
, and a second s	nt Description:	Love,	
		gal. DTW @ Sampling:	1/2.7/2
√	Q		
Time Volume (gal.) pH Conductivity (2400 hr.)		D.O. ORP	
	(G/F)	(mg/L) (mV)	
1125 15 1.28 0.94	21.9		
$\frac{-1130}{1131}$ $\frac{30}{118}$ $\frac{773}{726}$ $\frac{0.95}{6.01}$	21.0		
1136 48 1124 8.91	70.4		
LABORATOR	Y INFORMATION		
SAMPLE ID (#) CONTAINER REFRIG. PRESERV. TO		ANALYSES	
MW- 5 0 x voa vial YES HCL		TPH-GRO(8015)/BTEX(8260)	
2 × × ×	CHEVRON	CHEVRON	
		· · · · · · · · · · · · · · · · · · ·	
COMMENTS:			
Add/Replaced Lock: Add/Replaced Plug] :	Add/Replaced Bolt:	-



Client/Facility#:	Chevron #211253		Job Number:	385867	
Site Address:	930 Springtown E	Blvd.	Event Date:	(inclusive)	
City:	Livermore, CA		- Sampler:	MI.	(,
			-		
Well ID	MW-14		Date Monitored:	7-30-13	
Well Diameter	4	Vol	ume 3/4"= 0.0	02 1"= 0.04 2"= 0.17 3"=	0.38
Total Depth	14,40 ft.	· · · · · · · · · · · · · · · · · · ·	tor (VF) 4"= 0.6		5.80
Depth to Water	10.92 ft.		ımn is less then 0.50		
	13,418 xVF_	(ele = 2.2	x3 case volume =	Estimated Purge Volume:	_ gal.
Depth to Water v	w/ 80% Recharge [(Heigh	t of Water Column x 0.20)) + DTW]: //(e	~~ ∥ =	(2400 hrs)
Purge Equipment:		Sampling Equipmen	nt· 🖎	Time Started:	
Disposable Bailer	λ	Disposable Bailer	"' <i>X</i>	Depth to Product:	
Stainless Steel Bailer		Pressure Bailer		Depth to Water:	
Stack Pump		Metal Filters		Hydrocarbon Thickness:	ft
Suction Pump		Peristaltic Pump		Visual Confirmation/Descrip	ption:
Grundfos		QED Bladder Pump			
Peristaltic Pump		Other:		Skimmer / Absorbant Sock	
QED Bladder Pump				Amt Removed from Skimm Amt Removed from Well:	
Other:				Water Removed:	
Start Time (purge): 1505	\\\- =4b = = C		S (Y	
		Weather C		JUUN!	
Sample Time/Da	****		or: GRAY	Odor Y) N Medi	m
Approx. Flow Rat			Description:	light	
Did well de-water	? If yes, Ti	me: Vo	ume:	gal. DTW @ Sampling:	0.99
Time		Conductivity //	7 Tegaperature	D.O. ORP	•
(2400 hr.)	Volume (gal.) pH	(Hontos/cm-us)	(6 / F)	(mg/L) (mV)	
1511	2.5 7.1	la 0.86	71.7		
15110	5 77	0.88	7/17		
1570	7 7.0	1 0 88	21.3		<u>.</u>
SAMPLE ID	(#) CONTAINER REFR	LABORATORY IG. PRESERV. TYP		ANALYSES	
MW- /4	/ x voa vial YES		LANCASTER	TPH-GRO(8015)/BTEX(8260)	
	9			(0200)	
COMMENTS				L	
COMMENTS:	· · · · · · · · · · · · · · · · · · ·				
					
Add/Replaced L	ock: A	dd/Replaced Plug:		Add/Replaced Bolt:	



Client/Facility#:	Chevron #211253		Job Number:	385867	
Site Address:	930 Springtown Blvd.		Event Date:	7-30-13	— (inclusive)
City:	Livermore, CA		Sampler:	ML	_ `
Well ID Well Diameter Total Depth Depth to Water Depth to Water w/ Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	34.90 xVF .(elegate of Wall 2008) xVF .(elegate of Wall 20	Volume Factor eck if water column 2 = 23.0	(VF) 4"= 0.66 n is less then 0.50 x3 case volume =	ft. Estimated Purge Volume:	gal(2400 hrs)ftftftftftgalgal
Start Time (purge):		Weather Con		Water Removed:	
Sample Time/Date Approx. Flow Rate Did well de-water?		Water Color: Sediment De	scription:	Odor: Y / N	.14
Time (2400 hr.) 428 436 443	Volume (gal.) pH (Conductivity (4) pmhos/cm - ps)	Temperature (© / F) 2(O 20,3	D.O. ORP (mg/L) (mV)	- - -
		BORATORY INI	OPMATION		
MW- [\$ (PRESERV. TYPE HCL	LABORATORY	ANALYSES TPH-GRO(8015)/BTEX(8260)	
COMMENTS:					
Add/Replaced Loc	ck: Add/Re	eplaced Plug:		Add/Replaced Bolt:	



Client/Facility#: Site Address:	Chevron #211253 930 Springtown Blv	rd.	Job Number: Event Date:	385867 7-30-13	 (inclusive)
City:	Livermore, CA		Sampler:	ML	-
Well ID Well Diameter Total Depth Depth to Water	18,07 XVF 1	Volume Factor Check if water column (= 11,92	(VF) 4"= 0.66 n is less then 0.50 x3 case volume =	6 5"= 1.02 6"= 1.50 12"= 5.8 Oft. Estimated Purge Volume: 35.	0
Purge Equipment: Disposable Bailer Stainless Steel Baile Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:		F Water Column x 0.20) + Sampling Equipment: Disposable Bailer Pressure Bailer Metal Filters Peristaltic Pump QED Bladder Pump Other:	DTWJ: <u>[4,7]</u>	Time Started:	(2400 hrs)ftftft n: cle one)gal
Start Time (purge Sample Time/Da Approx. Flow Ra Did well de-wate Time (2400 hr.) 1634 1634	te: 1700 / 7,30/1 te: 3 gpm.	Weather Con Water Color: Sediment De: Volun Conductivity (1) (umhos/tm-ps) (i, 0) 1, 0(0)	Clew scription:	Odor: Y / M WONE gal. DTW @ Sampling:	.01
SAMPLE ID, MW-/C	(#) CONTAINER REFRIG. X voa vial YES OCK: Add	HCL HCL	LANCASTER	ANALYSES TPH-GRO(8015)/BTEX(8260) Add/Replaced Bolt:	



Client/Facility#:	Chevron #211253		Job Number:	385867	
Site Address:	930 Springtown Blvd	d.	Event Date:	7-30-13	(inclusive)
City:	Livermore, CA		Sampler:	ML	()
Well ID Well Diameter Total Depth Depth to Water	21,910 XVF /19	Volume Factor Check if water column	(VF) 4"= 0.66 n is less then 0.50 x3 case volume =	6 5"= 1.02 6"= 1.50 12"= 5.6 Oft. Estimated Purge Volume: 43, 6	80
Purge Equipment: Disposable Bailer Stainless Steel Baile Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	r P	Water Column x 0.20) + Sampling Equipment: Disposable Bailer Pressure Bailer Metal Filters Peristaltic Pump RED Bladder Pump Other:		Time Started: Time Completed: Depth to Product: Depth to Water: Hydrocarbon Thickness: Visual Confirmation/Description Skimmer / Absorbant Sock (cin Amt Removed from Skimmer: Amt Removed from Well: Water Removed:	(2400 hrs)ftftft on:gal
Start Time (purge Sample Time/Da Approx. Flow Ra Did well de-water Time (2400 hr.)	te: <u>0845 / 7-3</u> 0- (te: <u>3</u> gpm.	Weather Con Water Color: Sediment De: Conductivity (Clow scription: N	Odor: Y / N	7.06
		I AROBATORY IN	EORMATION		
SAMPLE ID MW- / 7	(#) CONTAINER REFRIG. O x voa vial YES	HCL	LABORATORY LANCASTER	ANALYSES TPH-GRO(8015)/BTEX(8260)	
Add/Replaced L	ock: Add/	Replaced Plug:		Add/Replaced Bolt:	



Client/Facility#:	Chevron #211253		Job Number:	385867	
Site Address:	930 Springtown Blv	∕d.	Event Date:	7-30-13	(inclusive)
City:	Livermore, CA		Sampler:	<u> </u>	()
				-poc	
Well ID	MW-18	Ε	Date Monitored:	7-30-13	
Well Diameter	4	Volum	e 3/4"= 0.0		
Total Depth	14.87 ft.	Factor			= 0.38 = 5.80
Depth to Water	12.57 ft.	Check if water colum	n is less then 0.50	D ft.	
	2.30 xVF 1	e6=1,5	x3 case volume =	Estimated Purge Volume:	S gal.
Depth to Water	w/ 80% Recharge [(Height o	f Water Column x 0.20) ⊀	DTW]: 13.03	3	
Burne Burne			,		(2400 hrs)
Purge Equipment:	✓	Sampling Equipment:		Time Completed: Depth to Product:	
Disposable Bailer		Disposable Bailer	X	Depth to Water:	
Stainless Steel Baile	r	Pressure Bailer		Hydrocarbon Thickness:	
Stack Pump Suction Pump		Metal Filters		Visual Confirmation/Descri	
Grundfos		Peristaltic Pump			<u> </u>
Peristaltic Pump		QED Bladder Pump Other:		Skimmer / Absorbant Sock	
QED Bladder Pump		Outer		Amt Removed from Skimm	
Other:				Amt Removed from Well: Water Removed:	
				Water Nemoved.	
Start Time (purge	1255	Weather Cor	adidi a na c	SUMMEN	
		1.0		>UMY	<i>f</i> :
Sample Time/Da				Odor: O/N Mee	lun-
Approx. Flow Ra		Sediment De		light	
Did well de-water	r? If yes, Tim	e:Volur	ne:	gal. 'DTW @ Sampling:	12.70
Time	Volume (gel)	Conductivity M	Temperature	D.O. ORP	
(2400 hr.)	Volume (gal.) pH	(µmhos/cm - uS)	(6 /F)	(mg/L) (mV)	
1300	1,5 7.47	1.30	22.0		
1305	3 7:46	1.78	717		
1310	4.5 7.47	1.27	21.7		
SAMPLE ID	(#) CONTAINER REFRIG	LABORATORY IN PRESERV. TYPE	FORMATION LABORATORY	ANALYOPA	
MW- 1 %	x voa vial YES	HCL	LANCASTER	ANALYSES TPH-GRO(8015)/BTEX(8260)	
7 6	2 X VOA YES	1/13	CHEVRON	CHEURON	
		~~			
<u> </u>					
					
COMMENTS:			·····		
_			·		
A 4 4/5	.1		**-		
Add/Replaced L	.ock: Add	d/Replaced Plug:		Add/Replaced Bolt:	



,	Client/Facility#: Site Address: City:	Chevron #2' 930 Springto Livermore, C	own Blvd	•	Job Number: Event Date: Sampler:	385867 7-30-/3 ML	(inclusive)
V T E P D S S S S G P	Well ID Well Diameter Fotal Depth Depth to Water Depth to Water Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Jeristaltic Pump JED Bladder Pump Jether:		XVF C XVF C E ((Height of W Si Di Pr Mi	Volume Factor heck if water column	(VF) 4"= 0.66 n is less then 0.50 x3 case volume =	6 5"= 1.02 6"= 1.50 12"= 5 Oft. Estimated Purge Volume: 3, 9	gal. (2400 hrs) (2400 hrs) ft ft ft ion:
S A	start Time (purge sample Time/Da approx. Flow Rat bid well de-water Time (2400 hr.)	te: <u>1400</u> /	7- 30-17 gpm. yes, Time: pH フ.リウ	Sediment Des	Clost scription:	Odor: Y / N gal. DTW @ Sampling: D.O. ORP (mg/L) (mV)	3.15
_				APODATORY INI	EODMATION		
Г	SAMPLE ID	(#) CONTAINER	REFRIG.	ABORATORY INI	LABORATORY	ANALYSES	
	MW- 9	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)	
C(OMMENTS:						
_	Add/Replaced L	ock:	Add/F	Replaced Plug		Add/Replaced Bolt: 7	



Client/Facility#: Chevron #211253	Job Number:	385867
Site Address: 930 Springtown Blvd.	Event Date:	7-30-13 (inclusive)
City: Livermore, CA	Sampler:	M
	·	
Well ID MW- 20	Date Monitored:	7.30-13
	Volume 3/4"= 0.02	2 1"= 0.04 2"= 0.17 3"= 0.38
	Factor (VF) 4"= 0.66	
	olumn is less then 0.50	
<u> </u>	x3 case volume =	Estimated Purge Volume: gal.
Depth to Water w/ 80% Recharge [(Height of Water Column x 0	.20) + DTWJ: <u>[[. 2</u>	Time Started: (2400 hrs)
Purge Equipment: Sampling Equipm	nent:	Time Completed: (2400 hrs)
Disposable Bailer Disposable Bailer	<u>/</u>	Depth to Product:ft
Stainless Steel Bailer Pressure Bailer		Depth to Water:ft
Stack Pump Metal Filters		Hydrocarbon Thickness:ft
Suction Pump Peristaltic Pump		Visual Confirmation/Description:
Grundfos QED Bladder Pum	p	Skimmer / Absorbant Sock (circle one)
Peristaltic Pump Other:		Amt Removed from Skimmer: gal
QED Bladder Pump		Amt Removed from Well:gal
Other:		Water Removed:
Sample Time/Date: // / 7-30-/3 Water C Approx. Flow Rate: gpm. Sedimen	MS Temperature	Odor: Y /N Odor: Y /N gal. DTW @ Sampling:
	YINFORMATION	
SAMPLE ID (#) CONTAINER REFRIG. PRESERV. TO MW- 70 (0 x voa vial YES HCL		ANALYSES
WWV- 20 (V X VOA VIAI) FES HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
COMMENTS:		
Add/Replaced Lock: Add/Replaced Plug	g:	Add/Replaced Bolt:

Chevron California Region Analysis Request/Chain of Custody

eurofins Lancaster Laboratories		cct. # <u>100</u>	04 Gr	For E	urofins 100 ons on rev	Lancas 517 erse side	ter Labo	oratories umple # ad with circles	ise only	194	19-61			
		7	4) Matrix				The second second	10 - 30>				2 3/2/2		
acility # 711753 CON 2000	WBS		4) Matrix	\dashv	(5)		A	nalyses	Heq	ueste	a I	\mathbf{H}	SCR #:	
1) Client Information of the Address 930 SPRING DIM 38580 SPRING DIM 3 CARRYL MACLED Consultant/Office CARRYL EYAN STANDARD CONSULTANT Project Mgr.			Ground Surface	ers	X 0928	8260							Results in Dry V J value reporting Must meet lowe limits possible for	g needed st detection
CONSUMENT PRINCE MAN DU	blin, CA aus	68	ω _	tai			Ge		٦	ال		1 1	8021 MTBE Cor	nfirmation
DEANUA HARDIN	9			f Containers	8021	8015 X	Silica	و ا	Method	Method			Confirm highest	
(975)58(-7555	Α		otat PDE	ber of	8	80 15 with	15 with	III Genet	N N	D.		7	Run oxy	
Mike Lombo	nd		_ -	Number		ဥ္က ၂ မွ	8 0	88 6	Lead	d Lead	-			
2)	SoilCollectedepthDateTime	Grab © Composite	Soll Water	g	BTEX +	TPH-GRO 8015 X	TPH-DRO 8015 with Silica	8260 Full Scan	Total Le	Dissolved		G	Rema	arke
QA	7-30-13	X	X	2	V	\mathbf{x}	+-							· · · · · · · · · · · · · · · · · · ·
Mw 9	1 09.25	X	X	6	X						++-		3 voa's	De 1
MW-10	1340		X	1/2	イ	X				$\neg +$		\Box	MW-16	BROKEN
MW-11	1010	$X \square$	X	7	X	X	A ^T					1	DURING	BROKEN TRANSPO
MW-12	1100	X		6	X	X								
MW-13	1150	X	$\perp \times \perp$	6	X	XL						7	lease forwa	ard the
MW-14	1535	IX I		6									ab results	
MW-15	1 1455	X		0		KL						1	othe lead	consultant
MW-16	1700	IX		3	ΔL	XL						7	icc G-R	
NW-[7]		X		6	\mathbf{X}^{\top}									
mw-/8	328	X		6	(1)									1.
MW-19	1400			6	V)					\perp		\Box Q	imended ()	llent
7) Turnaround Time Requested (TAT)	1 11015	Relinguished by				<u> </u>	-					ار	into knu &	17
Standard 5 day	4 day		W		Date 8-2	2-13	Time	220	Receiv	ed by	taljer	. \$'	2 AUG 13	1386
72 hour 48 hour	24 hour	Rélinquished by	later	6 2	Date AUG	.13	Time	36	Receiv	ed by			Date	Time
B) Data Package (circle if required)	EDD (circle if required)	Relinquished	by Commercial C	Carrier:	,		100		Receiv	ed by	<u> </u>		Date	Time
Type I - Full	EDFFLAT (default)	UPS_	FedE			Other				Z-9	7		8613	1840
Type VI (Raw Data)	Other:	Ten	nperature Upo	n Rec	eipt <u>C</u>	٠, ٣٦٠	· •	С	Cu	stody	Seals Intac	ct?	Yes	No

ATTACHMENT B

LABORATORY ANALYTICAL REPORT

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

ANALYTICAL RESULTS

Prepared by:

Prepared for:

Eurofins Lancaster Laboratories Environmental 2425 New Holland Pike Lancaster, PA 17601 Chevron L4310 6001 Bollinger Canyon Rd. San Ramon CA 94583

August 09, 2013

Project: 211253

Submittal Date: 08/06/2013 Group Number: 1409517 PO Number: 0015118372 Release Number: SHRILL HOPKINS State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
QA-T-130730 NA Water	7151949
MW-9-W-130730 Grab Groundwater	7151950
MW-10-W-130730 Grab Groundwater	7151951
MW-11-W-130730 Grab Groundwater	7151952
MW-12-W-130730 Grab Groundwater	7151953
MW-13-W-130730 Grab Groundwater	7151954
MW-14-W-130730 Grab Groundwater	7151955
MW-15-W-130730 Grab Groundwater	7151956
MW-16-W-130730 Grab Groundwater	7151957
MW-17-W-130730 Grab Groundwater	7151958
MW-18-W-130730 Grab Groundwater	7151959
MW-19-W-130730 Grab Groundwater	7151960
MW-20-W-130730 Grab Groundwater	7151961

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

ELECTRONIC	CRA c/o Gettler-Ryan	Attn: Rachelle Munoz
COPY TO		
ELECTRONIC	Chevron c/o CRA	Attn: Report Contact
COPY TO		_
ELECTRONIC	Chevron	Attn: Anna Avina
COPY TO		
ELECTRONIC	CRA	Attn: Brian Silva
COPY TO		

Analysis Report

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Respectfully Submitted,

fill M. Parker
Senior Specialist

(717) 556-7262



Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: QA-T-130730 NA Water

QA-T-130730 NA Water LL Sample # WW 7151949
Facility# 211253 Job# 385867 GRD LL Group # 1409517
930 Springtown-Livermore T0600101353 Account # 10904

Project Name: 211253

Collected: 07/30/2013 Chevron

L4310

Submitted: 08/06/2013 18:40 6001 Bollinger Canyon Rd.

Reported: 08/09/2013 18:59 San Ramon CA 94583

SBLQA

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

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Ti	me	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F132201AA	08/08/2013	06:39	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132201AA	08/08/2013	06:39	Anita M Dale	1
01728	TPH-GRO N. CA water C6- C12	SW-846 8015B	1	13219A20A	08/07/2013	21:59	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13219A20A	08/07/2013	21:59	Catherine J Schwarz	1



Analysis Report

LL Sample # WW 7151950

LL Group # 1409517

Account # 10904

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-9-W-130730 Grab Groundwater

Facility# 211253 Job# 385867 GRD 930 Springtown-Livermore T0600101353

Project Name: 211253

Reported: 08/09/2013 18:59

Collected: 07/30/2013 09:25 by ML Chevron

L4310

Submitted: 08/06/2013 18:40 6001 Bollinger Canyon Rd.

San Ramon CA 94583

SBL09

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	6	0.5	1
10943	Ethylbenzene		100-41-4	31	0.5	1
10943	Toluene		108-88-3	4	0.5	1
10943	Xylene (Total)		1330-20-7	77	0.5	1
GC Vol	Latiles TPH-GRO N. CA water	SW-846 C6-C12	8015B	ug/1 5,600	ug/1 500	10

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Ti	me	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F132201AA	08/08/2013	08:07	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132201AA	08/08/2013	08:07	Anita M Dale	1
01728	TPH-GRO N. CA water C6- C12	SW-846 8015B	1	13219A20A	08/08/2013	03:50	Catherine J Schwarz	10
01146	GC VOA Water Prep	SW-846 5030B	1	13219A20A	08/08/2013	03:50	Catherine J Schwarz	10



Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-10-W-130730 Grab Groundwater

Facility# 211253 Job# 385867 GRD 930 Springtown-Livermore T0600101353

LL Group # 1409517 Account # 10904

LL Sample # WW 7151951

Project Name: 211253

Reported: 08/09/2013 18:59

Collected: 07/30/2013 13:40 by ML Chevron

L4310

Submitted: 08/06/2013 18:40 6001 Bollinger Canyon Rd.

San Ramon CA 94583

SBL10

CAT No. Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846	8260B	ug/l	ug/l	
10943 Benzene		71-43-2	N.D.	0.5	1
10943 Ethylbenzene		100-41-4	N.D.	0.5	1
10943 Toluene		108-88-3	N.D.	0.5	1
10943 Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles 01728 TPH-GRO N. CA wate	SW-846 er C6-C12	8015B	ug/l 170	ug/1 50	1

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Ti	me	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P132191AA	08/07/2013	14:13	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P132191AA	08/07/2013	14:13	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13219A20A	08/08/2013	00:55	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13219A20A	08/08/2013	00:55	Catherine J Schwarz	1



Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-11-W-130730 Grab Groundwater

LL Sample # WW 7151952 Facility# 211253 Job# 385867 GRD LL Group # 1409517 930 Springtown-Livermore T0600101353 Account # 10904

Project Name: 211253

Collected: 07/30/2013 10:10 by ML Chevron

L4310

Submitted: 08/06/2013 18:40 6001 Bollinger Canyon Rd.

San Ramon CA 94583 Reported: 08/09/2013 18:59

SBL11

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	N.D.	0.5	1
10943	Ethylbenzene		100-41-4	N.D.	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	320	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Ti	me	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F132201AA	08/08/2013	08:29	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132201AA	08/08/2013	08:29	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13219A20A	08/08/2013	01:16	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13219A20A	08/08/2013	01:16	Catherine J Schwarz	1



Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-12-W-130730 Grab Groundwater

Facility# 211253 Job# 385867 GRD 930 Springtown-Livermore T0600101353

LL Group # 1409517 Account # 10904

LL Sample # WW 7151953

Project Name: 211253

Reported: 08/09/2013 18:59

Collected: 07/30/2013 11:00 by ML Chevron

L4310

Submitted: 08/06/2013 18:40 6001 Bollinger Canyon Rd.

San Ramon CA 94583

SBL12

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	52	5	10
10943	Ethylbenzene		100-41-4	160	5	10
10943	Toluene		108-88-3	190	5	10
10943	Xylene (Total)		1330-20-7	610	5	10
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	9,000	500	10

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Tim	ne	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F132201AA	08/08/2013	09:12	Anita M Dale	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132201AA	08/08/2013	09:12	Anita M Dale	10
01728	TPH-GRO N. CA water C6- C12	SW-846 8015B	1	13219A20A	08/08/2013	04:12	Catherine J Schwarz	10
01146	GC VOA Water Prep	SW-846 5030B	1	13219A20A	08/08/2013	04:12	Catherine J Schwarz	10



Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-13-W-130730 Grab Groundwater

Facility# 211253 Job# 385867 GRD 930 Springtown-Livermore T0600101353

LL Group # 1409517 Account # 10904

LL Sample # WW 7151954

Project Name: 211253

Reported: 08/09/2013 18:59

Collected: 07/30/2013 11:50 by ML Chevron

L4310

Submitted: 08/06/2013 18:40 6001 Bollinger Canyon Rd.

San Ramon CA 94583

SBL13

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	94	0.5	1
10943	Ethylbenzene		100-41-4	22	0.5	1
10943	Toluene		108-88-3	19	0.5	1
10943	Xylene (Total)		1330-20-7	57	0.5	1
GC Vo	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	2,800	250	5

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Tir	ne	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F132201AA	08/08/2013	09:34	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132201AA	08/08/2013	09:34	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13219A20A	08/08/2013	04:34	Catherine J Schwarz	5
01146	GC VOA Water Prep	SW-846 5030B	1	13219A20A	08/08/2013	04:34	Catherine J Schwarz	5



Analysis Report

LL Sample # WW 7151955

LL Group # 1409517

Account # 10904

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-14-W-130730 Grab Groundwater

Facility# 211253 Job# 385867 GRD 930 Springtown-Livermore T0600101353

Project Name: 211253

Collected: 07/30/2013 15:35 by ML Chevron

L4310

Submitted: 08/06/2013 18:40 6001 Bollinger Canyon Rd.

Reported: 08/09/2013 18:59 San Ramon CA 94583

SBL14

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	370	5	10
10943	Ethylbenzene		100-41-4	140	5	10
10943	Toluene		108-88-3	110	5	10
10943	Xylene (Total)		1330-20-7	430	5	10
GC Vol	L atiles TPH-GRO N. CA water	SW-846	8015B	ug/l 6,500	ug/1 250	5
01/20	IPH-GRO N. CA Water	C6-C12	II.a.	6,500	250	5

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Tim	ne	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F132201AA	08/08/2013	10:18	Anita M Dale	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132201AA	08/08/2013	10:18	Anita M Dale	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13219A20A	08/08/2013	04:56	Catherine J Schwarz	5
01146	GC VOA Water Prep	SW-846 5030B	1	13219A20A	08/08/2013	04:56	Catherine J Schwarz	5



Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-15-W-130730 Grab Groundwater

Facility# 211253 Job# 385867 GRD 930 Springtown-Livermore T0600101353

LL Group # 1409517 Account # 10904

LL Sample # WW 7151956

Project Name: 211253

Reported: 08/09/2013 18:59

Collected: 07/30/2013 14:55 by ML Chevron

L4310

Submitted: 08/06/2013 18:40 6001 Bollinger Canyon Rd.

San Ramon CA 94583

SBL15

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	N.D.	0.5	1
10943	Ethylbenzene		100-41-4	N.D.	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	0.6	0.5	1
GC Vo	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	N.D.	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Tim	ne	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F132202AA	08/08/2013	07:13	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132202AA	08/08/2013	07:13	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13219A20A	08/08/2013	02:00	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13219A20A	08/08/2013	02:00	Catherine J Schwarz	1



Analysis Report

LL Sample # WW 7151957

LL Group # 1409517

Account # 10904

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-16-W-130730 Grab Groundwater

Facility# 211253 Job# 385867 GRD 930 Springtown-Livermore T0600101353

Project Name: 211253

Reported: 08/09/2013 18:59

Collected: 07/30/2013 17:00 by ML Chevron

L4310

Submitted: 08/06/2013 18:40 6001 Bollinger Canyon Rd.

San Ramon CA 94583

SBL16

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

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Ti	me	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F132201AA	08/08/2013	10:40	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132201AA	08/08/2013	10:40	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13219A20A	08/08/2013	02:22	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13219A20A	08/08/2013	02:22	Catherine J Schwarz	1



Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-17-W-130730 Grab Groundwater

Facility# 211253 Job# 385867 GRD 930 Springtown-Livermore T0600101353

LL Group # 1409517 Account # 10904

LL Sample # WW 7151958

Project Name: 211253

Reported: 08/09/2013 18:59

Collected: 07/30/2013 08:45 by ML Chevron

L4310

Submitted: 08/06/2013 18:40 6001 Bollinger Canyon Rd.

San Ramon CA 94583

SBL17

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

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Ti	me	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F132201AA	08/08/2013	11:02	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132201AA	08/08/2013	11:02	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13219A20A	08/08/2013	02:44	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13219A20A	08/08/2013	02:44	Catherine J Schwarz	1



Analysis Report

LL Sample # WW 7151959

LL Group # 1409517

Account # 10904

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-18-W-130730 Grab Groundwater

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353

Project Name: 211253

Reported: 08/09/2013 18:59

Collected: 07/30/2013 13:25 by ML Chevron

L4310

Submitted: 08/06/2013 18:40 6001 Bollinger Canyon Rd.

San Ramon CA 94583

SBL18

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	270	5	10
10943	Ethylbenzene		100-41-4	440	5	10
10943	Toluene		108-88-3	230	5	10
10943	Xylene (Total)		1330-20-7	1,100	5	10
GC Vol	latiles TPH-GRO N. CA water	SW-846 C6-C12	8015B	ug/1 6,400	ug/1 250	5

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Tim	ne	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F132201AA	08/08/2013	11:46	Anita M Dale	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132201AA	08/08/2013	11:46	Anita M Dale	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13219A20A	08/08/2013	05:18	Catherine J Schwarz	5
01146	GC VOA Water Prep	SW-846 5030B	1	13219A20A	08/08/2013	05:18	Catherine J Schwarz	5



Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-19-W-130730 Grab Groundwater

Facility# 211253 Job# 385867 GRD 930 Springtown-Livermore T0600101353

LL Group # 1409517 Account # 10904

LL Sample # WW 7151960

Project Name: 211253

Reported: 08/09/2013 18:59

Collected: 07/30/2013 14:00 by ML Chevron

L4310

Submitted: 08/06/2013 18:40 6001 Bollinger Canyon Rd.

San Ramon CA 94583

SBL19

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

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Ti	me	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F132201AA	08/08/2013	12:52	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132201AA	08/08/2013	12:52	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13219A20A	08/08/2013	03:06	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13219A20A	08/08/2013	03:06	Catherine J Schwarz	1



Analysis Report

LL Sample # WW 7151961

LL Group # 1409517

Account # 10904

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-20-W-130730 Grab Groundwater

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353

Project Name: 211253

Reported: 08/09/2013 18:59

Collected: 07/30/2013 16:15 by ML Chevron

L4310

Submitted: 08/06/2013 18:40 6001 Bollinger Canyon Rd.

San Ramon CA 94583

SBL20

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	N.D.	0.5	1
10943	Ethylbenzene		100-41-4	23	0.5	1
10943	Toluene		108-88-3	3	0.5	1
10943	Xylene (Total)		1330-20-7	17	0.5	1
GC Vo	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	2,800	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Tir	me	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F132201AA	08/08/2013	13:14	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F132201AA	08/08/2013	13:14	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13219A20A	08/08/2013	03:28	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13219A20A	08/08/2013	03:28	Catherine J Schwarz	1

Analysis Report

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Quality Control Summary

Client Name: Chevron Group Number: 1409517

Reported: 08/09/13 at 06:59 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD <u>%REC</u>	LCS/LCSD <u>Limits</u>	<u>RPD</u>	RPD Max
Batch number: F132201AA	Sample numbe	er(s): 715	1949-7151	950,715195	52-7151955	,7151957-715	51961	
Benzene	N.D.	0.5	ug/l	95		77-121		
Ethylbenzene	N.D.	0.5		92		79-120		
Toluene	N.D.	0.5	ug/l	95		79-120		
Xylene (Total)	N.D.	0.5	ug/l	90		77-120		
Batch number: F132202AA	Sample numbe	er(s): 715	1956					
Benzene	N.D.	0.5	ug/l	93		77-121		
Ethylbenzene	N.D.	0.5	ug/l	90		79-120		
Toluene	N.D.	0.5	ug/l	94		79-120		
Xylene (Total)	N.D.	0.5	ug/l	86		77-120		
Batch number: P132191AA	Sample numbe	er(s): 715	1951					
Benzene	N.D.	0.5	ug/l	101		77-121		
Ethylbenzene	N.D.	0.5	ug/l	85		79-120		
Toluene	N.D.	0.5	ug/l	87		79-120		
Xylene (Total)	N.D.	0.5	ug/l	86		77-120		
Batch number: 13219A20A	Sample numbe	er(s): 715	1949-7151	961				
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	121	115	75-135	5	30

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD <u>MAX</u>	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: F132201AA Benzene	Sample 97	number(s) 95	: 7151949 72-134	-715195 2	0,7151	952-7151955,	7151957-715	51961 UNSPK:	P149781
Ethylbenzene	95	93	71-134	2	30				
Toluene	95	96	80-125	1	30				
Xylene (Total)	93	92	79-125	1	30				
Batch number: F132202AA	Sample	number(s)	: 7151956	UNSPK:	71519	56			
Benzene	98	99	72-134	1	30				
Ethylbenzene	99	96	71-134	3	30				
Toluene	105	107	80-125	2	30				
Xylene (Total)	97	96	79-125	2	30				
Batch number: P132191AA	Sample	number(s)	: 7151951	UNSPK:	71519	51			

*- Outside of specification

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



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Environmental

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Quality Control Summary

Toluene-d8

Client Name: Chevron Group Number: 1409517

Reported: 08/09/13 at 06:59 PM

Background (BKG) = the sample used in conjunction with the duplicate

	MS	MSD	MS/MSD		RPD	BKG	DUP	DUP	Dup RPD
<u>Analysis Name</u>	%REC	%REC	<u>Limits</u>	RPD	<u>MAX</u>	Conc	Conc	RPD	Max
Benzene	107	116	72-134	8	30				
Ethylbenzene	90	99	71-134	9	30				
Toluene	91	100	80-125	10	30				
Xylene (Total)	89	99	79-125	10	30				

Surrogate Quality Control

4-Bromofluorobenzene

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

1,2-Dichloroethane-d4

Analysis Name: UST VOCs by 8260B - Water

Batch number: F132201AA Dibromofluoromethane

	105 95 96 93 96 80-116 Name: UST VOCs bymber: P132191AA Dibromofluoromethane	113 99 104 104 105 77-113 y 8260B - Water 1,2-Dichloroethane-d4	105 104 104 106 109 80-113	99 97 98 101 99 78-113	
Blank LCS MS MSD	95 96 93 96	99 104 104 105	104 104 106 109	97 98 101 99	
Blank LCS MS	95 96 93	99 104 104	104 104 106	97 98 101	
Blank LCS MS	95 96 93	99 104 104	104 104 106	97 98 101	
Blank LCS	95 96	99 104	104 104	97 98	
Blank	95	99	104	97	
240011 114	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
	Name: UST VOCs by	y 8260B - Water			
Limits:	80-116	77-113	80-113	78-113	
MSD	96	102	104	98	
MS	97	106	103	99	
LCS	96	105	104	99	
Blank	96	102	103	97	
7151961	95	101	104	101	
7151960	96	101	105	99	
7151959	95	101	103	97	
7151958	96	101	103	96	
7151957	96	102	104	98	
7151955	96	102	105	99	
/151954	95	102	103	97	
7151954	96	99	106	99	
7151953	97	102	105	100	
	, ,	101	103	99	
7151953	95	103	104	97	

*- Outside of specification

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

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

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Quality Control Summary

Client Name: Chevron Group Number: 1409517 Reported: 08/09/13 at 06:59 PM Surrogate Quality Control Blank 105 LCS 105 104 95 97 97 MS 104 105 95 MSD 104 104 94 96 80-116 77-113 80-113 78-113 Limits: Analysis Name: TPH-GRO N. CA water C6-C12 Batch number: 13219A20A Trifluorotoluene-F 7151949 7151950 81 7151951 79 7151952 7151953 92 7151954 89 7151955 87 7151956 78 7151957 7151958 76 7151959 78 77 7151960 7151961 116 Blank LCS 101 LCSD 101

Limits:

63-135

^{*-} Outside of specification

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

⁽²⁾ The unspiked result was more than four times the spike added.

Chevron California Region Analysis Request/Chain of Custody

eurofins Lancaster \$8\$213-\$2 Acct. # 10	90	14	Fo Group :	or Eu	ıçofine	Plance	aster	Labo Sa	ratorio mple	es use	only 5	194	19-	61						
Laboratories			Inst	tructio	ns on r	everse s	side cor	respon	d with c	ircled nu	ımbers									
1) Client Information	(4)	Matrix			(5)			Δr	nalvs	ses F	gear	leet/	ad			7				
1) Client Information Facility # 21(253) Site Address			П						a.y.		1040	031		_ Ţ		┪	SCR #	t:		
930 SPRING DWW \$LVD, LIVERMORE, CA	Sediment	Ground Surface			×		Cleanup	dnu									☐ J va		Weight ng needed est detection	
THE GETTLER EYAN DUBLIN, CA 94568	Sedi	Gro		ainers	8260 🔀	8260	Gel	Gel Cleanup									com	possible		
DEANUA HARDING Copsultant Phone #]		Air	of Containers	8021	8015 🛛	without Silica	with Silica (se	Method	Method					Conf		onfirmation at hit by 8260 by 8260	
Consultant Project Mgr. DEANUA HAPDING Consultant Phone # (975) 55 (-7555 Sampler A 1 1	┨ 	Potable NPDES			80	8	8015 with	015 with	an	Oxygenates		Lead					Run	ox	xy's on highest xy's on all hits	hit
2 Soil Collected a E		Water		Total Number	+ X	TPH-GRO	TPH-DRO 8	TPH-DRO 8015	8260 Full Scan	ô	Lead	Dissolved Le								
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AMENDED Chevron California Region Analysis Request/Chain of Custody

eurofins Lancas	ter \$8\$213-\$2	.cct. # <u>1090</u>)U Gro	For E	urolins i	ancast	er Labora	itories j	န္မေ ၀ည	ly Q	10-1		am or Custouy
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MY CARRYL MACLE	l eed Consultant		P 8		الدا	_ <u>8</u>		-					Results in Dry Weight J value reporting needed
Onsultant/Office	OD CRASE	Sediment Sediment	Ground Surface	6	X 0928	Gel Cleanup	Cleanup						Must meet lowest detection
Onsultant/Office WINGENTLER EYAN	6747 Sicract. St Dublin, CA au Si	S S	ַס מ	Containers	88		8	1				1 1	limits possible for 8260 compounds
DEANUA HARDI	NACC-			in ta		Z Silica	8 Ge	-	g	8			8021 MTBE Confirmation
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975)551-7555	<u> </u>		Potable NPDES		8 8	× ×	5 with	Oxygenates					Run oxy's on highest hit
Mike Lam	bad	Grab © Composite Soil	중 품 드	Number		8015	8 8			-ead	.		Runoxy's on all hits
)	Soil Collected	၌ <u>မို</u>	ō		BTEX +	PH-DRO	PH-DRO 801		Fotal Lead	Dissolved Lead			
Sample Identification	Depth Date Time	Grab Comp Soil	Water	Total	BTEX	Ŧ	TPH.		otal 1	issol			
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MW-11	1340		- 	6	ŞΙζ								Mw-16 BROKE
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- MW- (3	1150	X	X	6	$\chi \chi \chi$	}		+-	\vdash	_		+	Please forward the
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MW-16	1455	$\Diamond \vdash \vdash \vdash$	\mathbf{S}	8	$\sum_{i} \langle X_i \rangle_{i}^2$								To the lead consultant
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	Eurofins Lancaster Laho								Jus		Jeals I	mact?	Ves No



Explanation of Symbols and Abbreviations

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

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

- < less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- ppm parts per million One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
- ppb parts per billion
- **Dry weight**basis
 Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C - result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

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

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

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

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

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

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ATTACHMENT C

HISTORICAL GROUNDWATER MONITORING AND SAMPLING DATA

Table 1
Groundwater Monitoring Data and Analytical Results

Former Texaco Service Station #211253 930 Springtown Boulevard Livermore, California

				Liver	more, California					
WELL ID/	TOC*	DTW	GWE	SPHT SP	H REMOVED	TPH-GRO	В	T	E	X
DATE	(ft.)	(ft.)	(msl)	(ft.)	(gallons)	(μg/L)	(µg/L)	(μg/L)	(µg/L)	(μg/L)
MW-9										
07/23/09 ¹	523.14	13.00	510.14	0.00	0.00	5,200	4	5	310	100
11/09/09	523.14	12.70	510.44	0.00	0.00	240	4	4	2	5
02/22/10	523.14	11.93	511.21	0.00	0.00	< 50	< 0.5	< 0.5	< 0.5	< 0.5
05/24/10	523.14	12.22	510.92	0.00	0.00	6,200	9	5	470	110
MW-10										
07/23/09 ¹	522.76	12.59	510.17	0.00	0.00	16,000	220	440	440	660
11/09/09	522.76	12.30	510.46	0.00	0.00	2,800	1	2^3	30	30
02/22/10	522.76	11.52	511.24	0.00	0.00	3,600	9	2	61	10
05/24/10	522.76	11.82	510.94	0.00	0.00	3,000	12	3	110	22
						,				
MW-11										
$07/23/09^1$	523.25	13.05	510.20	0.00	0.00	5,400	25	28	62	66
11/09/09	523.25	12.73	510.52	0.00	0.00	1,100	3	0.6^{3}	2	2
02/22/10	523.25	11.96	511.29	0.00	0.00	1,400	2	< 0.5	5	0.9
05/24/10	523.25	12.27	510.98	0.00	0.00	1,700	1	<0.5	10	0.6
MW-12					2					
07/23/09 ¹	523.42	13.03	510.41**	0.02	5.01 ²	48,000	340	3,100	1,300	7,600
11/09/09	523.42	12.78	510.64	0.00	0.00	18,000	290	560	22	3,100
02/22/10	523.42	12.13	511.29	0.00	0.00	14,000	190	590	310	1,400
05/24/10	523.42	12.38	511.04	0.00	0.00	17,000	150	530	320	1,400
MW 12										
MW-13	522.12	10.75	510.27	0.00	0.00	52 000	7.00	6.200	000	12 000
07/23/09 ¹	523.12	12.75	510.37	0.00	0.00	52,000	760 240	6,200	980	13,000
11/09/09	523.12	12.51	510.61	0.00	0.00	12,000	340	1,300	16 22	1,700
02/22/10 05/24/10	523.12 523.12	11.87	511.25 511.02	0.00	0.00 0.00	13,000 1 5 000	630 950	600 670	22 130	960 790
U3/24/1U	543.14	12.10	511.02	0.00	0.00	15,000	95U	0/0	130	/90

Table 1
Groundwater Monitoring Data and Analytical Results

Former Texaco Service Station #211253 930 Springtown Boulevard Livermore, California

					Livermore, Camorn					
WELL ID/	TOC*	DTW	GWE	SPHT	SPH REMOVED	TPH-GRO	В	T	E	X
DATE	(ft.)	(ft.)	(msl)	(ft.)	(gallons)	(μg/L)	(μg/L)	(µg/L)	(µg/L)	(µg/L)
MW-14										
07/23/091	520.88	10.40	510.48	0.00	0.00	8,400	230	460	180	670
11/09/09	520.88	10.11	510.77	0.00	0.00	23,000	1,800	1,900	750	2,600
02/22/10	520.88	9.37	511.51	0.00	0.00	48,000	3,600	7,900	2,100	9,400
05/24/10	520.88	9.88	511.25**	0.31	0.00	NOT SAMPLE	D DUE TO THE I	PRESENCE OF	SPH	
MW-15										
07/23/09 ¹	520.87	10.33	510.54	0.00	0.00	2,500	6	17	16	320
11/09/09	520.87	10.18	510.69	0.00	0.00	20,000	110	590	370	4,900
02/22/10	520.87	9.48	511.39	0.00	0.00	66	<0.5	3	1	6
05/24/10	520.87	9.83	511.04	0.00	0.00	70	1	8	1	8
MW-16										
$07/23/09^1$	520.50	10.63	509.87	0.00	0.00	430	0.6	< 0.5	< 0.5	< 0.5
11/09/09	520.50	10.31	510.19	0.00	0.00	180	< 0.5	< 0.5	< 0.5	< 0.5
02/22/10	520.50	9.63	510.87	0.00	0.00	< 50	< 0.5	< 0.5	< 0.5	< 0.5
05/24/10	520.50	9.88	510.62	0.00	0.00	<50	<0.5	<0.5	<0.5	<0.5
QA										
07/23/09						<50	< 0.5	< 0.5	< 0.5	< 0.5
11/09/09						< 50	< 0.5	14	< 0.5	< 0.5
02/22/10						< 50	< 0.5	< 0.5	< 0.5	< 0.5
						< 50	<0.5	<0.5	< 0.5	< 0.5

Table 1

Groundwater Monitoring Data and Analytical Results

Former Texaco Service Station #211253 930 Springtown Boulevard Livermore, California

EXPLANATIONS:

 $TOC = Top ext{ of Casing}$ (msl) = Mean Sea Level E = Ethylbenzene (ft.) = Feet TPH = Total Petroleum Hydrocarbons X = Xylenes $DTW = Depth ext{ to Water}$ GRO = Gasoline Range Organics --= Not Measured/Not Analyzed

GWE = Groundwater Elevation B = Benzene QA = Quality Assurance/Trip BlankSPHT = Separate Phase Hydrocarbon Thickness T = Toluene ($\mu g/L$) = Micrograms per liter

ANALYTICAL METHODS:

TPH-GRO analyzed by EPA Method 8015 BTEX analyzed by EPA Method 8260

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

211253.xls/385867 **1** As of 05/24/10

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

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

Well development preformed.