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April 9, 2013

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

e: Former Texaco Service Station 211253

930 Springtown Boulevard Livermore, California ACEHS Case No. RO0189

RECEIVED

By Alameda County Environmental Health at 9:38 am, Apr 10, 2013

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

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

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

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

Sincerely,

Carryl MacLeod Project Manager

Attachment: First Quarter 2013 Groundwater Monitoring and Sampling Report



10969 Trade Center Drive Rancho Cordova, California 95670

Telephone: (916) 889-8900 Fax: (916) 889-8999

http://www.craworld.com

April 9, 2013 Reference No. 060058

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

Re: First 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 First 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' Analytical Results report is included as Attachment B. Historical groundwater monitoring and sampling data are included as Attachment C.

RESULTS OF FIRST QUARTER 2013 EVENT

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

Equal Employment Opportunity Employer



April 9, 2013 Reference No. 060058

Results of the current monitoring event indicate the following:

• Groundwater Flow Direction

o Shallow (Figure 2)o Intermediate (Figure 3)NorthwestVariable

o Deep (Figure 4) Not Applicable (only 1 well)

• Approximate Depth to Groundwater

o Shallow Wells 9 to 13 feet below grade (fbg)

Intermediate WellsDeep Well10 to 14 fbg10 fbg

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

	TABLE A: C	GROUNDWA	TER ANALY	TICAL 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
		Shallo	ow Wells		
MW-9	5,200	<5	< 5	37	60
MW-11	110	<0.5	<0.5	<0.5	< 0.5
MW-14	4,200	170	120	61	410
MW-18	3,000	130	5	270	160
MW-19	<50	<0.5	<0.5	<0.5	<0.5
MW-20	2,000	<5	<5	< 5	<5
		Interme	diate Wells		
MW-10	<50	<0.5	<0.5	<0.5	<0.5
MW-12	7,700	20	83	160	500
MW-13	11,000	380	750	31	1,700
MW-16	<50	<0.5	<0.5	<0.5	<0.5
MW-17	<50	<0.5	<0.5	<0.5	<0.5
		Dee	p Well		
MW-15	<50	<0.5	<0.5	<0.5	<0.5

 $\mu g/L \qquad \text{Micrograms per liter}$

Indicates constituent was not detected at or above stated laboratory reporting limit
 ESLs Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), Screen

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



April 9, 2013 Reference No. 060058

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

CONCLUSIONS AND RECOMMENDATIONS

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

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

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

ANTICIPATED FUTURE ACTIVITIES

Groundwater Monitoring

G-R will monitor and sample site wells per the established schedule and inspect and replace (if necessary) the sorbent sock in MW-14. CRA will submit a groundwater monitoring and sampling report.

Soil Vapor Investigation

CRA has completed the installation and sampling of soil vapor wells and is currently awaiting the soil vapor results (samples were submitted on March 14, 2013). An updated conceptual site model will be prepared incorporating the results of the vapor sampling, as well as evaluation of the hydrocarbon distribution in soil and soil vapor, and potential vapor intrusion risks, comparison of site conditions to *Low-Threat Closure Policy* criteria, identification of data gaps, and conclusions and recommendations.



April 9, 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

CH/cw/21

Brian Silva

Encl.

Figure 1 Vicinity Map

Figure 2 Groundwater Elevation and Hydrocarbon Concentration Map –

Shallow Zone

Figure 3 Groundwater Elevation and Hydrocarbon Concentration Map –

Intermediate Zone

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

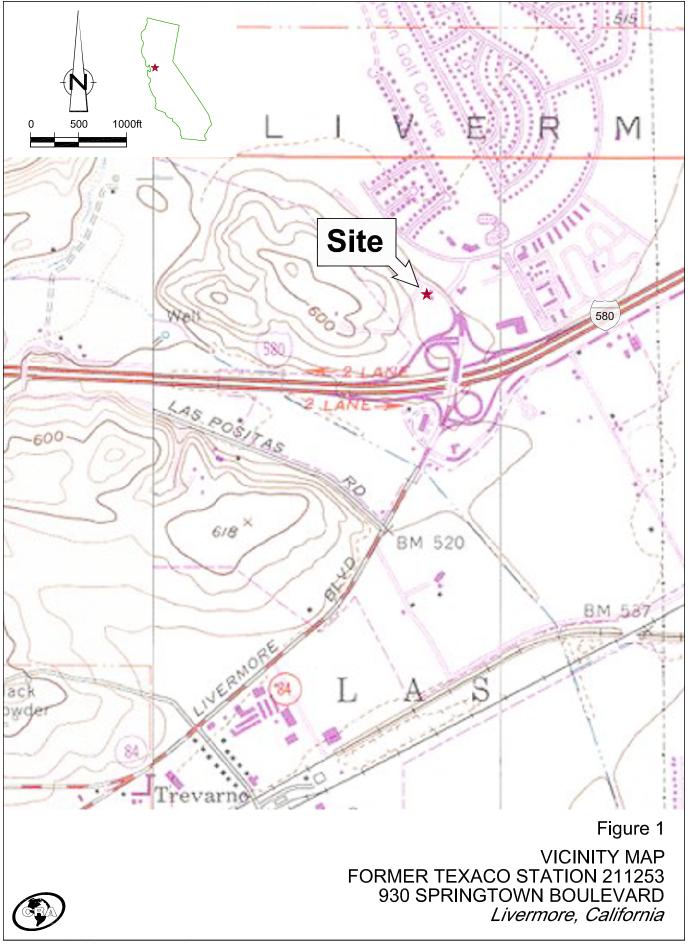
cc: Ms. Carryl MacLeod, Chevron (electronic copy)

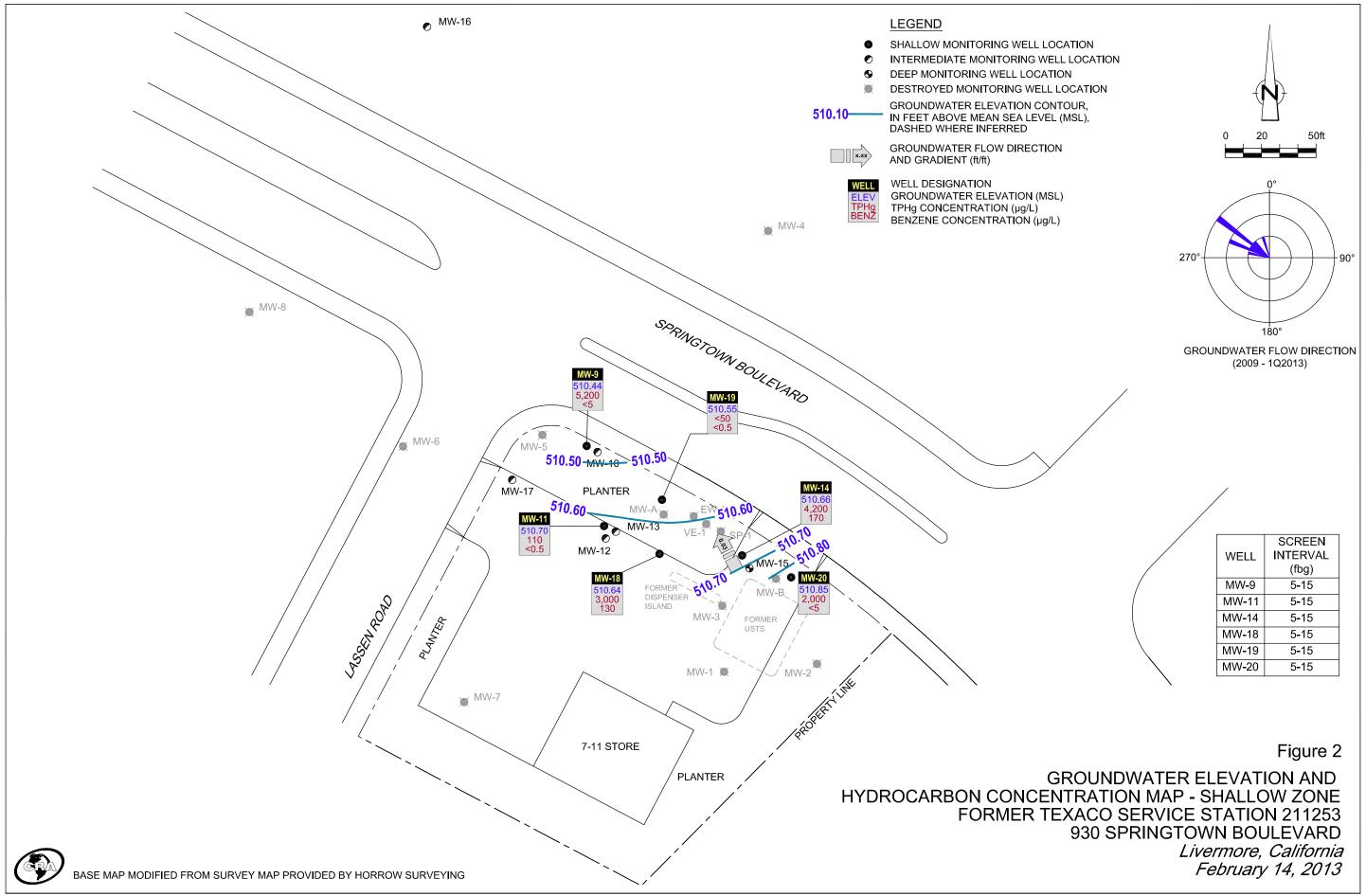
Mr. Joe Zadik

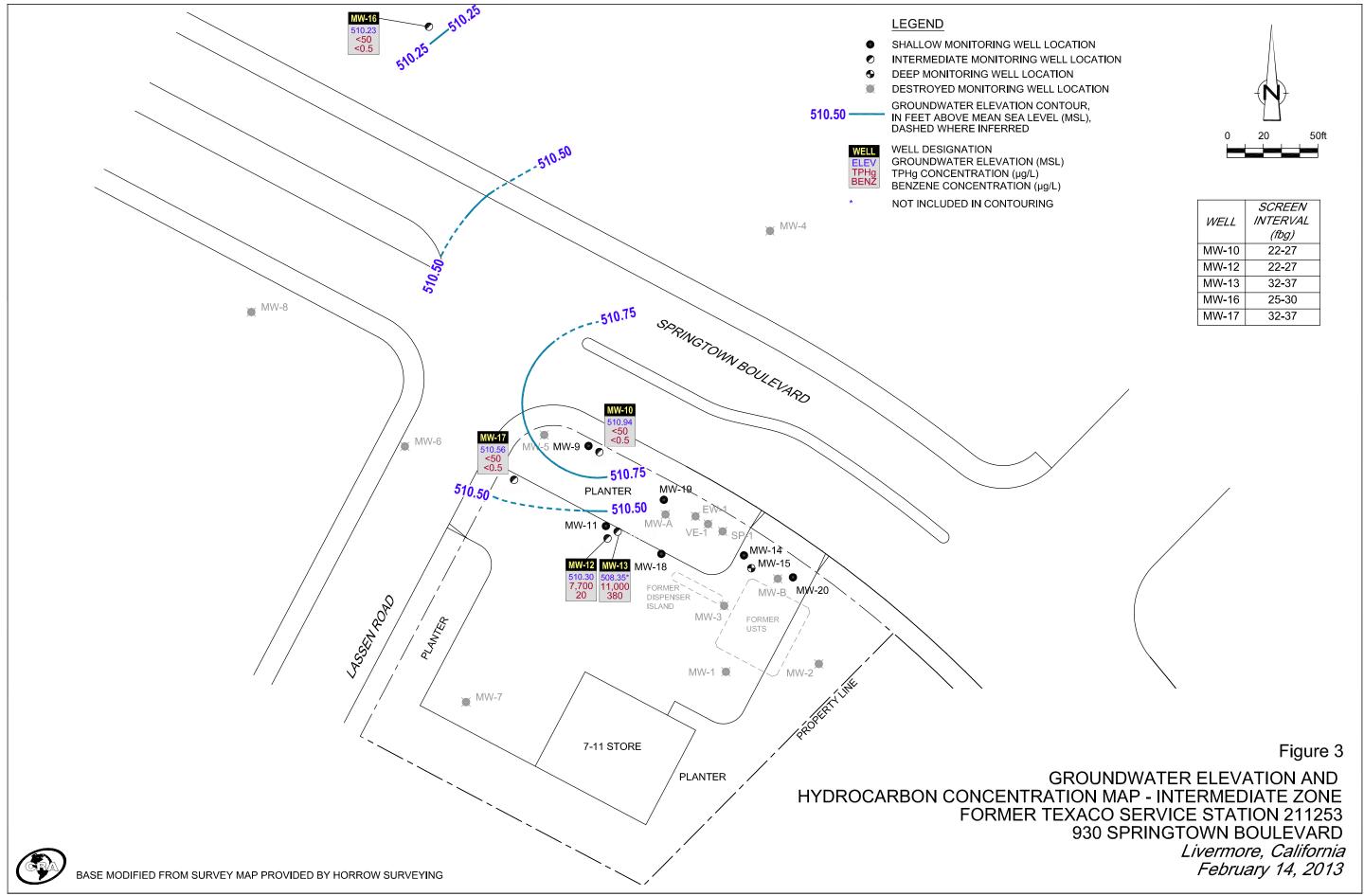
Mr. Ken Hilliard

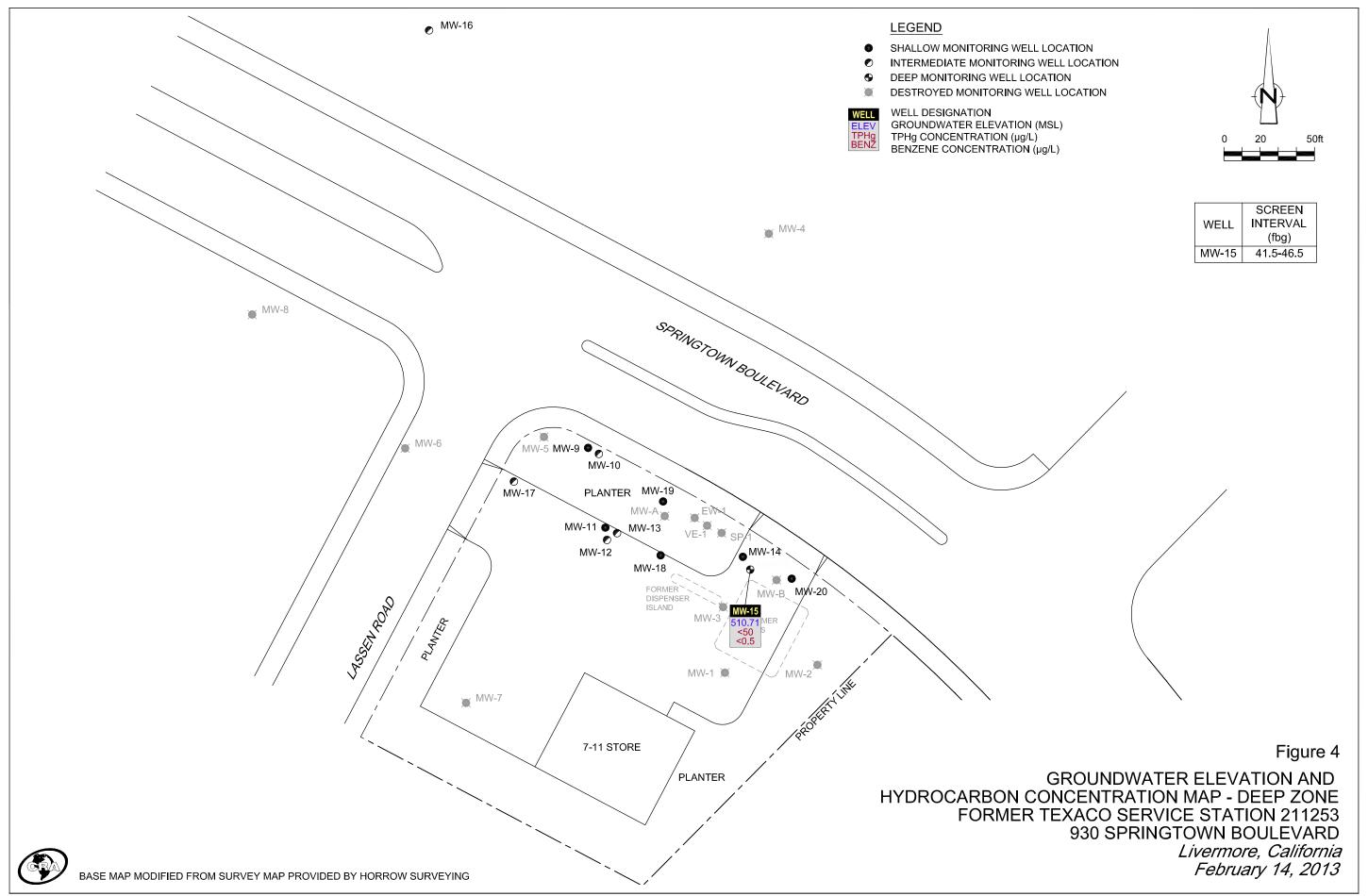
Mr. Kirk F. Sniff, Esq, Strasburger & Price, LLP

FIGURES









TABLE

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							HYDROCARBONS		PRIMA	RY VOCS		GE	NERAL C	CHEMIST	RY
Location	Date Units	TOC ft	DTW ft	GWE ft-amsl	tt LNAPLT	suollag	Т Трн-GRO	B µg/L	T µg/L	E µg/L	X µg/L	A Methane	Ferrous iron	Nitrate as Nitrogen	Sulfate
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-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-11 ²	08/24/2010	523.42	13.80	509.62	-	-	2,000 J	6	2	9	5	-	-	-	-
MW-11 ²	01/31/2011	523.42	12.35	511.07	-	-	790	1	< 0.5	5	3	-	-	-	-
MW-11 ²	08/09/2011	523.42	12.06	511.36	-	-	130	< 0.5	< 0.5	0.9	< 0.5	-	-	-	-
MW-11 ²	02/09/2012	523.42	13.06	510.36	-	-	220	< 0.5	< 0.5	< 0.5	<0.5	-	-	-	-
MW-11 ^{2, 5}	05/10/2012	523.42	12.58	510.84	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-
MW-11 ^{2,5}	02/14/2013	523.42	12.72	510.70	-	-	110	<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	-	-	-	-

TABLE 1 Page 2 of 5

							HYDROCARBONS		PRIMAI	RY VOCS		GE	NERAL C	CHEMIST	TRY
Location	Date Units	TOC ft	DTW ft	GWE ft-amsl	tt LNAPLT	gallons	Т Трн-GRO	B µg/L	T µg/L	Е µg/L	X µg/L	Methane	Ferrous iron	Nitrate as Nitrogen	Sulfate
MW-12 ³	00 100 10011	500.40	12.10	540.00			0.000		1.10	170	500				<u>'</u>
	08/09/2011	523.12	12.19	510.93	-	-	9,000	71	140	170	580	-	-	-	-
MW-12 ³ MW-12 ^{3, 5}	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	-	-		-	- 10	-	-	-	- 400	-	2 200
MW-12 3,5	08/22/2012 11/29/2012	523.12 523.12	13.44 13.35	509.68 509.77	-	-	8,500	<5	12	120	160	2,000	6,400	<250	3,200
MW-12 ^{3,5}	02/14/2013	523.12 523.12	13.35 12.82	510.30	-	-	- 7,700	20	83	160	500	-	-	-	-
.,.,,	02/14/2013	323.12	12.02	310.30	-	-	7,700	20	63	100	300	-	-	-	-
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-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 MW-14 ²	08/09/2011 1,**	520.88	9.67	511.35	0.17	0.00	-	-	-	-	-	-	-	-	-
MW-14 2,5	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	-	-	-	-	-	-	-	-	-
MW-14 2,5	05/30/2012	520.88	10.07	F10.4F	0.16	1.05	Sorber	nt Sock Insta	illed						
MW-14 2,5	06/14/2012**	520.88	10.36	510.65	0.16	1.25	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-
MW-14 ^{2, 5}	07/24/2012** 08/08/2012**	520.88 520.88	10.70 13.74	510.20 507.16	0.02 0.03	0.45 0.46	-	-	-	-	-	-	-	-	-
MW-14 ^{2,5}	08/08/2012***	520.88	10.78	510.10	0.03	0.46	22,000	890	990	600	2,600	1,200	1,000	<250	145,000
MW-14 ^{2,5}	09/04/2012	520.88	10.78	510.10	-	0.33	-	-	-	-	2,600	-	-	-250	-
	05,01,2012	020.00	10.04	515.00		0.10									

TABLE 1 Page 3 of 5

·			T		T	_	HYDROCARBONS		PRIMA	RY VOCS	T	GE	NERAL (CHEMIS	TRY
Location	Date Units	TOC ft	DTW ft	GWE ft-amsl	tf LNAPLT	gallons	™ TTPH-GRO	В µg/L	T µg/L	Е µg/L	X µg/L	Methane	Ferrous iron	Nitrate as Nitrogen	Sulfate
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	_	_	<u>-</u>	_	_	_	_	_	_	_	_
MW-14 ^{2, 5}	10/29/2012	520.88	10.62	510.26	_	_	<u>-</u>	_	_	_	_	_	_	_	_
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-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-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	-	-	-	-
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-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
					-	-						- 25	- <10	- 3,700	

TABLE 1 Page 4 of 5

							HYDROCARBONS		PRIMAI	RY VOCS		GE	ENERAL C	HEMIST	ΓRY
Location	Date Units	TOC ft	DTW ft	GWE ft-amsl	tt LNAPLT	gallons	™H-GRO	В µg/L	T µg/L	E µg/L	X µg/L	Methane	Ferrous iron	Nitrate as Nitrogen	Sulfate
	Offits	jι	jι	jt-umst	Ji	guitons	ry -	F9 -	ry -	ry -	F9 -	F9 -	F9 -	ry -	F9 -
$MW-17^3$	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-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-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	-	-	-	-
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-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	-	-	-	-
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	-	-	-	-

TABLE 1 Page 5 of 5

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

							HYDROCARBONS		PRIMAR	RY VOCS		GE	NERAL (CHEMIST	RY
Location	Date	тос	DTW	GWE	LNAPLT	LNAPL REMOVED	TPH-GRO	В	Т	E	X	Метнапе	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
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	-	-	-	-

Abbreviations and Notes:

TOC = Top of casing

DTW = Depth to water

GWE = Groundwater elevation

(ft-amsl) = Feet above mean sea level

ft = Feet

 μ g/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

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)].
- 1 Not sampled due to the presence of LNAPL.
- 2 Shallow well
- 3 Intermediate well
- 4 Deep well
- 5 Sampled semi-annually during the first and third quarters

ATTACHMENT A

MONITORING DATA PACKAGE



TRANSMITTAL

February 21, 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:

toring and Sampling Data Package nt of February 14, 2013

COMMENTS:

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

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

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

Trans/211253

WELL CONDITION STATUS SHEET

Client/Facility #:	Chevron #211253	Job#:	385867
Site Address:	930 Springtown Blvd.	Event Date:	2/14/13
City:	Livermore, CA	Sampler:	SW

WELL ID	Vault Frame Condition	Gasket/O-Ring (M) Missing (R) Replaced	BOLTS (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/N	REPLACE CAP Y/N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y/N
MW-9	Olc							1	N	12" emco	1
MU-10	ou	(No.	1	1	
MW-11	סנר										1 1
MW-12	٥٤										+ /
MW-1)	6IC										+ /
M W-14	OK										
mw-15	OK								4		
MW-16	6lc							7	4 42		+ + -
MU-17	olc							· r	r		
mw-18	ok								1		
MW-19	61C	-)			
MW-2)	c۷							7	4		
										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.

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

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

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

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

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



Client/Facility#: Site Address:	Chevron #21 930 Springto		i.	Job Number: Event Date:	385867	<u> </u>	 (inclusive)
City:	Livermore, C	A		Sampler:	45	<u></u>	
Well ID Well Diameter Total Depth Depth to Water Depth to Water Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	w/ 80% Recharge	xVF	Fa Check if water col 6 = 1-16	0) + DTW]: <u>{3.05</u>	02 1"= 0.04 2"= 66 5"= 1.02 6"= 50 ft. = Estimated Purge Vol Time Started: Time Complete Depth to Produ Depth to Wate Hydrocarbon T Visual Confirm Skimmer / Abs Amt Removed	0.17 3"= 0.3 1.50 12"= 5.8 ume: 3.50 ed:	gal. (2400 hrs)ftftftftftftftftgal
Start Time (purge Sample Time/Da Approx. Flow Rat Did well de-water (2400 hr.)	te: 0955 / 2 te:	pH 7.25 7.19	Water Col Sediment	Description:	Clean_Odor: Ø/ Ni L.s.He gal. DTW @ Sar D.O. (mg/L)	Strong	<i>-56</i>
		l	ABORATORY	INFORMATION			
SAMPLE ID MW- 9	(#) CONTAINER A x voa vial	YES	PRESERV. TYP		TPH-GRO(8015)/BT	ANALYSES EX(8260)	
COMMENTS:Add/Replaced L	ock.	NhhA	Replaced Plug:		Add/Replaced B	014:	



Client/Facility#	Chevron #2	11253		Job Number:	385867	
Site Address:	930 Springt	own Blve	d.	Event Date:	2/14/13	(inclusive)
City:	Livermore,			Sampler:	34	(IIIOId3IVE)
				•		
Well ID	MW- 10	<u>) </u>	-1	Date Monitored:	2/14/13	
Well Diameter	4		Volum	ne 3/4"= 0.0	2 1"= 0.04 2"= 0.17	3"= 0.38
Total Depth	26.42 ft	_	L	r (VF) 4"= 0.6	6 5"= 1.02 6"= 1.50	12"= 5.80
Depth to Water	14-11	xVF	Check if water colum	in is less then 0.50 x3 case volume =	0 ft. Estimated Purge Volume: 2 °	7,43 _{gal.}
Depth to Water	w/ 80% Recharge	e [(Height of	Water Column x 0.20)	+ DTWJ: 15-13		·
Purge Equipment:			compling Equipment.		Time Started:	(2400 hrs) (2400 hrs)
Disposable Bailer			Sampling Equipment:	<	Depth to Product:	
Stainless Steel Baile			Disposable Bailer Pressure Bailer		Depth to Water:	
Stack Pump	×		Metal Filters		Hydrocarbon Thickness	
Suction Pump			Peristaltic Pump		Visual Confirmation/Des	
Grundfos			ED Bladder Pump		Chi	
Peristaltic Pump		C	other:		Skimmer / Absorbant So Amt Removed from Skir	
QED Bladder Pump					Amt Removed from Wel	
Other:					Water Removed:	
Start Time (purg			Weather Co	1 —	Clean	
Sample Time/Da		2/14/12	Water Color:	Clean	_Odor: Y / 🚯	
Approx. Flow Ra	ate:3	_gpm.	Sediment De	escription:	None	
Did well de-wate	er? <u>ys</u> If	yes, Time	: <u>0914</u> Volu	me: <u>12</u>	gal. DTW @ Sampling:	12.88
Time	Volume (gal.)	pН	Conductivity	Temperature	D.O. OF	RP
(2400 hr.)		•	(µmhos/cm - (13)	(③ / F)	(mg/L) (m	V)
0913	<u> </u>	7.37	729			<u>. </u>
						
FI						
SAMPLE ID	(#) ÇONTAINER	REFRIG.	LABORATORY IN PRESERV. TYPE	LABORATORY	ANALYSI	
MW- 16	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)	
			1.102			
	3 × 100 1101			BWOAGTER		1
	- A voca vici			DIVOTOTER		
	S x vou viii			BINGROTER		
	S x vou viii			SWONDER		
	S x vou viii			Z-WOZO ZEK		
	S X void visit					
COMMENTS:	S X YOU WILL					
COMMENTS:	S X VOLUME					
COMMENTS: Add/Replaced			Replaced Plug:		Add/Replaced Bolt:	



	Client/Facility#:	Chevron #2112	53	Job Number	: 385867	
	Site Address:	930 Springtow	n Blvd.	Event Date:		(inclusive)
	City:	Livermore, CA		Sampler:	211	(Miciasive)
	Well ID Well Diameter Total Depth Depth to Water	MW- 4	= .66 = 1.	Date Monitored Volume 3/4"= 0 Factor (VF) 4"= 0 r column is less then 0. 2	d: 2 14/13 1.02 1"= 0.04 2"= 0.17 1.66 5"= 1.02 6"= 1.50 50 ft. Time Started: Time Completed: Depth to Product: Depth to Water: Hydrocarbon Thicks Visual Confirmation Skimmer / Absorbas Amt Removed from	12"= 5.80 3 - 7 2 gal. (2400 hrs) (2400 hrs) ft ft ness: ft /Description:
S	Start Time (purge Sample Time/Dat Approx. Flow Rat Did well de-water Time (2400 hr.) 1138 1142	te: 1200 / 211 e: gpi ? If yes Volume (gal.)	Water m. Sedime n, Time: OH Conductivi (µmhos/cm -	er Conditions: Color: Clarity ent Description: Volume: Temperature (G / F) 17-8 17-7 17-3	Odor: Y ID Mine gal. DTW @ Samplin D.O. (mg/L)	ng:
C	SAMPLE ID MW- I(<u>``</u>	LABORATO EFRIG. PRESERV. YES HCL	RY INFORMATION TYPE LABORATORY LANCASTER	/ ANAL TPH-GRO(8015)/BTEX(8	YSES 260)
	Add/Replaced L	ock:	Add/Replaced PI	ug:	Add/Replaced Bolt:	



	Client/Facility#:	Chevron #211253		Job Number:	: 385867	
	Site Address:	930 Springtown E	Blvd.	Event Date:	2/14/13	(inclusive)
	City:	Livermore, CA		Sampler:	77	(
	Well ID	MW-12		Date Monitored	2/14/15	
	Well Diameter	4		Volume 3/4"= 0.	02 1"= 0.04 2"= 0.17	3"= 0.38
	Total Depth	26.66 ft.	[Factor (VF) 4"= 0.		12"= 5.80
	Depth to Water	12.82 ft. xvF		column is less then 0.5		7 4.
	Depth to Water v	w/ 80% Recharge [(Heigh	of Water Column x	0.20) + DTWI: 15.5	= Estimated Purge Volume: 2	<u>/•90</u> gal.
			. O. Traidi Goldiiii X	0.20) · B W]. <u>1000</u>	Time Started:	
	Purge Equipment:		Sampling Equip	ment:		(2400 hrs)
	Disposable Bailer		Disposable Bailer	<u> </u>	Depth to Product:	
	Stainless Steel Bailer		Pressure Bailer		Depth to Water: Hydrocarbon Thickness	
0	Stack Pump	<u> </u>	Metal Filters		Visual Confirmation/Des	
	Suction Pump Grundfos		Peristaltic Pump			
	Peristaltic Pump		QED Bladder Pun		Skimmer / Absorbant Sc	
	QED Bladder Pump		Other:		Amt Removed from Skii	nmer: gal
	Other:				Amt Removed from We Water Removed:	ll:gal
	Sample Time/Dai Approx. Flow Rat Did well de-water Time (2400 hr.)	e: <u>3</u> gpm.	Sedime ime: 1124 Conductivity (µmhos/cm - 1	y Temperature	gal. DTW @ Sampling: D.O. OF (mg/L) (m	13.65
_	SAMPLEID	(#) CONTAINER REFR	LABORATOR	RY INFORMATION		
H	MW- 12	6 x voa vial YES			TPH-GRO(8015)/BTEX(8260)	•
r	MAY C	O X VOA VIAI TEX	, ncl	LANCASTER	1PH-GRO(8015)/BTEX(8260)	-
F						
H						
L						
H						
c _	COMMENTS:					
	Add/Replaced Lo	ock: A	.dd/Replaced Plu	ıq:	Add/Replaced Bolt	



Client/Facility#:	Chevron #2	11253		Job Number:	385867	
Site Address:	930 Springto	own Blv	d.	Event Date:	2/14/13	(inclusive)
City:	Livermore, 0	CA		Sampler:	34	
Well ID	MW- / 3	_		Date Monitored:	2/14/13	
Well Diameter	4	_	Volun			3"= 0.38
Total Depth	36.62 ft			r (VF) 4"= 0.66		2"= 5.80
Depth to Water	12.53 ft 24.65		Check if water colum			7 / C
Depth to Water		_	Water Column x 0.20)		Estimated Purge Volume: 4	7.67 gal.
	m comarge	Z [(Treight of	vvater Column x 0.20)	+DIVVJ. 18137	Time Started:	(2400 hrs)
Purge Equipment:		8	Sampling Equipment:		Time Completed:	(2400 hrs)
Disposable Bailer			Disposable Bailer	X	Depth to Product:	ft
Stainless Steel Bailer			Pressure Bailer		Depth to Water: Hydrocarbon Thickness	
Stack Pump Suction Pump	×		fletal Filters Peristaltic Pump		Visual Confirmation/Des	
Grundfos			ED Bladder Pump			
Peristaltic Pump	-		Other:		Skimmer / Absorbant Sc	
QED Bladder Pump					Amt Removed from Skin Amt Removed from Wel	l: gal
Other:					Water Removed:	
Start Time (purge			Weather Co	, , <u> </u>	Clean	
Sample Time/Da		2/14/12	Water Color	: Cloudy	Odor: 🕅 <u>L 13</u>	Ho
Approx. Flow Rat		gpm.	Sediment De	· —	Listy	
Did well de-water	? If	yes, Time	:Volu	me: g	gal. DTW @ Sampling:	14.68
Time	Volume (gal.)	рН	Conductivity	Temperature	D.O. OR	RP .
(2400 hr.)			(µmhos/cm -419)	(6)/ F)	(mg/L) (m ¹	V)
1033	16	7.82	879	18.2		
10 41	32	7.76	834	18.1		
1049		7.53	830	17.9		
cer I				-		
0.4451.5.15	(#) 00NTANATA		LABORATORY IN			
SAMPLE ID	(#) CONTAINER O x you vial	REFRIG. YES	PRESERV. TYPE	LABORATORY	ANALYSE	
- WIVV- 13	O X VOA VIAI	TES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)	
	4 1 1 1 1					· · · · · · · · · · · · · · · · · · ·
<u> </u>	!!					
COMMENTS: 12" emco						
Add/Replaced L	ock:	Add/	Replaced Plug:		Add/Replaced Bolt:	***



Client/Facility#:	Chevron #211253		Job Number:	385867	
Site Address:	930 Springtown B	lvd.	Event Date:	2/14/13	(inclusive)
City:	Livermore, CA		Sampler:	ZH	(moldorve)
Well ID Well Diameter Total Depth Depth to Water Depth to Water Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	w/ 80% Recharge [(Height	Volum Factor Check if water colum 66 = 2.75	(VF) 4"= 0.60 n is less then 0.50 x3 case volume =	6 5"= 1.02 6"= 1.50 12	(2400 hrs) (2400 hrs) (2400 hrs) ft ft ft ription: k (circle one) mer: gal
Start Time (purge Sample Time/Dat Approx. Flow Rat Did well de-water (2400 hr.) 1358 1407 1416	te: 1440 / 2/14/13 te:gpm.	Sediment De	cleaning scription:	Clean Odor: (N STR L., W gal. DTW @ Sampling: _ D.O. ORF (mg/L) (mV)	11.00
		LABORATORY IN	FORMATION		
SAMPLE ID MW- 14	(#) CONTAINER REFRIE	G. PRESERV. TYPE HCL	LABORATORY LANCASTER	ANALYSES TPH-GRO(8015)/BTEX(8260)	
COMMENTS:	Sock.	- NO DRIM	on site.	Not able to	Remove and
Add/Replaced L	ock: Ac	dd/Replaced Plug:		Add/Replaced Bolt:	



SORBENT SOCK EVALUATION FORM

Name: 3. Herr Date: 2/14/13	Project Number:
Site Address: 930 SPRINSTAN BL Well ID.	2/1257
himme cot mw-14	Weather: Clear
1) Time absorbent sock removed from well for inspection:	0645
2) Condition of sock:	
a) Length of sock showing product saturation:	3"
b) Length of sock showing dryness:	27"
c) Color of sock showing product saturation:	L+ Blu-
d) Weight of the removed sock:	12.7.2
e) Weight of a new/clean/dry sock:	10 or
f) Difference in weight: (D-E) to 0.01 ounces.	2.7 - 2
3) Picture of sock removed from well taken:	-
1) Sock removed from well deposited into a waste drum:	
-Is drum labeled? How full is drum? (%)	
After at least 15 minutes after removing the sock from the v of the well casing. :	well, measure (to 0.01ft) from the top
a) Depth to product:	- P
b) Depth to water:	/0.22
c) Thickness of product: (b-a)	
Size and type of sock installed	e/s
Comments: No DRum on site - old sock Re	einsteller Pen L.C.



Client/Facility#:	Chevron #21	1253		Job Number:	385867		
Site Address:	930 Springto	wn Blvd	d.	Event Date:	2/14/	2)	- (inclusive)
City:	Livermore, C	A		Sampler:	<u> </u>		_ (************************************
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:	×	xVF	Volun Facto Check if water colum	nn is less then 0.5 x3 case volume = + DTW]: 17.36	66 5"= 1.02 6"= 0 ft. Estimated Purge Vol Time Started: Time Complete Depth to Produ Depth to Wate Hydrocarbor T Visual Confirm Skimmer / Abs Amt Removed	0.17 3"= 0.38 1.50 12"= 5.80 ume: 70.76 ed:	gal(2400 hrs)(2400 hrs)ftftftftftgal
Start Time (purge Sample Time/Da Approx. Flow Ra Did well de-water Time (2400 hr.) 1507 1519	te: 1550 / 3	gpm. yes, Time: pH 7.28 7.20 7.06	Weather Co Water Color Sediment De Volu Conductivity (µmhos/cm - µS) 682 675 631	: <u>Clear</u> escription:	Odor: Y / (S) None gal. DTW @ Sar D.O. (mg/L)		57
(8)			AROPATORY IN	ECOMATION			
SAMPLE ID	(#) CONTAINER	REFRIG.	LABORATORY IN PRESERV. TYPE	LABORATORY		ANALYSES	
MW- 15	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BT	EX(8260)	
COMMENTS:							



Client/Facility#:	Chevron #2	11253		Job Number:	385867	
Site Address:	930 Springto	own Blv	d.	Event Date:	2/14/13	(inclusive)
City:	Livermore, (CA		Sampler:	314	()
Well ID	MW-/6			Date Monitored:	2/14/13	
Well Diameter	4	_	Vol	lume 3/4"= 0.0	02 1"= 0.04 2"= 0.17	3"= 0.38
Total Depth	29.19 ft	<u>. </u>	Fac	ctor (VF) 4"= 0.6		
Depth to Water				umn is less then 0.5		
	18.92	_	= 12.48		= Estimated Purge Volume	37. 46 gal.
Depth to Water	w/ 80% Recharge	€ [(Height of	Water Column x 0.20	0) + DTW]: 14.05		
Bures Equipment					Time Started:	(2400 hrs)
Purge Equipment:			Sampling Equipmen	nt:		(2400 nrs)
Disposable Bailer Stainless Steel Baile			Disposable Bailer	×		n
Stack Pump			Pressure Bailer Metal Filters		Hydrocarbon Thick	
Suction Pump			Peristaltic Pump		Visual Confirmation	/Description:
Grundfos			QED Bladder Pump			
Peristaltic Pump			Other:		Skimmer / Absorba	nt Sock (circle one) Skimmer: gal
QED Bladder Pump					Amt Removed from	Well: gal
Other:					Water Removed:	
Start Time (purg	e): 0710		Weather C	Conditions:	Clear	
Sample Time/Da		2/14/13	Water Col		Odor: Y / 🚯	
Approx. Flow Ra		gpm.		Description:	_ L.s.by	
Did well de-wate		yes, Time		lume:	gal. DTW @ Samplin	ng: /2.80
		,,			gai. Divv @ Campii	ig. 72.00
Time	Volume (gal.)	pН	Conductivity	Temperature	D.O.	ORP
(2400 hr.)		_	(µmhos/cm - (S)	(C)/ F)	(mg/L)	(mV)
0716	12	7.25	1025	17.6		
0722	24	7.08	1036	17.8		
0729	38	7.02	1042	17. 9		
			-		=\1	
			LABORATORY	INFORMATION		
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYP	E LABORATORY	ΔΝΔΙ	YSES
MW- /6	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8	
					ļ	
<u></u>						
COMMENTS:	12"emio					
	,	_				
-						
				× 4"		
Add/Replaced I	Lock:	Add	Replaced Plug:		Add/Replaced Bolt:	



Client/Facility#:	Chevron #21	1253		Job Number:	385867		
Site Address:	930 Springto	wn Blv	d.	Event Date:	2/14/1	3	— (inclusive)
City:	Livermore, C	Α		Sampler:	ZH		_ (o.asive)
Well ID	MW-/7			Date Monitored:	2/14/13		iii
Well Diameter	4		Volur	me 3/4"= 0.0	02 1"= 0.04 2"=	0.17 3"= 0.38	
Total Depth	37.05 ft.			or (VF) 4"= 0.6		1.50 12"= 5.80	
Depth to Water	14.25 ft.		Check if water colun		0 ft.		
	22-80		= 15.04		Estimated Purge Vo	ume: 45-14	<u>∕</u> gal.
Depth to Water v	w/ 80% Recharge	[(Height of	Water Column x 0.20)	+ DTWJ: 18.81			
Purge Equipment:		_	2			ed:	
Disposable Bailer			Sampling Equipment			uct:	
Stainless Steel Bailer	•		Disposable Bailer Pressure Bailer	<u> </u>		r:	
Stack Pump			Metal Filters		Hydrocarbon 1		ft
Suction Pump			Peristaltic Pump		Visual Confirm	ation/Description	:
Grundfos	, , , , , ,		QED Bladder Pump				
Peristaltic Pump			Other:			orbant Sock (circ from Skimmer:	
QED Bladder Pump						from Well:	
Other:					Water Remove		yai
Start Time (purge): 0805		Weather Co	nditions:	Clean		
Sample Time/Dat		CIMIS		: clear	Odor: Y / N		
Approx. Flow Rat		gpm.	Sediment De				
Did well de-water					None Con		
Did Well de Water	:	yes, i ii ie	e: Volu	me	gai. Divv @ Sar	npling: //	62
Time	Volume (gal.)	рН	Conductivity	Temperature	D.O.	ORP	
(2400 hr.)			(μmhos/cm - 🚱)	(6 / F)	(mg/L)	(mV)	
0810	15	7.39	627	17-6			_
0815	30	7.30	605	17.2			
0820	45	7.22	599	17.1			
					-		-
			LABODATORY	(FORMATION)			
SAMPLE ID	(#) CONTAINER	REFRIG.	LABORATORY IN PRESERV. TYPE	LABORATORY	 	ANALYSES	
MW- 17	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BT		
					(-1.0)	((0200)	
TIV						· · · · · · · · · · · · · · · · · · ·	
30							
<u> </u>							
COMMENTS	el. D		12" ema				
COMMENTS:	Slow Recov.	~/	11 em				
		/					
Add/Replaced L	ock:	Add	Replaced Plug: _		Add/Replaced B	olt:	



	Client/Facility#:	Chevron #21	1253		Job Number:	385867		
	Site Address:	930 Springto	wn Blv	d.	Event Date:	2/14	112	(inclusive)
	City:	Livermore, C	Α		Sampler:	31		_ (e.ae.re)
	Well ID Well Diameter Total Depth Depth to Water	MW-18 4 14.87 ft. 11.76 ft.		Volum Facto	r (VF) 4"= 0.6	02 1"= 0.04 2 66 5"= 1.02 6"	"= 0.17 3"= 0.3 = 1.50 12"= 5.8	
		3.11	xVF	Check if water column	x3 case volume	= Estimated Purge V	olume: 6.15	, gal.
	Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	<u>×</u>	\$ F F	Water Column x 0.20) Sampling Equipment: Disposable Bailer Pressure Bailer Metal Filters Peristaltic Pump QED Bladder Pump Other:		Time Started Time Comple Depth to Pro Depth to Wa Hydrocarbon Visual Confin Skimmer / At Amt Remove	eted: duct: ter: Thickness: mation/Description psorbarit Sock (circ d from Skimmer: d from Well:	ftftft n: cle one)
	Start Time (purge Sample Time/Dat Approx. Flow Rat Did well de-water Time (2400 hr.) 1240	te: 1310 / 3 e:	pH 7.83 7.60 7.34	Weather Color Water Color Sediment De Volui Conductivity (µmhos/cm - µS) 789 755	classescription:	Liots		.09
_				LABORATORY IN				
	SAMPLE ID MW- 18	(#) CONTAINER x voa vial	YES YES	HCL	LANCASTER	TPH-GRO(8015)/B	ANALYSES TEX(8260)	
_ (COMMENTS:	12" cr	160					
	Add/Replaced Lo	ock:	Add	/Replaced Plug:		Add/Replaced I	Bolt:	



	Client/Facility#:	Chevron #2	11253		Job Number:	385867		
	Site Address:	930 Springt	own Blv	/d.	Event Date:	2/14/1)	— (inclusive)
	City:	Livermore,			Sampler:	211		(
	Well ID Well Diameter Total Depth Depth to Water	10	9 ft. t. □	Volum	or (VF) 4 "= 0.6	6 5"= 1.02 6"= 0 ft.	= 0.17 3"= 0.3 = 1.50 12"= 5.8	30
	Depth to Water v			f Water Column x 0.20)				
	Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:			Sampling Equipment: Disposable Bailer Pressure Bailer Metal Filters Peristaltic Pump QED Bladder Pump Other:	<u></u>	Depth to Proc Depth to Wate Hydrocarbon Visual Confirm Skimmer / Abs	ted:	(2400 hrs)ftftftftcle one)gal
E-	Start Time (purge Sample Time/Dat Approx. Flow Rat Did well de-water Time (2400 hr.)	te: 133. / e:	рН	Sediment Do e: 1228 Volu Conductivity (µmhos/cm -	rescription: me: Temperature (Ø / F)	L.017		2.43
	1203		7.46	<u>\$77</u>				- - -
٢	SAMPLE ID	(#) CONTAINER	REFRIG.	LABORATORY IN . PRESERV. TYPE	IFORMATION LABORATORY		ANALVOEO	
	MW- 19	6 x voa via		HCL HCL	LANCASTER	TPH-GRO(8015)/BT	ANALYSES [EX(8260)	
_	COMMENTS:	12" em	? •					
	Add/Replaced Le	ock:	Add	d/Replaced Plug: _		Add/Replaced B	olt:	



	Client/Facility#:	Chevron #2	11253		Job	Number:	385867		
	Site Address:	930 Springto	own Blv	d.	Eve	nt Date:		4/13	— (inclusive)
	City:	Livermore, (***			pler:	3		(molusive)
	Well ID	MW- 2 c	<u> </u>		Date M	onitored:	2/14	113	
	Well Diameter	4	_	1	Volume	3/4"= 0.02	2 1"= 0.04	2"= 0.17 3"= 0.3	
	Total Depth	14.92 ft	<u>.</u>	l	Factor (VF)	4"= 0.66		6"= 1.50 12"= 5.8	
	Depth to Water	9.43 ft		Check if water					
		5.49					Estimated Purg	e Volume: 10-87	gal.
	Depth to Water v	w/ 80% Recharge	€ [(Height of	f Water Column x	0.20) + DTWJ:	10.52	Time Ste	to al.	/2.22
	Purge Equipment:			Sampling Equip	mant:			ted: npleted:	
	Disposable Bailer			Disposable Bailer				Product:	
	Stainless Steel Bailer			Pressure Bailer		<u>×</u>		Vater:	
	Stack Pump	×		Metal Filters				oon Thickness:	
	Suction Pump			Peristaltic Pump			Visual Co	nfirmation/Description	n:
	Grundfos			QED Bladder Pur	пр		Skimmer	Absorbant Sock (circ	
	Peristaltic Pump			Other:				oved from Skimmer:	
	QED Bladder Pump						Amt Remo	oved from Well:	gal
	Other:	<u> </u>					Water Rei	moved:	
_									
	Start Time (purge			Weathe	er Condition:		cle		
	Sample Time/Dat		2/14/17	Water (Color:C	louly	Odor: Y / 6	/	
	Approx. Flow Rat		gpm.		ent Description		List	18	-
	Did well de-water	? <u> </u>	yes, Time	e: <u>16 µ</u>	Volume:	<u>6</u> 9	gal. DTW @	Sampling:	
	Time			Conductivit	v Temp	erature	D.O.	ORP	
	(2400 hr.)	Volume (gal.)	pН	(µmhos/cm - į	6 6	/ F)	(mg/L)	(mV)	
	/609	4	7-47	689	//	7.6			
									-
									•
									
				LABORATO	RY INFORM	ATION			
F	SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV.	TYPE LABO	RATORY		ANALYSES	
\vdash	MW- 20	6 x voa vial	YES	HCL	LAN	CASTER	TPH-GRO(8015	i)/BTEX(8260)	
H	-		-						
L								· · · · · · · · · · · · · · · · · · ·	
L								· · · · · · · · · · · · · · · · · · ·	
\vdash				- 					
-			-	 					
_	OMMENTS:	<u></u>		<u> </u>			-		
	CIMIMIEM 13.								
	<u> </u>						·		
	*				<u></u>				
	Add/Replaced Lo	ock:	Add	l/Replaced Plu	ıg:		Add/Replace	d Bolt:	

Chevron California Region Analysis Request/Chain of Custody



For Lancaster Laboratofies use only

Acct. #: 10904 | Sample # 1370027 | 6958490 - 502Group #: 008029

\mathcal{L}	2191.	3-&4									A	nalys	ses	Requ	este	d		7		
SS#211253-OML G-R#38586			1353		Matri	x					Р	rese	rval	ion C	odes			Preserva	tive Co	des
930 SPRINGTOWN BLVD., LI Site Address: CM Chevron PM: G-R, Inc., 6747 Sierra Col		CRASE	Silv	/a	1	T		H.	H	Gei Cleanup								H = HCI N = HNO ₃	T = Thic B = NaC O = Oth	sulfate DH
Consultant/Office: Deanna L. Harding (de	sanna@grii	nc.com)		8-	Potable	N DES	Containers	₹8021		Silica Gel C								☐ J value report	ing neede	d ction limits
Consultant Prj. Mgr.: 925-551-7555 Consultant Phone #:	92 Fax #:	5-551-7899]	ਰੱ	8260	유				Method	Method				possible for 8 8021 MTBE Cor		ounds
Sampler: Date Time						Air	Total Number	+	TPH 8015 MOD GRO	TPH 8015 MOD DRO	ll scan	eg eg		Dissolved Lead M				☐ Confirm highe	s by 8260	,]
Sample Identification	Grab	Composite	Water	Öİ	Total	втех	TPH 80	TPH 80	8260 full scan		Total Lead	Dissolv				Run oxy	_			
Q).	Zhhlis		×		X		2	X	x									Comments / F	lemarks	
mu-q		0955	X		<u> </u>	Ш	6	X	7											- 1
MW-10		1010	7		X		6	X	X											- 1
MU-11		1200	X		X		6	X	X		Т		T					Please forwar		
mu-12		1240	8		×	\coprod	6	X	8				\prod					directly to the	Lead Con: c: G-R.	sultant
mu-13		1105	x		メ		6	4	Y			\neg	T		\top					
		1440	8		X		6	Y	Y	T			\top							ı
mu-is		1550	X		X		6	4	Y				Т					7		
		0750	X		X		6	Y	X	\Box								1		
mu-ij		0856	X		8		6	7	X				Т		\Box	$\neg \uparrow$		1		1
Mn-18		1310	X		8		6	Y	Y					T						-
m w-19		1330	X		X		6	7	X	T								7		1
MW-20	+	1700	X		X	П	6	স	X				\top					1		
Turnaround Time Requested (TAT) (please cir	•	Relinqu					<i>-</i>				ate 14 3	Tim 200		60	lved b	-N-	RYA	NFRIDGE 02	Date 79-13	Time 27/20
24 hour 4 day 5 day		Relinqui	1/2	TAI	6			C	227	Da 9-/	ate 3	Tim		Rece	ived b سر	Y.	for	- 19F	Date E/3L3	Time 1215
Data Package Options (please circle if required) QC Summary Type I - Full EDF/EDD Type VI (Raw Data) □ Coelt Deliverable not needed WIP (RWQCB)						0	ther		3	ERI JUS	(3	/	œ	Rece	lved b ived b	iy: > <i>Ez</i> iy:		11	Date	Time
Disk		Tempera	ature (Jpon R	eceipt	(·)·		2.9 15			3.90	2-15	C°	Custo	ody Se	als ir	ntact?	Yes		

ATTACHMENT B

LABORATORY ANALYTICAL REPORT



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

ANALYTICAL RESULTS

Prepared by:

Prepared for:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 Chevron L4310 6001 Bollinger Canyon Rd. San Ramon CA 94583

February 28, 2013

Project: 211253

Submittal Date: 02/20/2013 Group Number: 1370027 PO Number: 0015118372 Release Number: MACLEOD State of Sample Origin: CA

Lancaster Labs (LLI) #
6958490
6958491
6958492
6958493
6958494
6958495
6958496
6958497
6958498
6958499
6958500
6958501
6958502

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	Cl	A., A .
ELECTRONIC COPY TO	Chevron	Attn: Anna Avina
ELECTRONIC	CRA	Attn: Brian Silva
COPY TO	Citi	rum. Brium Brivu



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Respectfully Submitted,

fill M. Parker
Senior Specialist

(717) 556-7262



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: QA-T-130214 NA Water

LLI Sample # WW 6958490 Facility# 211253 Job# 385867 GRD LLI Group # 1370027 930 Springtown-Livermore T0600101353 Account # 10904

Project Name: 211253

Collected: 02/14/2013 Chevron

L4310

Submitted: 02/20/2013 09:10 6001 Bollinger Canyon Rd.

San Ramon CA 94583 Reported: 02/28/2013 15:51

1253Q

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 Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130561AA	02/25/2013 11:59	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130561AA	02/25/2013 11:59	Emily R Styer	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13052A20A	02/22/2013 15:38	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13052A20A	02/22/2013 15:38	Marie D John	1



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Sample Description: MW-9-W-130214 Grab Water

LLI Sample # WW 6958491 LLI Group # 1370027 Facility# 211253 Job# 385867 GRD 930 Springtown-Livermore T0600101353 Account # 10904

Project Name: 211253

Reported: 02/28/2013 15:51

Collected: 02/14/2013 09:55 by JH Chevron

L4310

Submitted: 02/20/2013 09:10 6001 Bollinger Canyon Rd.

San Ramon CA 94583

12539

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.	5	10
10943	Ethylbenzene		100-41-4	37	5	10
10943	Toluene		108-88-3	N.D.	5	10
10943	Xylene (Total)		1330-20-7	60	5	10
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	5,200	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 Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130561AA	02/25/2013 13:55	Emily R Styer	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130561AA	02/25/2013 13:55	Emily R Styer	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13052A20A	02/22/2013 22:50	Marie D John	5
01146	GC VOA Water Prep	SW-846 5030B	1	13052A20A	02/22/2013 22:50	Marie D John	5



10904

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-10-W-130214 Grab Water

LLI Sample # WW 6958492 LLI Group # 1370027 Facility# 211253 Job# 385867 GRD 930 Springtown-Livermore T0600101353 Account

Project Name: 211253

Reported: 02/28/2013 15:51

Collected: 02/14/2013 10:10 by JH Chevron

L4310

Submitted: 02/20/2013 09:10 6001 Bollinger Canyon Rd.

San Ramon CA 94583

25310

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 Tim	ıe	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130561AA	02/25/2013	12:27	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130561AA	02/25/2013	12:27	Emily R Styer	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13052A20A	02/22/2013	17:50	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13052A20A	02/22/2013	17:50	Marie D John	1



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Sample Description: MW-11-W-130214 Grab Water

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

LLI Group # 1370027 Account # 10904

LLI Sample # WW 6958493

Project Name: 211253

Submitted: 02/20/2013 09:10

Reported: 02/28/2013 15:51

Collected: 02/14/2013 12:00 by JH Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

25311

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 Vo	Latiles TPH-GRO N. CA water	SW-846 C6-C12	8015B n.a.	ug/l 110	ug/l 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 Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130561AA	02/25/2013 14:	23 Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130561AA	02/25/2013 14:	23 Emily R Styer	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13052A20A	02/22/2013 21:	22 Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13052A20A	02/22/2013 21:	22 Marie D John	1



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Sample Description: MW-12-W-130214 Grab Water

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

LLI Sample # WW 6958494 LLI Group # 1370027 Account # 10904

Project Name: 211253

Reported: 02/28/2013 15:51

Collected: 02/14/2013 12:40 by JH Chevron

L4310

Submitted: 02/20/2013 09:10 6001 Bollinger Canyon Rd.

San Ramon CA 94583

25312

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	20	5	10
10943	Ethylbenzene		100-41-4	160	5	10
10943	Toluene		108-88-3	83	5	10
10943	Xylene (Total)		1330-20-7	500	5	10
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	7,700	250	5

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130561AA	02/25/2013 14:5	1 Emily R Styer	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130561AA	02/25/2013 14:5	1 Emily R Styer	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13052A20A	02/22/2013 23:1	2 Marie D John	5
01146	GC VOA Water Prep	SW-846 5030B	1	13052A20A	02/22/2013 23:1	2 Marie D John	5



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Sample Description: MW-13-W-130214 Grab Water

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

LLI Group # 1370027 Account # 10904

LLI Sample # WW 6958495

Project Name: 211253

Collected: 02/14/2013 11:05 by JH Chevron L4310

Submitted: 02/20/2013 09:10 6001 Bollinger Canyon Rd.

Reported: 02/28/2013 15:51 San Ramon CA 94583

25313

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/1	
10943	Benzene		71-43-2	380	5	10
10943	Ethylbenzene		100-41-4	31	0.5	1
10943	Toluene		108-88-3	750	5	10
10943	Xylene (Total)		1330-20-7	1,700	5	10
	latiles	SW-846		ug/l	ug/l	_
01728	TPH-GRO N. CA water	C6-C12	n.a.	11,000	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 Time	e	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130562AA	02/25/2013 1	12:41	Emily R Styer	1
10943	BTEX 8260B Water	SW-846 8260B	1	F130581AA	02/27/2013 1	15:56	Anita M Dale	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130562AA	02/25/2013 1	12:41	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	F130581AA	02/27/2013 1	15:56	Anita M Dale	10
01728	TPH-GRO N. CA water C6-	SW-846 8015B	1	13052A20A	02/22/2013 2	23:34	Marie D John	5
	C12							
01146	GC VOA Water Prep	SW-846 5030B	1	13052A20A	02/22/2013 2	23:34	Marie D John	5



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Sample Description: MW-14-W-130214 Grab Water

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

LLI Group # 1370027 Account # 10904

LLI Sample # WW 6958496

Project Name: 211253

Collected: 02/14/2013 14:40 by JH Chevron

L4310

Submitted: 02/20/2013 09:10 6001 Bollinger Canyon Rd.

Reported: 02/28/2013 15:51 San Ramon CA 94583

25314

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	170	5	10
10943	Ethylbenzene		100-41-4	61	5	10
10943	Toluene		108-88-3	120	5	10
10943	Xylene (Total)		1330-20-7	410	5	10
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	4,200	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 Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130562AA	02/25/2013 14:0	9 Emily R Styer	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130562AA	02/25/2013 14:0	9 Emily R Styer	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13053B20A	02/26/2013 23:1	3 Marie D John	5
01146	GC VOA Water Prep	SW-846 5030B	1	13053B20A	02/26/2013 23:1	3 Marie D John	5



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Sample Description: MW-15-W-130214 Grab Water

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

LLI Sample # WW 6958497

LLI Group # 1370027 Account # 10904

Project Name: 211253

Submitted: 02/20/2013 09:10

Reported: 02/28/2013 15:51

Collected: 02/14/2013 15:50 by JH Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

25315

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 Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130562AA	02/25/2013 14:3	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130562AA	02/25/2013 14:3	Emily R Styer	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13053B20A	02/26/2013 13:3	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13053B20A	02/26/2013 13:3	Marie D John	1



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Sample Description: MW-16-W-130214 Grab Water

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

LLI Group # 1370027 Account # 10904

LLI Sample # WW 6958498

Project Name: 211253

Submitted: 02/20/2013 09:10

Reported: 02/28/2013 15:51

Collected: 02/14/2013 07:50 by JH Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

25316

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 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 Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130562AA	02/25/2013 15:0	5 Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130562AA	02/25/2013 15:0	5 Emily R Styer	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13053B20A	02/26/2013 13:5	7 Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13053B20A	02/26/2013 13:5	7 Marie D John	1



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Sample Description: MW-17-W-130214 Grab Water

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

LLI Sample # WW 6958499 LLI Group # 1370027

LLI Group # 137002 Account # 10904

Project Name: 211253

Submitted: 02/20/2013 09:10

Reported: 02/28/2013 15:51

Collected: 02/14/2013 08:55 by JH Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

25317

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
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 Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130562AA	02/25/2013 15:3	3 Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130562AA	02/25/2013 15:3	3 Emily R Styer	1
01728	TPH-GRO N. CA water C6- C12	SW-846 8015B	1	13053B20A	02/26/2013 14:1	9 Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13053B20A	02/26/2013 14:1	9 Marie D John	1



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Sample Description: MW-18-W-130214 Grab Water

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

LLI Sample # WW 6958500

LLI Group # 1370027 Account # 10904

Project Name: 211253

Collected: 02/14/2013 13:10 by JH Chevron L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Reported: 02/28/2013 15:51

Submitted: 02/20/2013 09:10

25318

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	130	5	10
10943	Ethylbenzene		100-41-4	270	5	10
10943	Toluene		108-88-3	5	5	10
10943	Xylene (Total)		1330-20-7	160	5	10
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	3,000	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130562AA	02/25/2013 16:01	Emily R Styer	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130562AA	02/25/2013 16:01	Emily R Styer	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13053B20A	02/26/2013 15:25	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13053B20A	02/26/2013 15:25	Marie D John	1



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Sample Description: MW-19-W-130214 Grab Water

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

LLI Sample # WW 6958501

LLI Group # 1370027 Account # 10904

Project Name: 211253

Collected: 02/14/2013 13:30 by JH Chevron L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

Reported: 02/28/2013 15:51

Submitted: 02/20/2013 09:10

25319

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 Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130562AA	02/25/2013 16::	28 Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130562AA	02/25/2013 16::	28 Emily R Styer	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13053B20A	02/26/2013 14:	41 Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13053B20A	02/26/2013 14:4	41 Marie D John	1



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Sample Description: MW-20-W-130214 Grab Water

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

LLI Group # 1370027 Account # 10904

LLI Sample # WW 6958502

Project Name: 211253

Submitted: 02/20/2013 09:10

Reported: 02/28/2013 15:51

Collected: 02/14/2013 17:00 by JH Chevron

L4310

6001 Bollinger Canyon Rd.

San Ramon CA 94583

25320

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor			
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l				
10943	Benzene		71-43-2	N.D.	5	10			
10943	Ethylbenzene		100-41-4	N.D.	5	10			
10943	Toluene		108-88-3	N.D.	5	10			
10943	Xylene (Total)		1330-20-7	N.D.	5	10			
A preserved vial was submitted for analysis. However, the pH at the time of analysis was 3.									
GC Vo	latiles	SW-846	8015B	ug/l	ug/l				
01728	TPH-GRO N. CA water	C6-C12	n.a.	2,000	50	1			

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P130562AA	02/25/2013 16:56	Emily R Styer	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P130562AA	02/25/2013 16:56	Emily R Styer	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	13053B20A	02/26/2013 15:47	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13053B20A	02/26/2013 15:47	Marie D John	1



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Quality Control Summary

Client Name: Chevron Group Number: 1370027

Reported: 02/28/13 at 03:51 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>	RPD	RPD Max
Batch number: F130581AA	Sample numbe	er(s): 695	8495					
Benzene	N.D.	0.5	ug/l	90	92	77-121	3	30
Toluene	N.D.	0.5	ug/l	94	94	79-120	0	30
Xylene (Total)	N.D.	0.5	ug/l	95	95	77-120	0	30
Batch number: P130561AA	Sample numbe	er(s): 695	8490-6958	494				
Benzene	N.D.	0.5	ug/l	95		77-121		
Ethylbenzene	N.D.	0.5	ug/l	93		79-120		
Toluene	N.D.	0.5	ug/l	92		79-120		
Xylene (Total)	N.D.	0.5	ug/l	92		77-120		
Batch number: P130562AA	Sample numbe	er(s): 695	8495-6958	502				
Benzene	N.D.	0.5	ug/l	93		77-121		
Ethylbenzene	N.D.	0.5	ug/l	95		79-120		
Toluene	N.D.	0.5	ug/l	93		79-120		
Xylene (Total)	N.D.	0.5	ug/l	96		77-120		
Batch number: 13052A20A	Sample numbe	er(s): 695	8490-6958	495				
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	95	88	75-135	7	30
Batch number: 13053B20A	Sample numbe	er(s): 695	8496-6958	502				
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	86	87	75-135	1	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 <u>%REC</u>	MSD <u>%REC</u>	MS/MSD <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG <u>Conc</u>	DUP <u>Conc</u>	DUP <u>RPD</u>	Dup RPD <u>Max</u>
Batch number: P130561AA	Sample			-69584		K: 6958492			
Benzene	101	105	72-134	4	30				
Ethylbenzene	97	103	71-134	5	30				
Toluene	99	104	80-125	4	30				
Xylene (Total)	97	101	79-125	4	30				
Batch number: P130562AA	Sample	number(s)	: 6958495	-69585	02 UNSP	K: 6958495			
Benzene	181 (2)	249 (2)	72-134	3	30				
Ethylbenzene	106	116	71-134	4	30				
Toluene	155 (2)	244 (2)	80-125	3	30				
Xylene (Total)	167 (2)	202 (2)	79-125	1	30				

*- Outside of specification

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



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Quality Control Summary

Client Name: Chevron Group Number: 1370027

Reported: 02/28/13 at 03:51 PM

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

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

Surrogate Quality Control

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

Analysis Name: UST VOCs by 8260B - Water

Batch number: F130581AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
Blank	95	96	101	100	
LCS	95	98	99	99	
LCSD	97	97	101	101	
Limits:	80-116	77-113	80-113	78-113	
	Name: UST VOCs by	y 8260B - Water			

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
6958490	103	102	96	94	
6958491	102	102	97	94	
6958492	102	97	97	95	
6958493	103	100	96	95	
6958494	102	103	96	95	
Blank	102	100	97	95	
LCS	103	104	96	96	
MS	102	104	97	96	
MSD	101	102	97	95	
Limits:	80-116	77-113	80-113	78-113	

Analysis Name: UST VOCs by 8260B - Water

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
5958495	100	93	97	103	
5958496	100	98	98	99	
5958497	98	94	99	97	
5958498	100	97	97	98	
958499	101	100	98	98	
5958500	101	100	98	98	
958501	101	97	97	98	
958502	101	99	98	98	
Blank	101	100	97	97	
.CS	103	98	97	100	
IS	100	99	97	102	
ISD	100	101	97	101	

^{*-} 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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Quality Control Summary

Client Name: Chevron Group Number: 1370027

Reported: 02/28/13 at 03:51 PM

Surrogate Quality Control

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

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

Batch number: 13052A20A Trifluorotoluene-F

6958490	80
6958491	96
6958492	77
6958493	81
6958494	114
6958495	101
Blank	80
LCS	98
LCSD	97

Limits: 63-135

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

Batch number: 13053B20A Trifluorotoluene-F

6958496	96
6958497	78
6958498	79
6958499	77
6958500	105
6958501	77
6958502	147*
Blank	81
LCS	98
LCSD	96

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

41	Lancaster.	
	Laboratorie	S

For Lancaster Laboratofies use only

Acct. #: 10909 | Sample # 1370027 | 6958490 - 502Group #: 008029

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CM CRASB Silva						1					Cleanup									N = HNO ₃ S = H ₂ SO ₄	B = NaC O = Oth	
Chevron PM: ——G-R, Inc., 6747 Sierra Co				9456	8 -	<u></u>		ers			Se									☐ J value report		
Consultant/Office: Deanna L. Harding (d	eanna	@grin	c.com)			Potable NPDES		Containers	25. 8021		Silica Gel								į	•	-	
Consultant Prj. Mgr.: 925-551-7555			-551-7899		_			Son) XI		iii			_	밁					Must meet log possible for 8	260 comp	ounds
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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)	L	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
- J estimated value The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

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

ppb parts per billion

Dry weight basis

X,Y,Z

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.

Inorganic Qualifiers

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

Α TIC is a possible aldol-condensation product В Value is <CRDL, but ≥IDL Analyte was also detected in the blank В Ε Estimated due to interference C Pesticide result confirmed by GC/MS М Duplicate injection precision not met Spike sample not within control limits D Compound quantitated on a diluted sample Ν Concentration exceeds the calibration range of Method of standard additions (MSA) used Ε S the instrument for calculation Ν Presumptive evidence of a compound (TICs only) U Compound was not detected Concentration difference between primary and Post digestion spike out of control limits W confirmation columns >25% Duplicate analysis not within control limits Compound was not detected Correlation coefficient for MSA < 0.995

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

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

Defined in case narrative

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

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

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

ATTACHMENT C

HISTORICAL GROUNDWATER MONITORING AND SAMPLING DATA

Table 1
Groundwater Monitoring Data and Analytical Results

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

Livermore, California											
WELL ID/	TOC*	DTW	GWE	SPHT SP	PH REMOVED	TPH-GRO	В	Т	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 07/23/09 ¹	522 12	10.75	510.27	0.00	0.00	52,000	760	6 200	090	12 000	
	523.12	12.75	510.37	0.00	0.00	52,000	760 240	6,200	980	13,000	
11/09/09 02/22/10	523.12 523.12	12.51 11.87	510.61 511.25	0.00 0.00	0.00 0.00	12,000 13,000	340 630	1,300 600	16 22	1,700 960	
02/22/10 05/24/10	523.12 523.12	11.87 12.10	511.25 511.02	0.00 0.00	0.00 0.00	15,000 15,000	950	670	22 130	900 790	
US/ 24/ 1U	343.14	12.10	311.04	0.00	0.00	15,000	930	0/0	130	790	

Table 1
Groundwater Monitoring Data and Analytical Results

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

WELL ID/ DATE	TOC* (ft.)	DTW	GWE	SPHT	SPH REMOVED	TPH-GRO	В	${f T}$	E	X	
DATE	(£4.\										
	(jt.)	(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 SAMPLED DUE TO THE PRESENCE OF SPH					
MW-15											
07/23/091	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	
05/24/10						< 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.