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

January 30, 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 Fourth Quarter 2012 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 Fourth Quarter 2012 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: Fourth Quarter 2012 Groundwater Monitoring and Sampling Report

CONESTOGA-ROVERS
& ASSOCIATES

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

January 30, 2013 Reference No. 060058

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

Re: Fourth Quarter 2012
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 *Fourth Quarter 2012 Groundwater Monitoring and Sampling Report* on behalf of Chevron Environmental Management Company (Chevron) for the site referenced above (Figure 1). 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. Eurofins Lancaster Laboratories' *Analytical Results* report is included as Attachment B. Historical groundwater monitoring and sampling data are included as Attachment C.

RESULTS OF FOURTH QUARTER 2012 EVENT

On November 29, 2012, 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.

Results of the current monitoring event indicate the following:

- Groundwater Flow Direction
  - Shallow (Figure 2) Northwest
  - Intermediate (Figure 3) North-northwest
  - Deep (Figure 4) Not Applicable (only 1 well)
- Approximate Depth to Groundwater
  - Shallow Wells 10 to 13 feet below grade (fbg)
  - Intermediate Wells 11 to 15 fbg
  - Deep Well 11 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***
Shallow Wells					
MW-9	Sampled Semi-Annually				
MW-11	Sampled Semi-Annually				
MW-14	Sampled Semi-Annually				
MW-18	**2,000**	**44**	25	**96**	**190**
MW-19	58	<0.5	<0.5	<0.5	<0.5
MW-20	**4,200**	<0.5	9	**41**	**95**
Intermediate Wells					
MW-10	Sampled Semi-Annually				
MW-12	Sampled Semi-Annually				
MW-13	Sampled Semi-Annually				
MW-16	Sampled Semi-Annually				
MW-17	<50	<0.5	<0.5	<0.5	<0.5
Deep Well					
MW-15	Sampled Semi-Annually				

µg/L Micrograms per liter
< Indicates constituent was not detected at or above stated laboratory reporting limit
ESLs Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), *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

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 replaced on a biweekly basis and field data sheets are presented in Attachment A. On November 29, 2012, 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 biweekly monitoring in the fourth quarter.
- The highest dissolved hydrocarbon concentrations detected this quarter were in shallow wells MW-18 and MW-20 located northwest and north, respectively, of the former underground storage tanks and dispensers.

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 four quarters since installation, CRA recommends that these wells also be sampled semi-annually and that all site wells be monitored semi-annually during sampling. Since LNAPL was not observed in well MW-14 during the fourth quarter, we recommend that biweekly monitoring and replacement of the absorbent LNAPL sock be performed quarterly; if significant LNAPL is again observed in the well, the absorbent sock will be monitored and replaced monthly or more frequently as necessary.

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.

Soil Vapor Investigation
CRA is currently coordinating the installation and sampling of five soil vapor wells as proposed in CRA's *Draft Feasibility Study/Corrective Action Addendum*, dated November 5, 2012 and approved by ACEH in correspondence dated December 17, 2012.

Absorbent Sock
G-R will continue to monitor and replace the absorbent sock as necessary in well MW-14 on a quarterly basis as an interim remedial action to remove LNAPL.

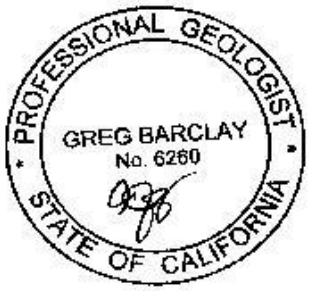
CONESTOGA-ROVERS & ASSOCIATES

January 30, 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



Brian Silva Greg Barclay, PG 6260

CH/cw/19
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

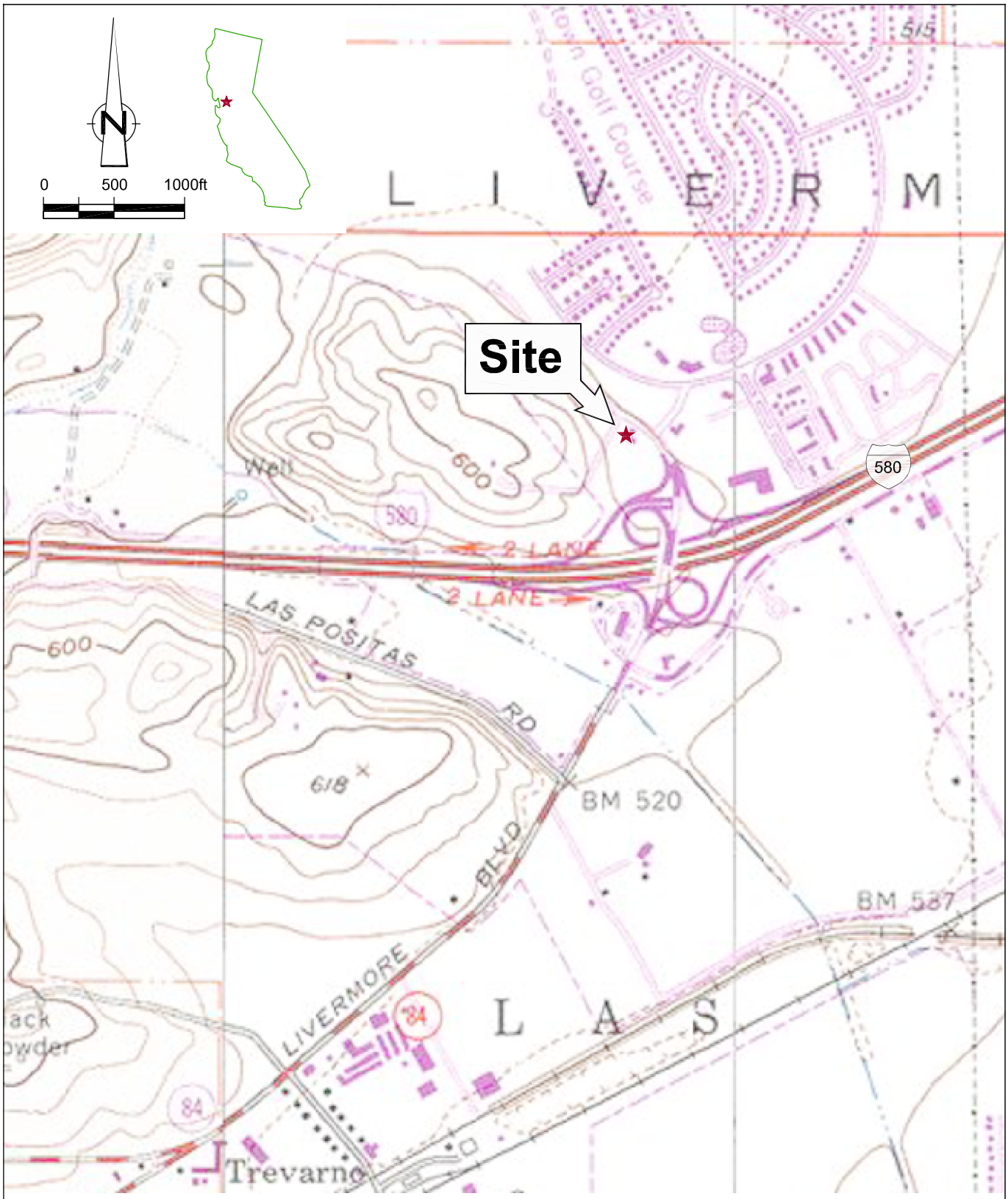


Figure 1

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

060058-95(019)GN-EM001 DEC 19/2012

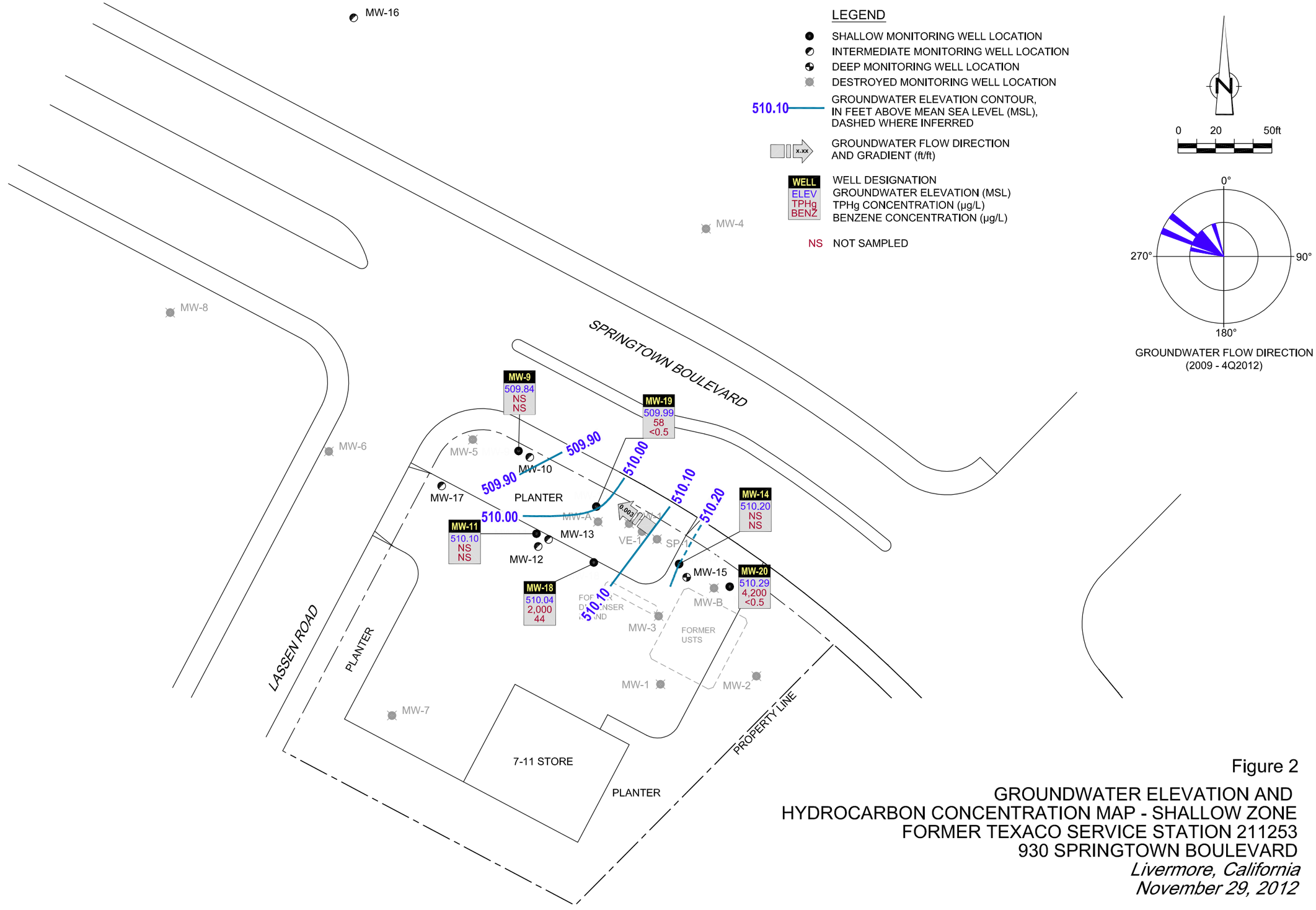
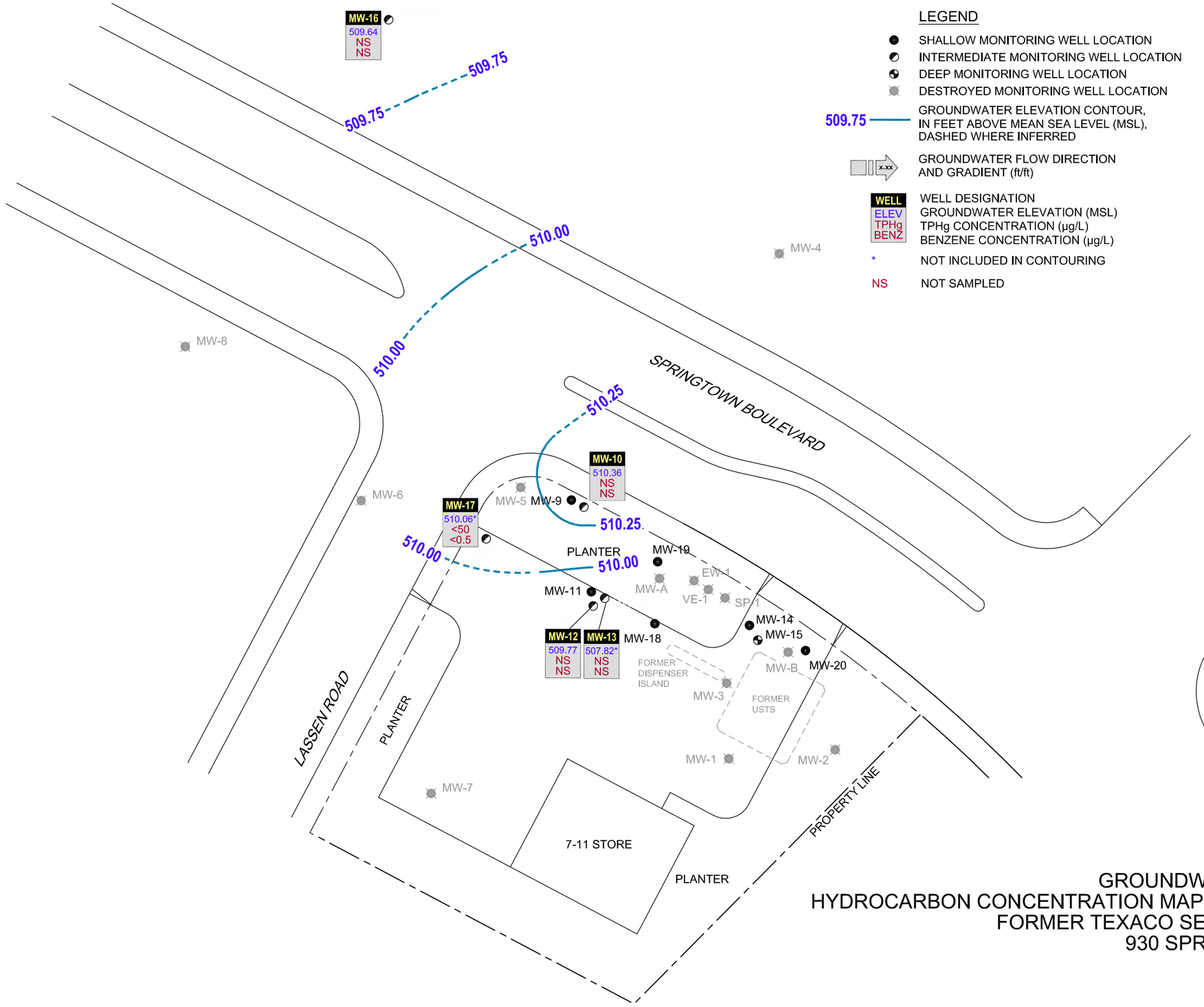


Figure 2

GROUNDWATER ELEVATION AND
HYDROCARBON CONCENTRATION MAP - SHALLOW ZONE
FORMER TEXACO SERVICE STATION 211253
930 SPRINGTOWN BOULEVARD
Livermore, California
November 29, 2012



LEGEND

- SHALLOW MONITORING WELL LOCATION
- INTERMEDIATE MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- DESTROYED MONITORING WELL LOCATION
- 509.75 — GROUNDWATER ELEVATION CONTOUR, IN FEET ABOVE MEAN SEA LEVEL (MSL), DASHED WHERE INFERRED
- x.xx — GROUNDWATER FLOW DIRECTION AND GRADIENT (ft/ft)
- WELL / ELEV / TPHg / BENZ — WELL DESIGNATION, GROUNDWATER ELEVATION (MSL), TPHg CONCENTRATION (µg/L), BENZENE CONCENTRATION (µg/L)
- * — NOT INCLUDED IN CONTOURING
- NS — NOT SAMPLED

N

0 20 50ft

WELL	*SCREEN INTERVAL (fbg)*
MW-10	22-27
MW-12	22-27
MW-13	32-37
MW-16	25-30
MW-17	32-37

Figure 3

GROUNDWATER ELEVATION AND
HYDROCARBON CONCENTRATION MAP - INTERMEDIATE ZONE
FORMER TEXACO SERVICE STATION 211253
930 SPRINGTOWN BOULEVARD
Livermore, California
November 29, 2012

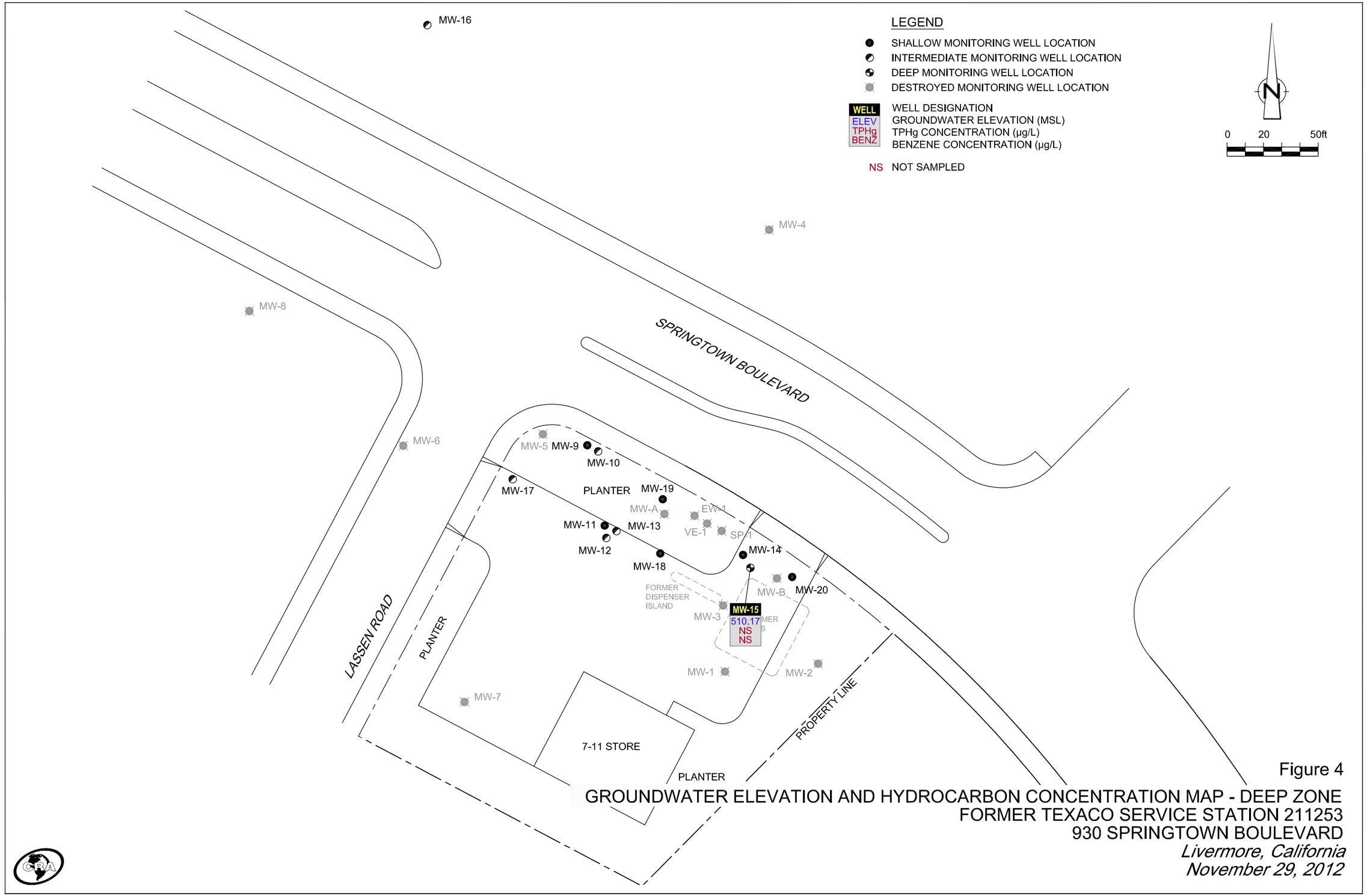


Figure 4

GROUNDWATER ELEVATION AND HYDROCARBON CONCENTRATION MAP - DEEP ZONE
FORMER TEXACO SERVICE STATION 211253
930 SPRINGTOWN BOULEVARD
Livermore, California
November 29, 2012

060058-95(019)GN-EM004 DEC 19/2012

TABLE

TABLE 1

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

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

TABLE 1

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

							HYDROCARBONS	*PRIMARY VOCS*				*GENERAL CHEMISTRY*			
Location	Date	*TOC*	*DTW*	*GWE*	*LNAPLT*	*LNAPL REMOVED*	*TPH-GRO*	*B*	*T*	*E*	*X*	*Methane*	*Ferrous iron*	*Nitrate as Nitrogen*	*Sulfate*
	Units	*ft*	*ft*	*ft-amsl*	*ft*	*gallons*	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-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-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-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	-	-	-	-	-	-	-	-	-
MW-14 [2, 5]	05/30/2012	520.88					Sorbent Sock Installed								
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**	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**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

TABLE 1

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

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

TABLE 1

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

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

Abbreviations and Notes:

TOC = Top of casing

DTW = Depth to water

GWE = Groundwater elevation

(ft-amsl) = Feet above mean sea level

ft = Feet

µg/L = Micrograms per Liter

TPH-GRO = Total petroleum hydrocarbons - gasoline range organics

VOCS = Volatile organic compounds

TABLE 1

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

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

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

GETTLER-RYAN INC.

TRANSMITTAL

December 4, 2012
G-R #385867

TO: Ms. 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 **Fourth Quarter Event of November 29, 2012**

COMMENTS:

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

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

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

Trans/211253

WELL CONDITION STATUS SHEET

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

Job #: **385867**
Event Date: **11/29/11**
Sampler: **JH**

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	o/c							N	N	12" emco	N
MW-10	o/c										
MW-11	o/c										
MW-12	o/c										
MW-13	o/c										
MW-14	o/c										
MW-15	o/c										
MW-16	o/c										
MW-17	o/c										
MW-18	o/c										
MW-19	o/c										
MW-20	o/c										

Comments Old sock removed from MW-14, New Sock installed

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

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

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

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

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

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

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

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 | Job Number: 385867
Site Address: 930 Springtown Blvd. | Event Date: 11/29/12 (inclusive)
City: Livermore, CA | Sampler: JH

Well ID: MW- 9 | Date Monitored: 11/29/12
Well Diameter: 4
Total Depth: 14.47 ft.
Depth to Water: 13.30 ft.
1.17 xVF ~ = ~ x3 case volume = Estimated Purge Volume: ~ gal.
Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: ~

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

☐ Check if water column is less then 0.50 ft.

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

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

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

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	x voa vial	YES	HCL	LANCASTER	METHANE (8015)
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE (EPA 300.0)

COMMENTS: MLO

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867
Site Address: 930 Springtown Blvd. Event Date: 11/29/12 (inclusive)
City: Livermore, CA Sampler: JH

Well ID MW-10 Date Monitored: 11/29/12
Well Diameter 4
Total Depth 26.44 ft.
Depth to Water 12.89 ft.
13.55 xVF ___ = ___

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

☐ Check if water column is less then 0.50 ft.

x3 case volume = Estimated Purge Volume: ___ gal.

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

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

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

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

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	x voa vial	YES	HCL	LANCASTER	METHANE (8015)
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE (EPA 300.0)

COMMENTS: MW

Add/Replaced Lock: ___ Add/Replaced Plug: ___ Add/Replaced Bolt: ___

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867
Site Address: 930 Springtown Blvd. Event Date: 11/29/12 (inclusive)
City: Livermore, CA Sampler: JH

Well ID MW- 11 Date Monitored: 11/29/12
Well Diameter 4
Total Depth 14.62 ft.
Depth to Water 13.32 ft.

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

☐ Check if water column is less then 0.50 ft.

1.30 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

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

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

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

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

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	x voa vial	YES	HCL	LANCASTER	METHANE (8015)
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE (EPA 300.0)

COMMENTS: MLO

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867
Site Address: 930 Springtown Blvd. Event Date: 11/29/12 (inclusive)
City: Livermore, CA Sampler: SH

Well ID MW-12 Date Monitored: 11/29/12
Well Diameter 4
Total Depth 26.68 ft.
Depth to Water 13.35 ft.

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

☐ Check if water column is less then 0.50 ft.

13.33 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

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

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

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

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

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	x voa vial	YES	HCL	LANCASTER	METHANE (8015)
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE (EPA 300.0)

COMMENTS: 11/16

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 | Job Number: 385867
Site Address: 930 Springtown Blvd. | Event Date: 11/29/12 (inclusive)
City: Livermore, CA | Sampler: JH

Well ID: MW-13 | Date Monitored: 11/29/12
Well Diameter: 4
Total Depth: 36.65 ft.
Depth to Water: 13.06 ft.

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

☐ Check if water column is less then 0.50 ft.

23.59 xVF ___ = ___ x3 case volume = Estimated Purge Volume: ___ gal.

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

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

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

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

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	x voa vial	YES	HCL	LANCASTER	METHANE (8015)
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE (EPA 300.0)

COMMENTS: MW

Add/Replaced Lock: ___ Add/Replaced Plug: ___ Add/Replaced Bolt: ___

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867
Site Address: 930 Springtown Blvd. Event Date: 11/29/12 (inclusive)
City: Livermore, CA Sampler: JH

Well ID MW-14 Date Monitored: 11/29/12
Well Diameter 4
Total Depth 14.41 ft.
Depth to Water 10.68 ft.

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

☐ Check if water column is less then 0.50 ft.

3.73 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

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

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

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

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: 0 ft
Depth to Water: _____ ft
Hydrocarbon Thickness: 0 ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ gal
Amt Removed from Well: _____ gal
Water Removed: _____

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	x voa vial	YES	HCL	LANCASTER	METHANE (8015)
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE (EPA 300.0)

COMMENTS: M/O Removed old sock From Well, installed new sock

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

CONESTOGA-ROVERS & ASSOCIATES

SORBENT SOCK EVALUATION FORM

Name: J. Herrow	Date: 11/29/12	Project Number: 211253
Site Address: 930 Springtown Blvd Livermore CA	Well ID: MW-14	Weather: cloudy

1) Time absorbent sock removed from well for inspection: 0800

2) Condition of sock:

a) Length of sock showing product saturation: Ø"

b) Length of sock showing dryness: 12"

c) Color of sock showing product saturation: White

d) Weight of the removed sock: 14.3 oz

e) Weight of a new/clean/dry sock: 9 oz

f) Difference in weight: (D-E) to 0.01 ounces. 5.3 oz

3) Picture of sock removed from well taken: ☑

4) Sock removed from well deposited into a waste drum: ☑

-Is drum labeled? Yes How full is drum? (%) 70%

5) After at least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing. :

a) Depth to product: Ø

b) Depth to water: 10.68

c) Thickness of product: (b-a) N/A

6) Size and type of sock installed 3"X30" New Pig

7) Comments: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867
Site Address: 930 Springtown Blvd. Event Date: 11/29/12 (inclusive)
City: Livermore, CA Sampler: SH

Well ID MW-15 Date Monitored: 11/29/12
Well Diameter 4
Total Depth 45.90 ft.
Depth to Water 10.70 ft.

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

☐ Check if water column is less then 0.50 ft.

35.20 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

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

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

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

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

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	x voa vial	YES	HCL	LANCASTER	METHANE (8015)
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE (EPA 300.0)

COMMENTS: M/O

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 Job Number: 385867
Site Address: 930 Springtown Blvd. Event Date: 11/29/12 (inclusive)
City: Livermore, CA Sampler: JH

Well ID MW-16 Date Monitored: 11/29/12
Well Diameter 4
Total Depth 29.19 ft.
Depth to Water 10.86 ft.

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

☐ Check if water column is less then 0.50 ft.

18.33 xVF — = — x3 case volume = Estimated Purge Volume: — gal.

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

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

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

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

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	x voa vial	YES	HCL	LANCASTER	METHANE (8015)
	x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE (EPA 300.0)

COMMENTS: M/O

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 | Job Number: 385867
Site Address: 930 Springtown Blvd. | Event Date: 11/28/12 (inclusive)
City: Livermore, CA | Sampler: JH

Well ID: MW-17 | Date Monitored: 11/29/12
Well Diameter: 4
Total Depth: 37.08 ft.
Depth to Water: 14.75 ft. ☐ Check if water column is less then 0.50 ft.

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

22.33 xVF .66 = 14.73 x3 case volume = Estimated Purge Volume: 44.21 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.21

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

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

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

Start Time (purge): 0905
Sample Time/Date: 0955 / 11/29/12
Approx. Flow Rate: 1 gpm.
Did well de-water? Yes If yes, Time: 0937 Volume: 32 gal. DTW @ Sampling: 19.20

Weather Conditions: cloudy
Water Color: Cloudy Odor: Y / (N)
Sediment Description: None

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0920	15	7.52	487	18.4	PRE: 1.1	PRE: 83
0935	30	7.31	521	18.2		
					POST: 1.4	POST: 107

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-17	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	2 x voa vial	YES	HCL	LANCASTER	METHANE (8015)
	1 x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	2 x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE (EPA 300.0)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 | Job Number: 385867
Site Address: 930 Springtown Blvd. | Event Date: 11/28/12 (inclusive)
City: Livermore, CA | Sampler: JH

Well ID: MW-18 | Date Monitored: 11/28/12
Well Diameter: 4
Total Depth: 14.90 ft.
Depth to Water: 12.36 ft.

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

☐ Check if water column is less then 0.50 ft.

2.54 xVF .66 = 1.67 x3 case volume = Estimated Purge Volume: 5.02 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.86

Purge Equipment:

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

Sampling Equipment:

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

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

Start Time (purge): 1045 | Weather Conditions: Cloudy
Sample Time/Date: 1140 / 11/28/12 | Water Color: cloudy | Odor: Ⓨ / N | Light
Approx. Flow Rate: — gpm. | Sediment Description: Light
Did well de-water? Yes | If yes, Time: 1049 | Volume: 1.75 gal. | DTW @ Sampling: 12.80

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - Ⓒ)	Temperature (Ⓒ / F)	D.O. (mg/L)	ORP (mV)
1048	1.5	7.51	625	18.5	PRE: .9	PRE: 72
					POST: 1.0	POST: 89

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-18	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	2 x voa vial	YES	HCL	LANCASTER	METHANE (8015)
	1 x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	2 x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE (EPA 300.0)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 | Job Number: 385867
Site Address: 930 Springtown Blvd. | Event Date: 11/29/12 (inclusive)
City: Livermore, CA | Sampler: SH

Well ID: MW-19 | Date Monitored: 11/29/12
Well Diameter: 4
Total Depth: 14.91 ft.
Depth to Water: 12.64 ft. ☐ Check if water column is less then 0.50 ft.

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

2.27 xVF .66 = 1.49 x3 case volume = Estimated Purge Volume: 4.49 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.09

Purge Equipment:

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

Sampling Equipment:

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

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

Start Time (purge): 1015 | Weather Conditions: cloudy
Sample Time/Date: 1130 / 11/29/12 | Water Color: cloudy | Odor: (Y) / N
Approx. Flow Rate: — gpm. | Sediment Description: heavy
Did well de-water? Yes If yes, Time: 1018 Volume: 1.5 gal. DTW @ Sampling: 13.05

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - (µS))	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)
1018	1.5	7.43	556	18.2	PRE: .8	PRE: 59
					POST: .9	POST: 65

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-19	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	2 x voa vial	YES	HCL	LANCASTER	METHANE (8015)
	1 x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	2 x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE (EPA 300.0)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #211253 — Job Number: 385867
Site Address: 930 Springtown Blvd. — Event Date: 11/29/12 (inclusive)
City: Livermore, CA — Sampler: JH

Well ID: MW-20 — Date Monitored: 11/29/12
Well Diameter: 4
Total Depth: 14.94 ft.
Depth to Water: 9.99 ft. ☐ Check if water column is less then 0.50 ft.

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

4.95 xVF .66 = 3.26 x3 case volume = Estimated Purge Volume: 9.80 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.98

Purge Equipment:

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

Sampling Equipment:

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

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

Start Time (purge): 1105 — Weather Conditions: Cloudy
Sample Time/Date: 1220 / 11/29/12 — Water Color: Cloud, Odor: Y / (N)
Approx. Flow Rate: — gpm. — Sediment Description: L. Brn
Did well de-water? Yes If yes, Time: 1145 Volume: 4.5 gal. DTW @ Sampling: 10.85

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - (µS))	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)
1112	3	7.36	442	18.6	PRE: .9	PRE: 52
					POST: 1.1	POST: 88

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-20	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
	3 x voa vial	YES	HCL	LANCASTER	METHANE (8015)
	1 x 250ml amber	YES	HCL	LANCASTER	FERROUS IRON (SM20 3500 Fe B)
	2 x voa vial	YES	NP	LANCASTER	NITRATE/SULFATE (EPA 300.0)

COMMENTS:

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

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only

Acct. #: _____ Sample # _____ Group #: 010589

Facility #: SS#211253-OML G-R#385867 Global ID#T0600101353

Site Address: 930 SPRINGTOWN BLVD., LIVERMORE, CA

Chevron PM: CM Lead Consultant: CRATH Hariu

Consultant/Office: ~~G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568~~

Consultant Prj. Mgr.: ~~Deanna L. Harding (deanna@grinc.com)~~

Consultant Phone #: 925-551-7555 Fax #: 925-551-7899

Sampler: Jim Hearn

Analyses Requested

Preservation Codes

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

- ☐ J value reporting needed
- ☐ Must meet lowest detection limits possible for 8260 compounds

8021 MTBE Confirmation
- ☐ Confirm highest hit by 8260
- ☐ Confirm all hits by 8260
- ☐ Run ____ oxy's on highest hit
- ☐ Run ____ oxy's on all hits

Sample Identification	Date Collected	Time Collected	Matrix: Grab	Composite	Soil	Water	Oil ☐ Air	Total Number of Containers	BTEX + ~~MTBE~~ 8260 ☐ 8021 ☒	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	Oxygenates	Total Lead Method	Dissolved Lead Method	methane (RSK)	Nitrate (EPA 300.0)	ferrous iron (SM 3500 Fe B)
GA	11/25/12		X			X		2	X	X								
MW-17		0955	X			X		11	X	X						X	X	X
MW-18		1140	X			X		11	X	X						X	X	X
MW-19		1130	X			X		11	X	X						X	X	X
MW-20		1220	X			X		11	X	X						X	X	X

Comments / Remarks

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

Turnaround Time Requested (TAT) (please circle)

STD. TAT | 72 hour | 48 hour
24 hour | 4 day | 5 day

Data Package Options (please circle if required)

QC Summary | Type I - Full | EDF/EDD
Type VI (Raw Data) | ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

Relinquished by:	Date 11/26/12	Time 1300	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by Commercial Carrier: UPS FedEx Other _____			Received by:	Date	Time
Temperature Upon Receipt _____ C°			Custody Seals Intact? Yes No		

GETTLER-RYAN INC.

TRANSMITTAL

September 25, 2012
G-R #385867

TO: Ms. Tina Hariu
Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608

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 **Bi-weekly Absorbent Sock Change Out of September 21, 2012**

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: 9-21-12

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

WELL ID	Vault Frame Condition	Gasket/O-Ring (M) Missing (R) Replaced	BOLTS (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=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-14	OK	→	→	→	→	→	→	NO	NO	EMCO 12" / 2	NO

Comments

CONESTOGA-ROVERS & ASSOCIATES

SORBENT SOCK EVALUATION FORM

Name: Mike L.	Date: 9-21-12	Project Number: 211253
Site Address: 930 Springtown Blvd. Livermore, CA 94550	Well ID: MW-14	Weather: SUNNY

1) Time absorbent sock removed from well for inspection: 1030

2) Condition of sock:

a) Length of sock showing product saturation: NONE

b) Length of sock showing dryness: 31"

c) Color of sock showing product saturation: NONE

d) Weight of the removed sock: 11 oz.

e) Weight of a new/clean/dry sock: 9 oz.

f) Difference in weight: (D-E) to 0.01 ounces. 2.00 oz.

3) Picture of sock removed from well taken: ☒

4) Sock removed from well deposited into a waste drum: ☒

-Is drum labeled? Yes How full is drum? (%) ~50%

5) After at least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing. :

a) Depth to product: —

b) Depth to water: 10.69

c) Thickness of product: (b-a) 0

6) Size and type of sock installed 30" PIG

7) Comments: NO PRODUCT PRESENT IN WELL

GETTLER-RYAN INC.

TRANSMITTAL

October 12, 2012
G-R #385867

TO: Ms. Tina Hariu
Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608

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 **Bi-weekly Absorbent Sock Change Out of October 2, 2012**

COMMENTS:

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

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

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

Trans/211253

WELL CONDITION STATUS SHEET

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

Job #: **385867**
Event Date: 10/2/12
Sampler: JV

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-14	OK	—					—	~	~	12" emco	~

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.

CONESTOGA-ROVERS & ASSOCIATES

SORBENT SOCK EVALUATION FORM

Name: J. Herrera	Date: 10/2/12	Project Number: 211253
Site Address: 930 Spring Tree Blvd Livermore CA	Well ID: MW-14	Weather: clear

1) Time absorbent sock removed from well for inspection: 1520

2) Condition of sock:

a) Length of sock showing product saturation: 0"

b) Length of sock showing dryness: 8"

c) Color of sock showing product saturation: brown

d) Weight of the removed sock: 16.5 oz

e) Weight of a new/clean/dry sock: 9.1 oz

f) Difference in weight: (D-E) to 0.01 ounces. 7.4 oz

3) Picture of sock removed from well taken: ☑

4) Sock removed from well deposited into a waste drum: ☑

-Is drum labeled? Yes How full is drum? (%)

5) After at least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing. :

a) Depth to product: N/A

b) Depth to water: 10.65

c) Thickness of product: (b-a) 0.00

6) Size and type of sock installed 3" x 30" Pig

7) Comments: _____

GETTLER-RYAN INC.

TRANSMITTAL

October 24, 2012
G-R #385867

TO: Ms. Tina Hariu
Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608

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 **Bi-weekly Absorbent Sock Change Out of October 17, 2012**

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: 10/17/12

City: **Livermore, CA** Sampler: JW

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-14	ok	—					S	n	n	12" cmw	n

Comments

CONESTOGA-ROVERS & ASSOCIATES

SORBENT SOCK EVALUATION FORM

Name: J. Herrera	Date: 10/17/12	Project Number: 211253
Site Address: 930 Spring Town Blvd Livermore, CA	Well ID: MW-14	Weather: Clear

1) Time absorbent sock removed from well for inspection: 0900

2) Condition of sock:

a) Length of sock showing product saturation: 6"

b) Length of sock showing dryness: 30"

c) Color of sock showing product saturation: None

d) Weight of the removed sock: 12.2 oz

e) Weight of a new/clean/dry sock: 10 oz

f) Difference in weight: (D-E) to 0.01 ounces. 2.2 oz

3) Picture of sock removed from well taken: ☑

4) Sock removed from well deposited into a waste drum: ☑

-Is drum labeled? Yes How full is drum? (%) 70%

5) After at least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing. :

a) Depth to product: —

b) Depth to water: 10.70

c) Thickness of product: (b-a) 0

6) Size and type of sock installed 3"x30" New Pig

7) Comments: _____

GETTLER-RYAN INC.

TRANSMITTAL

November 7, 2012
G-R #385867

TO: Ms. Tina Hariu
Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608

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 **Bi-weekly Absorbent Sock Change Out of October 29, 2012**

COMMENTS:

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

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

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

Trans/211253

WELL CONDITION STATUS SHEET

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

Job #: **385867**
Event Date: 10-29-12
Sampler: ML

WELL ID	Vault Frame Condition	Gasket/O-Ring (M) Missing (R) Replaced	BOLTS (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=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-14	OK							NO	NO	EMCO/12"/2	NO

Comments

CONESTOGA-ROVERS & ASSOCIATES

SORBENT SOCK EVALUATION FORM

Name: Mike Lombard	Date: 10.29.12	Project Number: #211253
Site Address: 930 Springtown Blvd Livermore, CA 94550	Well ID: MW-14	Weather: SUNNY

1) Time absorbent sock removed from well for inspection: 1130

2) Condition of sock:

a) Length of sock showing product saturation: Ø

b) Length of sock showing dryness: ~20"

c) Color of sock showing product saturation: Ø

d) Weight of the removed sock: 12.75 oz.

e) Weight of a new/clean/dry sock: 9 oz.

f) Difference in weight: (D-E) to 0.01 ounces. 3.75 oz.

3) Picture of sock removed from well taken: ☒

4) Sock removed from well deposited into a waste drum: ☒

-Is drum labeled? yes How full is drum? (%) 50%

5) After at least 15 minutes after removing the sock from the well, measure (to 0.01ft) from the top of the well casing. :

a) Depth to product: Ø

b) Depth to water: 10.62

c) Thickness of product: (b-a) Ø

6) Size and type of sock installed 30" PIG

7) Comments: NO FREE PRODUCT PRESENT

ATTACHMENT B

LABORATORY ANALYTICAL REPORT

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

December 11, 2012

Project: 211253

Submittal Date: 11/30/2012
Group Number: 1352700
PO Number: 0015093428
Release Number: MACLEOD
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
QA-T-121129 NA Water	6877535
MW-17-W-121129 Grab Water	6877536
MW-18-W-121129 Grab Water	6877537
MW-19-W-121129 Grab Water	6877538
MW-20-W-121129 Grab Water	6877539

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

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

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

Respectfully Submitted,

Jill M. Parker

Jill M. Parker
Senior Specialist

(717) 556-7262

Sample Description: **QA-T-121129 NA Water**
Facility# 211253 Job# 385867 GRD
930 Springtown-Livermore T0600101353 QA

LLI Sample # WW 6877535
LLI Group # 1352700
Account # 10904

Project Name: 211253

Collected: 11/29/2012

Submitted: 11/30/2012 09:30
Reported: 12/11/2012 09:01

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

STLQA

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D123422AA	12/07/2012 13:02	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D123422AA	12/07/2012 13:02	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12338A20A	12/03/2012 20:33	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12338A20A	12/03/2012 20:33	Marie D John	1

Sample Description: **MW-17-W-121129 Grab Water**
Facility# 211253 Job# 385867 GRD
930 Springtown-Livermore T0600101353 MW-17

LLI Sample # WW 6877536
LLI Group # 1352700
Account # 10904

Project Name: 211253

Collected: 11/29/2012 09:55 by JH

Submitted: 11/30/2012 09:30
Reported: 12/11/2012 09:01

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

SLM17

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles		**SW-846 8260B**		**ug/l**	**ug/l**	
10943	Benzene		71-43-2	N.D.	0.5	1
10943	Ethylbenzene		100-41-4	N.D.	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles		**SW-846 8015B**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water	C6-C12	n.a.	N.D.	50	1
GC Miscellaneous		**SW-846 8015B modified**		**ug/l**	**ug/l**	
07105	Methane		74-82-8	39	3.0	1
Wet Chemistry		**EPA 300.0**		**ug/l**	**ug/l**	
00368	Nitrate Nitrogen		14797-55-8	3,200	250	5
00228	Sulfate		14808-79-8	67,900	6,000	20
		SM20 3500 Fe B modified		**ug/l**	**ug/l**	
08344	Ferrous Iron		n.a.	77	10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F123392AA	12/04/2012 07:43	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F123392AA	12/04/2012 07:43	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12338A20A	12/03/2012 23:27	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12338A20A	12/03/2012 23:27	Marie D John	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B modified	1	123420006A	12/07/2012 13:20	Elizabeth J Marin	1
00368	Nitrate Nitrogen	EPA 300.0	1	12335655601A	11/30/2012 17:24	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12335655601A	11/30/2012 18:10	Christopher D Meeks	20
08344	Ferrous Iron	SM20 3500 Fe B modified	1	12338834401A	12/03/2012 20:10	Daniel S Smith	1

Sample Description: MW-18-W-121129 Grab Water
Facility# 211253 Job# 385867 GRD
930 Springtown-Livermore T0600101353 MW-18

LLI Sample # WW 6877537
LLI Group # 1352700
Account # 10904

Project Name: 211253

Collected: 11/29/2012 11:40 by JH

Submitted: 11/30/2012 09:30
Reported: 12/11/2012 09:01

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

SLM18

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	44	0.5	1
10943	Ethylbenzene		100-41-4	96	0.5	1
10943	Toluene		108-88-3	25	0.5	1
10943	Xylene (Total)		1330-20-7	190	0.5	1
GC Volatiles		**SW-846 8015B**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water	C6-C12	n.a.	2,000	50	1
GC Miscellaneous		**SW-846 8015B modified**		**ug/l**	**ug/l**	
07105	Methane		74-82-8	320	3.0	1
Wet Chemistry		**EPA 300.0**		**ug/l**	**ug/l**	
00368	Nitrate Nitrogen		14797-55-8	N.D.	250	5
00228	Sulfate		14808-79-8	117,000	6,000	20
		SM20 3500 Fe B modified		**ug/l**	**ug/l**	
08344	Ferrous Iron		n.a.	2,400	100	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.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F123422AA	12/07/2012 11:36	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F123422AA	12/07/2012 11:36	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12338A20A	12/04/2012 00:10	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12338A20A	12/04/2012 00:10	Marie D John	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B modified	1	123420006A	12/07/2012 13:39	Elizabeth J Marin	1
00368	Nitrate Nitrogen	EPA 300.0	1	12335655601A	11/30/2012 17:39	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12335655601A	11/30/2012 18:25	Christopher D Meeks	20
08344	Ferrous Iron	SM20 3500 Fe B modified	1	12338834401A	12/03/2012 20:10	Daniel S Smith	10

Sample Description: MW-19-W-121129 Grab Water
Facility# 211253 Job# 385867 GRD
930 Springtown-Livermore T0600101353 MW-19

LLI Sample # WW 6877538
LLI Group # 1352700
Account # 10904

Project Name: 211253

Collected: 11/29/2012 11:30 by JH

Submitted: 11/30/2012 09:30
Reported: 12/11/2012 09:01

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

SLM19

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles		**SW-846 8260B**		**ug/l**	**ug/l**	
10943	Benzene		71-43-2	N.D.	0.5	1
10943	Ethylbenzene		100-41-4	N.D.	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Volatiles		**SW-846 8015B**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water	C6-C12	n.a.	58	50	1
GC Miscellaneous		**SW-846 8015B modified**		**ug/l**	**ug/l**	
07105	Methane		74-82-8	15	3.0	1
Wet Chemistry		**EPA 300.0**		**ug/l**	**ug/l**	
00368	Nitrate Nitrogen		14797-55-8	N.D.	250	5
00228	Sulfate		14808-79-8	41,200	1,500	5
		SM20 3500 Fe B modified		**ug/l**	**ug/l**	
08344	Ferrous Iron		n.a.	1,800	200	20

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F123422AA	12/07/2012 11:58	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F123422AA	12/07/2012 11:58	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12338A20A	12/04/2012 00:32	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12338A20A	12/04/2012 00:32	Marie D John	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B modified	1	123420006A	12/07/2012 13:58	Elizabeth J Marin	1
00368	Nitrate Nitrogen	EPA 300.0	1	12335655601A	11/30/2012 16:05	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12335655601A	11/30/2012 16:05	Christopher D Meeks	5
08344	Ferrous Iron	SM20 3500 Fe B modified	1	12338834401A	12/03/2012 20:10	Daniel S Smith	20

Sample Description: **MW-20-W-121129 Grab Water**
Facility# 211253 Job# 385867 GRD
930 Springtown-Livermore T0600101353 MW-20

LLI Sample # WW 6877539
LLI Group # 1352700
Account # 10904

Project Name: 211253

Collected: 11/29/2012 12:20 by JH

Submitted: 11/30/2012 09:30
Reported: 12/11/2012 09:01

Chevron
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

SLM20

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	41	0.5	1
10943	Toluene		108-88-3	9	0.5	1
10943	Xylene (Total)		1330-20-7	95	0.5	1
GC Volatiles		**SW-846 8015B**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water	C6-C12	n.a.	4,200	50	1
GC Miscellaneous		**SW-846 8015B modified**		**ug/l**	**ug/l**	
07105	Methane		74-82-8	23	3.0	1
Wet Chemistry		**EPA 300.0**		**ug/l**	**ug/l**	
00368	Nitrate Nitrogen		14797-55-8	N.D.	250	5
00228	Sulfate		14808-79-8	131,000	6,000	20
		SM20 3500 Fe B modified		**ug/l**	**ug/l**	
08344	Ferrous Iron		n.a.	11,100	500	50

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	F123422AA	12/07/2012 12:20	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F123422AA	12/07/2012 12:20	Anita M Dale	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	12338A20A	12/04/2012 00:54	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12338A20A	12/04/2012 00:54	Marie D John	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B modified	1	123420006A	12/07/2012 14:16	Elizabeth J Marin	1
00368	Nitrate Nitrogen	EPA 300.0	1	12335655601A	11/30/2012 17:55	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12335655601A	11/30/2012 18:40	Christopher D Meeks	20
08344	Ferrous Iron	SM20 3500 Fe B modified	1	12338834401A	12/03/2012 20:10	Daniel S Smith	50

Quality Control Summary

Client Name: Chevron Group Number: 1352700
Reported: 12/11/12 at 09:01 AM

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 Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: D123422AA	Sample number(s): 6877535							
Benzene	N.D.	0.5	ug/l	87	87	77-121	0	30
Ethylbenzene	N.D.	0.5	ug/l	95	95	79-120	0	30
Toluene	N.D.	0.5	ug/l	93	93	79-120	0	30
Xylene (Total)	N.D.	0.5	ug/l	97	98	77-120	1	30
Batch number: F123392AA	Sample number(s): 6877536							
Benzene	N.D.	0.5	ug/l	94		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	97		77-120		
Batch number: F123422AA	Sample number(s): 6877537-6877539							
Benzene	N.D.	0.5	ug/l	92		77-121		
Ethylbenzene	N.D.	0.5	ug/l	92		79-120		
Toluene	N.D.	0.5	ug/l	91		79-120		
Xylene (Total)	N.D.	0.5	ug/l	95		77-120		
Batch number: 12338A20A	Sample number(s): 6877535-6877539							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	125	121	75-135	4	30
Batch number: 123420006A	Sample number(s): 6877536-6877539							
Methane	N.D.	3.0	ug/l	98		80-120		
Batch number: 12335655601A	Sample number(s): 6877536-6877539							
Nitrate Nitrogen	N.D.	50.	ug/l	98		90-110		
Sulfate	N.D.	300.	ug/l	101		90-110		
Batch number: 12338834401A	Sample number(s): 6877536-6877539							
Ferrous Iron	N.D.	10.	ug/l	97		93-105		

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 MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: F123392AA	Sample number(s): 6877536 UNSPK: 6877536								
Benzene	99	96	72-134	3	30				
Ethylbenzene	99	98	71-134	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.

Quality Control Summary

Client Name: Chevron Group Number: 1352700
Reported: 12/11/12 at 09:01 AM

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 MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Toluene	98	95	80-125	3	30				
Xylene (Total)	103	100	79-125	3	30				
Batch number: F123422AA	Sample number(s): 6877537-6877539 UNSPK: P877902								
Benzene	98	96	72-134	2	30				
Ethylbenzene	94	96	71-134	2	30				
Toluene	94	96	80-125	2	30				
Xylene (Total)	97	99	79-125	3	30				
Batch number: 123420006A	Sample number(s): 6877536-6877539 UNSPK: P876803								
Methane	-13169 (2)	-11534 (2)	35-157	9	20				
Batch number: 12335655601A	Sample number(s): 6877536-6877539 UNSPK: 6877538 BKG: 6877538								
Nitrate Nitrogen	96		90-110			N.D.	N.D.	0 (1)	20
Sulfate	93		90-110			41,200	38,000	8	20
Batch number: 12338834401A	Sample number(s): 6877536-6877539 UNSPK: P878189 BKG: P878189								
Ferrous Iron	96	96	81-112	0	6	6,200	6,000	3 (1)	5

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: D123422AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6877535	104	93	96	99
Blank	104	96	97	100
LCS	104	100	98	104
LCSD	104	99	98	103
Limits:	80-116	77-113	80-113	78-113

Analysis Name: UST VOCs by 8260B - Water
Batch number: F123392AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6877536	106	99	99	97
Blank	105	99	99	95
LCS	105	102	99	99
MS	105	99	98	99
MSD	105	101	99	100
Limits:	80-116	77-113	80-113	78-113

Analysis Name: UST VOCs by 8260B - Water

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

Quality Control Summary

Client Name: Chevron Group Number: 1352700
Reported: 12/11/12 at 09:01 AM

Surrogate Quality Control

Batch number: F123422AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6877537	103	98	98	100
6877538	104	99	96	95
6877539	103	97	99	100
Blank	105	99	97	96
LCS	105	98	98	98
MS	104	100	97	96
MSD	103	100	98	98
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 12338A20A

	Trifluorotoluene-F
6877535	83
6877536	84
6877537	126
6877538	86
6877539	177*
Blank	84
LCS	120
LCSD	117
Limits:	63-135

Analysis Name: Volatile Headspace Hydrocarbon
Batch number: 123420006A

	Propene
6877536	39*
6877537	50
6877538	56
6877539	64
Blank	103
LCS	99
MS	48
MSD	51
Limits:	42-131

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

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only

Acct. #: 10904 Sample # 6877535-39 Group #: 010589

Grp #1352700

Facility #: SS#211253-OML G-R#385867 Global ID#T0600101353

Site Address: 930 SPRINGTOWN BLVD., LIVERMORE, CA

Chevron PM: CM Lead Consultant: CRATH Hariu

Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568

Consultant Prj. Mgr.: Deanna L. Harding (deanna@grinc.com)

Consultant Phone #: 925-551-7555 Fax #: 925-551-7899

Sampler: Jim Herren

Analyses Requested / Preservation Codes: H (BTEX), H (TPH 8015 MOD GRO), H (Methane), H (Ferrous Iron)

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water (☐ Potable ☐ NPDES)	Oil ☐ Air	Total Number of Containers	BTEX + [redacted]E 8260 ☒ 8021 ☐	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	Oxygenates	Total Lead Method	Dissolved Lead Method	Methane (8015)	Nitrate/Sulfate (EPA 300.0)	Ferrous Iron SM20 3500 FeB
QA	11/28/12		X			X		2	X	X								
MW-17	↓	0955	X			X		11	X	X						X	X	X
MW-18	↓	1140	X			X		11	X	X						X	X	X
MW-19	↓	1130	X			X		11	X	X						X	X	X
MW-20	↓	1220	X			X		11	X	X						X	X	X

Preservative Codes

H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds

8021 MTBE Confirmation
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy's on highest hit
☐ Run ____ oxy's on all hits

Comments / Remarks

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

Turnaround Time Requested (TAT) (please circle)

(STD. TAT) 72 hour 48 hour
24 hour 4 day 5 day

Data Package Options (please circle if required)

QC Summary Type I - Full **EDF/EDD**
Type VI (Raw Data) ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	11/29/12	1300			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by Commercial Carrier: UPS (FedEx) Other ____			Received by: [signature]	11-30-12	0930
Temperature Upon Receipt 1.6 C°			Custody Seals Intact? (Yes) No		

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300

4804.01 (north) Rev. 10/12/06

Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

eurofins | Lancaster Laboratories

Explanation of Symbols and Abbreviations

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

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

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

> greater than

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

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

Inorganic Qualifiers

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

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

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

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

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

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

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	SPHT (ft.)	SPH REMOVED (gallons)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (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										
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-13										
07/23/09[1]	523.12	12.75	510.37	0.00	0.00	52,000	760	6,200	980	13,000
11/09/09	523.12	12.51	510.61	0.00	0.00	12,000	340	1,300	16	1,700
02/22/10	523.12	11.87	511.25	0.00	0.00	13,000	630	600	22	960
05/24/10	**523.12**	**12.10**	**511.02**	**0.00**	**0.00**	**15,000**	**950**	**670**	**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 (ft.)	GWE (msl)	SPHT (ft.)	SPH REMOVED (gallons)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW-14										
07/23/09[1]	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										
07/23/09[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	1[4]	<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 of Casing
(ft.) = Feet
DTW = Depth to Water
GWE = Groundwater Elevation
SPHT = Separate Phase Hydrocarbon Thickness
(msl) = Mean Sea Level
TPH = Total Petroleum Hydrocarbons
GRO = Gasoline Range Organics
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
-- = Not Measured/Not Analyzed
QA = Quality Assurance/Trip Blank
(µg/L) = Micrograms per liter

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

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

ANALYTICAL METHODS:

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

[1] Well development preformed.

[2] Product + water removed.

[3] 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.

[4] 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.