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10:04 am, Nov 01, 2011
Alameda County
Environmental Health

Eric Frohnapple
Project Manager
Marketing Business Unit

Chevron Environmental Management Company 6101 Bollinger Canyon Road San Ramon, CA 94583 Tel (925) 790-6692 Fax (925) 984-8373 ericf@chevron.com

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

Re: Former Texaco Service Station 21-1253 930 Springtown Boulevard Livermore, California ACEHS Case No. RO0189

I accept the **Second Semi-Annual 2011 Groundwater Monitoring and Sampling Report** dated October 31, 2011.

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 **Second Semi-Annual 2011 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,

Eric Frohnapple Project Manager

Enc Trohyple

Attachment: Second Semi-Annual 2011 Groundwater Monitoring and Sampling Report



5900 Hollis Street, Suite A Emeryville, California 94608

Telephone: (510) 420-0700 Fax: (510) 420-9170

http://www.craworld.com

October 31, 2011 Reference No. 060058

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

Re: Second Semi-Annual 2011

Groundwater Monitoring and Sampling Report and Annual Update

Former Texaco Station 21-1253 930 Springtown Boulevard Livermore, California

Dear Mr. Wickham:

Conestoga-Rovers & Associates (CRA) is submitting this *Second Semi-Annual 2011 Groundwater Monitoring and Sampling Report and Annual Update* on behalf of Chevron Environmental Management Company (Chevron) for the site referenced above (Figures 1). Groundwater monitoring and sampling was performed by Gettler-Ryan, Inc. (G-R) of Dublin, California and their August 16, 2011 *Groundwater Monitoring and Sampling Data Package* is included as Attachment A. Current groundwater monitoring and sampling data are presented in Table 1. Lancaster Laboratories' August 23, 2011 *Analytical Results* is included as Attachment B. Historical groundwater monitoring and sampling data are included as Attachment C.

RESULTS OF SECOND SEMI-ANNUAL 2011 EVENT

On August 9, 2011, G-R monitored and sampled the site wells per the established schedule. Monitoring wells are divided into three different zones based on the screen intervals: shallow zone (wells MW-9, MW-11 and MW-14), intermediate zone (wells MW-10, MW-12, MW-13 and MW-16) and deep zone (well MW-15).

Equal Employment Opportunity Employer



October 31, 2011 Reference No. 060058

Results of the current monitoring event indicate the following:

Groundwater Flow Direction Northwest

• Depth to Water

o Shallow Wells 9.67 to 12.06 feet below grade (fbg)

o Intermediate Wells 9.59 to 12.19 fbg

o Deep Well 9.56 fbg

Results of the 2011 sampling events are presented below in Table A:

TABLE A: 2011 HYDROCARBON CONCENTRATIONS								
Well ID	Sample Date	TPHg (μg/L)	Benzene (µg/L)	Toluene (μg/L)	Ethylbenzene (μg/L)	Total Xylenes (µg/L)		
Ground	water ESLs	100	1	40	30	20		
MW-9	1/31/2011	68	<0.5	<0.5	3	<0.5		
	8/9/2011	54	<0.5	<0.5	<0.5	<0.5		
MW-10	1/31/2011	250	<0.5	<0.5	<0.5	<0.5		
	8/9/2011	300	< 0.5	<0.5	<0.5	<0.5		
MW-11	1/31/2011	790	1	<0.5	5	3		
10100-11	8/9/2011	130	<0.5	<0.5	0.9	<0.5		
MW-12	1/31/2011	9,600	64	180	180	400		
10100-12	8/9/2011	9,000	71	140	170	580		
MW-13	1/31/2011	22,000	1,600	1,600	270	1,600		
10100-13	8/9/2011	12,000	1,200	820	120	710		
MW-14	1/31/2011			0.25 foot c	f LNAPL			
10100-14	8/9/2011			0.17 foot c	f LNAPL			
MW-15	1/31/2011	<50	<0.5	<0.5	<0.5	<0.5		
10100-10	8/9/2011	<50	<0.5	<0.5	<0.5	<0.5		
MW-16	1/31/2011	<50	<0.5	<0.5	<0.5	<0.5		
10100-10	8/9/2011	66	< 0.5	<0.5	<0.5	<0.5		

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



October 31, 2011 Reference No. 060058

CONCLUSIONS AND RECOMMENDATIONS

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

- Based on similar depth to groundwater data in shallow, intermediate and deep monitoring wells it appears the three groundwater zones are hydraulically connected.
- Light non-aqueous phase liquid (LNAPL) was detected in well MW-14 during the first and second semi-annual events.
- The highest dissolved hydrocarbon concentrations are detected in intermediate wells MW-12 and MW-13 located west-northwest of the former underground storage tanks and dispensers.
- Well MW-10, located downgradient (northwest) of MW-12 and MW-13, defines dissolved hydrocarbons to near and below ESLs.
- Deep well MW-15 defines the vertical extent of hydrocarbons.
- Over 2011, dissolved hydrocarbon concentrations in site wells were stable or decreasing.

CRA recommends continuing semi-annual monitoring and sampling to establish hydraulic and hydrocarbon concentration trends.

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.

Additional Activity

Once Chevron and CRA have established an access agreement with the property owner, CRA will install the monitoring wells proposed in CRA's March 30, 2011 *Site Conceptual Model and Work Plan* that was approved by ACEH in a letter dated May 3, 2011.



October 31, 2011 Reference No. 060058

Greg Barclay, P.G. 6260

Please contact Ms. Kiersten Hoey at (510) 420-3347 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Kiersten Hoey

KH/aa/13 Encl.

Figure 1

Figure 2 Groundwater Elevation and Hydrocarbon Concentrations Map

Table 1 Groundwater Monitoring and Sampling Data

Attachment A Monitoring and Sampling Data Package

Attachment B Laboratory Analytical Report

Vicinity Map

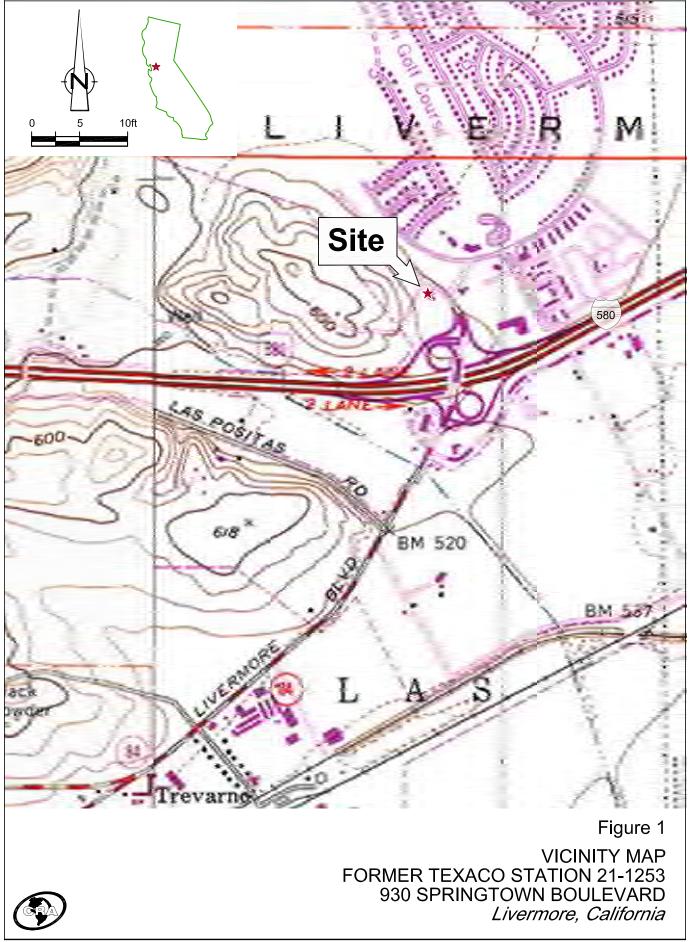
Attachment C Historical Groundwater Monitoring and Sampling Data

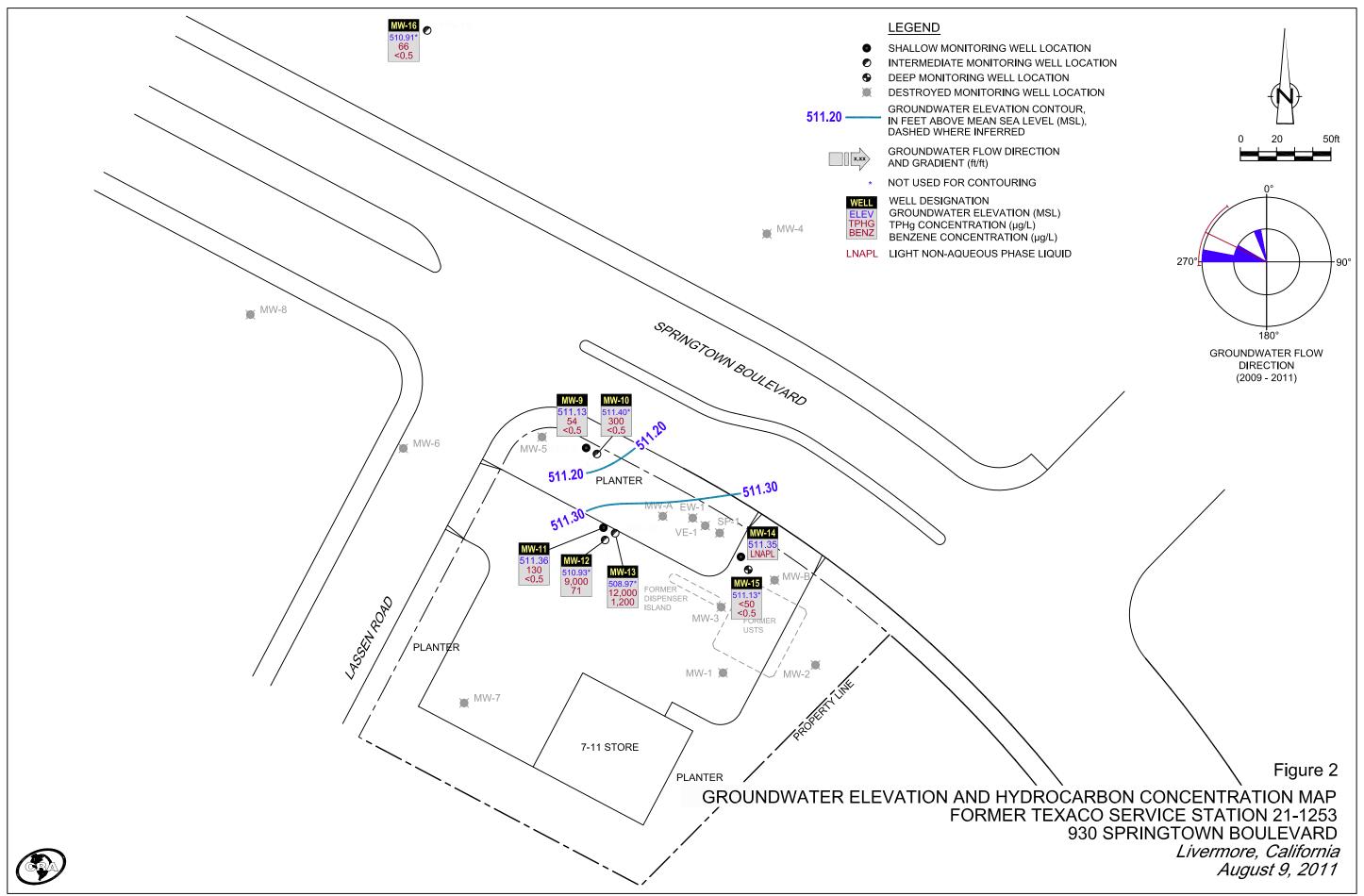
cc: Mr. Eric Frohnapple, Chevron (electronic copy)

Mr. Joe Zadik

Worldwide Engineering, Environmental, Construction, and IT Services

FIGURES





TABLE

TABLE 1 Page 1 of 3

GROUNDWATER MONITORING AND SAMPLING DATA FORMER TEXACO SERVICE STATION 21-1253 930 SPRINGTOWN BOULEVARD LIVERMORE, CALIFORNIA

							HYDROCARBONS		PRIMA	RY VOCS	
Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	TPH-GRO	В	T	E	X
	Units	ft	ft	ft-amsl	ft	gallons	µg/L	$\mu g/L$	µg∕L	µg/L	µg/L
MW-9	08/24/2010	523.14	13.58	509.56	_	_	3,500	6	8	180	79
MW-9	01/31/2011	523.14	12.31	510.83	-	_	68	<0.5	<0.5	3	<0.5
MW-9	08/09/2011	523.14	12.01	511.13	-	-	54	<0.5	<0.5	<0.5	<0.5
MW-10	08/24/2010	523.25	13.07	510.18	-	-	1,300	< 0.5	<0.5	2	< 0.5
MW-10	01/31/2011	523.25	11.92	511.33	-	-	250	< 0.5	<0.5	<0.5	<0.5
MW-10	08/09/2011	523.25	11.85	511.40	-	-	300	<0.5	<0.5	<0.5	<0.5
MW-11	08/24/2010	523.42	13.80	509.62	-	-	2,000 J	6	2	9	5
MW-11	01/31/2011	523.42	12.35	511.07	-	-	790	1	< 0.5	5	3
MW-11	08/09/2011	523.42	12.06	511.36	-	-	130	<0.5	<0.5	0.9	<0.5
MW-12	08/24/2010	523.12	12.84	510.28	-	-	18,000	210	650	330	1,900
MW-12	01/31/2011	523.12	12.47	510.65	-	-	9,600	64	180	180	400
MW-12	08/09/2011	523.12	12.19	510.93	-	-	9,000	71	140	170	580
MW-13	08/24/2010	520.88	13.69	507.19	_	_	13,000	810	710	76	660
MW-13	01/31/2011	520.88	12.21	508.67		_	22,000	1,600	1,600	270	1,600
MW-13	08/09/2011	520.88	11.91	508.97	_	_	12,000	1,200	820	120	710
14144-10	00/07/2011	020.00	11,71	500.77	-	-	12,000	1,400	020	140	710
MW-14	08/24/20101,**	520.88	10.36	510.75	0.29	0.00	-	-	-	-	-
MW-14	01/31/20111,**	520.88	9.96	511.12	0.25	0.00	-	-	-	-	-
MW-14	08/09/20111,**	520.88	9.67	511.35	0.17	0.00	-	-	-	-	-

TABLE 1 Page 2 of 3

GROUNDWATER MONITORING AND SAMPLING DATA FORMER TEXACO SERVICE STATION 21-1253 930 SPRINGTOWN BOULEVARD LIVERMORE, CALIFORNIA

							HYDROCARBONS PRIMARY VOCS					
			T	1	1	T	HYDROCARBONS		PKIMAF	T VOCS	T	
Location	Date	TOC	DTW	GWE	LNAPLT	LNAPL REMOVED	TPH-GRO	В	T	E	X	
	Units	ft	ft	ft-amsl	ft	gallons	μg/L	µg/L	µg/L	µg∕L	µg/L	
MW-15 MW-15	08/24/2010 01/31/2011	520.87 520.87	10.81 9.86	510.06 511.01	- -	- -	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	
MW-15 MW-16	08/09/2011 08/24/2010	520.87 520.50	9.56 11.07	511.31 509.43	-	-	<50 68	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	
MW-16	08/24/2010	520.50	9.99	510.51	-	-	<50	<0.5	<0.5	<0.5	<0.5	
MW-16	08/09/2011	520.50 520.50	9.99 9.59	510.51 510.91	-	- -	66	<0.5	<0.5	<0.5	<0.5	
14144-10	00/03/2011	320.30	9.39	310.91	-	-	00	~0. 3	~0. 3	~0. 3	~0. 3	
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	

Abbreviations and Notes:

TOC = Top of Casing

DTW = Depth to Water

GWE = Groundwater elevation

(ft-amsl) = Feet Above Mean sea level

ft = Feet

 μ g/L = Micrograms per Liter

TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics

VOCS = Volatile Organic Compounds

B = Benzene

TABLE 1 Page 3 of 3

GROUNDWATER MONITORING AND SAMPLING DATA FORMER TEXACO SERVICE STATION 21-1253 930 SPRINGTOWN BOULEVARD LIVERMORE, CALIFORNIA

							HYDROCARBONS		PRIMAI	RY VOCS	
Location	Date	тос	DTW	GWE	LNAPLT	LNAPL REMOVED	TPH-GRO	В	T	E	X
	Units	ft	ft	ft-amsl	ft	gallons	µg/L	μg/L	µg/L	μg/L	µg/L

T = Toluene

E = Ethylbenzene

X = Xylene

-- = 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.

ATTACHMENT A

MONITORING DATA PACKAGE



TRANSMITTAL

August 16, 2011 G-R #385867

TO: Ms. Kiersten Hoey

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 Second Semi-Annual Event of August 9, 2011

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 #: Site Address: City:	930 Spri	Chevron #211253 30 Springtown Blvd. Livermore, CA						3858	3 /	109 -1G	/11 Keve	RK				
WELL ID	Vault Frame Condition	Gasket/ O-Ring (M)mlssing	BOLTS (M) Missing (R) Replaced	Bolt Fianges 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)		ACE K	REPLACE CAP Y/N		WELL VA	AULT :e/ # of Bol	Its	Pictures Yes /	
MW-9	OK-						>	N	J	N	EM	CO -	124/	2	1	0 (
MW-10							>	1					1			
MW-11	OK-						<u> </u>									
MW-12							>							1		
MW-13							>							\dashv		
MW-14							>									
MW-15	oK -														N	
MW-16	oK-				->	3 Feet Deficient		V	1	V		/	V		YE	S
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													,			
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 IWM to Chemical Waste Management located in Kettleman Hills, California.



Client/Facility#: Site Address: City:	Chevron #211253 930 Springtown E Livermore, CA		Job Number: Event Date: Sampler:	385867 8/09/11 (inclusive)
Well ID Well Diameter Total Depth Depth to Water Depth to Water Purge Equipment: Disposable Bailer Stainless Steel Baile Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	w/ 80% Recharge [(Heigh	Volum Factor Check if water column Color = 1 287	r (VF) 4"= 0.66 nn is less then 0.50 x3 case volume =	6 5"= 1.02 6"= 1.50 12"= 5.80
Start Time (purge Sample Time/Da Approx. Flow Ra Did well de-water Time (2400 hr.)	te:gpm. ? If yes, T	Weather Color: Sediment De ime: Conductivity (µmhos/cm - µS)	CLOW 9	Odor: Y / N
SAMPLE ID MW- COMMENTS: Add/Replaced L	(#) CONTAINER REFR		LANCASTER	ANALYSES TPH-GRO(8015)/BTEX(8260) Add/Replaced Bolt:



Client/Facility#: Chev	ron #211253	Job Number:	385867
Site Address: 930	Springtown Blvd.	Event Date:	8 / 0 9 / (inclusive)
City: Live	rmore, CA	Sampler:	HAIG K,
Well Diameter Total Depth Depth to Water Depth to Water w/ 80% Purge Equipment: Disposable Bailer Stainless Steel Bailer	4 in. Volun	r (VF) 4"= 0.66 nn is less then 0.50 x3 case volume = + DTW]:	5"= 1.02 6"= 1.50 12"= 5.80 ft.
Start Time (purge): Sample Time/Date: Approx. Flow Rate: Did well de-water? Time (2400 hr.) 1005	gpm. Sediment De	: CUSAIZ escription:	Odor: (Y) N SU(SH) pal. DTW @ Sampling: 3.34 D.O. OBB (mg/L) (mv)
	NTAINER REFRIG. PRESERV. TYPE x voa vial YES HCL	LABORATORY	ANALYSES TPH-GRO(8015)/BTEX(8260)
Add/Replaced Lock:	Add/Replaced Plug:		Add/Replaced Bolt



GETTLER-RYAN INC.

Client/Facility#: Chevron #211253 Site Address: 930 Springtown Blvd. Livermore, CA	Job Number: 385867 Event Date: Sampler: HAIG K. (inclusive)
Well Diameter Total Depth Depth to Water Total Depth to Water	(VF) 4"= 0.66 5"= 1.02 6"= 1.50 12"= 5.80 n is less then 0.50 ft. x3 case volume = Estimated Purge Volume:
Start Time (purge): 1037 Weather Corn Sample Time/Date: 100 / 8 / 9 Water Color: Sediment De Did well de-water? User Time (2400 hr.) Volume (gal.) pH Conductivity (µmhos(cm - µs)) 13 4 8 13 5 0 10 4 9 5 5 1 3 13 5 0	CLEAR Odor: WIN MODERATE scription:
SAMPLE ID (#) CONTAINER REFRIG. PRESERV. TYPE MW- X voa vial YES HCL	FORMATION LABORATORY ANALYSES LANCASTER TPH-GRO(8015)/BTEX(8260)
COMMENTS:	
Add/Replaced Lock: Add/Replaced Plug:	Add/Replaced Bolt:



GETTLER-RYAN INC.

Client/Facility#:	Chevron #211253		Job Number:	385867
Site Address:	930 Springtown Blvd	d.	Event Date:	8 / 09 / 11 (inclusive)
City:	Livermore, CA		Sampler:	HAIG K
Well ID Well Diameter Total Depth Depth to Water	MW- in. 26.4 ft. 12.19 ft. xVF (1). w/ 80% Recharge [(Height of	Volume Factor of Check if water column	ate Monitored: 3/4"= 0.02 (VF) 4"= 0.66 n is less then 0.50 x3 case volume =	2 1"= 0.04 2"= 0.17 3"= 0.38 5 5"= 1.02 6"= 1.50 12"= 5.80 9 ft. Estimated Purge Volume: 28 gal.
Other:				Water Removed:gal
Start Time (purge Sample Time/Da Approx. Flow Ra Did well de-wate (2400 hr.)	tte:gpm.	Sediment De	CUEAR scription:	Odor: (V) N MODERATE gal. DTW @ Sampling: 13.82 D.O/ OPP (mg/L) (mV)
		LABORATORY IN	FORMATION	
SAMPLE ID MW-	(#) CONTAINER REFRIG. x voa vial YES		LANCASTER	ANALYSES TPH-GRO(8015)/BTEX(8260)
COMMENTS:				
Add/Replaced	Lock: Add	l/Replaced Plug:		Add/Replaced Bolt:



Client/Facility#: Chevron #211253		Job Number:	385867
Site Address: 930 Springtown E	Blvd.	Event Date:	8 / 0 9 / 1\ (inclusive)
City: Livermore, CA		Sampler:	HAIG K
Well ID Well Diameter Total Depth Depth to Water Depth to Water w/ 80% Recharge [(Height Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	Volume Factor (Check if water column	vF) 4"= 0.66 is less then 0.50 x3 case volume =	ft.
Start Time (purge): Sample Time/Date: Approx. Flow Rate: Did well de-water? Time (2400 hr.) Volume (gal.) pH	Sediment Des	CUZAR scription:	Odor: (V) N MODERATE gal. DTW @ Sampling:
SAMPLE ID (#) CONTAINER REFI		LANCASTER	ANALYSES TPH-GRO(8015)/BTEX(8260)
COMMENTS:	72		
Add/Replaced Lock:	Add/Replaced Plug:		Add/Replaced Bolt:



Client/Facility#:	Chevron #211253		Job Number:	385867
Site Address:	930 Springtown B	lvd.	Event Date:	8 / 0 9 / 1 (inclusive)
City:	Livermore, CA		Sampler:	HAIG K
Well ID Well Diameter Total Depth Depth to Water Depth to Water Purge Equipment: Disposable Bailer Stainless Steel Baile Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	w/ 80% Recharge [(Height	Volum Facto Check if water colum	r (VF) 4"= 0.66 nn is less then 0.50 x3 case volume =	5 5"= 1.02 6"= 1.50 12"= 5.80
Start Time (purge Sample Time/Da Approx. Flow Ra Did well de-wate Time (2400 hr.)	ate:gpm.	Weather Co Water Color Sediment Do ime:Volu Conductivity (μmhos/cm - μS)	escription:	Odor: Y / N gal. DTW @ Sampling:
SAMPLE ID	(#) CONTAINER REFR		NFORMATION LABORATORY LANCASTER	ANALYSES TPH-ORO(8015)/BTEX(8260)
1017	7 400 AID!	TIOL	ENIONOTEK	
COMMENTS:	NOTSAM	PLED DW	ETO ().17/SPH)
Add/Replaced	Lock:	Add/Replaced Plug:		Add/Replaced Bolt:



Client/Facility#:	Chevron #211253	Job Number:	385867				
Site Address:	930 Springtown Blvd.	Event Date:	8 / p 9 / 11 (inclusive)				
City:	Livermore, CA	Sampler:	HAIG K				
	4)-		57 1 0 00 111				
Well ID	<u>mw-15</u>	Date Monitored:	8/09/11				
Well Diameter	4 in.	Volume 3/4"= 0.00	2 1"= 0.04 2"= 0.17 3"= 0.38				
Total Depth	46.02 ft.	Factor (VF) 4"= 0.60					
Depth to Water	9.56 ft. Check	if water column is less then 0.50	Oft. Estimated Purge Volume: gal.				
Depth to Water	w/ 80% Recharge [(Height of Water		ST				
Duras Equipment	Carrott		Time Started: (2400 hrs) Time Completed: (2400 hrs)				
Purge Equipment: Disposable Bailer		ng Equipment:	Depth to Product:ft				
Stainless Steel Baile	•	able Bailer	Depth to Water: ft				
Stack Pump	Discrete	NAME OF TAXABLE PARTY.	Hydrocarbon Thickness: ft				
Suction Pump		tic Pump	Visual Confirmation/Description:				
Grundfos		adder Pump					
Peristaltic Pump			Skimmer / Absorbant Sock (circle one) Amt Removed from Skimmer: gal				
QED Bladder Pump			Amt Removed from Well: gal				
Other:			Water Removed:				
Start Time (purge	0838	Weather Conditions:	SUMMY				
	te: 0915/8/9/11	Water Color: CLEAR					
Approx. Flow Rat	,		Oddi. 1 / (1)				
		Sediment Description:	1 2714 0 0 11 1 1 0 1 7 7				
Did well de-water	? If yes, Time:	Volume: (gal. DTW @ Sampling: 12.5 17				
Time	Valuma (aal.)	onductivity Temperature	D.9. ORF				
(2400 hr.)	Volume (gal.) pH (µm	hos/em - µS) (C) F)	(prg/L) (nrV)				
0846	24 7.82	1278 209	,				
12 8 m	48 11.45	1256 20.7					
0902	मिक में में	1261 210					
CAMPIE ID		DRATORY INFORMATION					
SAMPLE ID	(#) CONTAINER REFRIG. PR	ESERV. TYPE LABORATORY	ANALYSES				
C 1-101	A Voa Viaii YES	HCL LANCASTER	TPH-GRO(8015)/BTEX(8260)				
		 					
COMMENTS:							
	· · ·						
Add/Replaced L	ock: Add/Repla	aced Plug:	Add/Replaced Bolt:				



Client/Facility#:	Chevron #211253		Job Number:	385867
Site Address:	930 Springtown Blv	d.	Event Date:	8 /09 /11 (inclusive)
City:	Livermore, CA		Sampler:	HAIG K
Well ID Well Diameter	MW-16 4 in.	Volum		8 1 0 9 11 2 1"= 0.04 2"= 0.17 3"= 0.38
Total Depth	29.30 ft.	Factor	· _ ·	
Depth to Water		Check if water column) ft. Estimated Purge Volume: 39 gal.
Depth to Water	w/ 80% Recharge [(Height of			
Purge Equipment:		Sampling Equipment:		Time Completed: (2400 hrs)
Disposable Bailer		Disposable Bailer		Depth to Product:ft
Stainless Steel Baile	r	Pressure Bailer		Depth to Water:ft
Stack Pump		Discrete Bailer		Hydrocarbon Thickness:ft Visual Confirmation/Description:
Suction Pump		Peristaltic Pump		Visual Committation/Description.
Grundfos		QED Bladder Pump		Skimmer / Absorbant Sock (circle one)
Peristaltic Pump		Other:		Amt Removed from Skimmer: gal
QED Bladder Pump Other:				Amt Removed from Well:gal
Other				Water Removed:
Start Time (purge Sample Time/Da Approx. Flow Ra Did well de-water	te: 0820/ 8/9 te:gpm. r?lf yes, Time	Sediment De	CLEAR scription:	Odor: Y /N
0749 0756 0803	Volume (gal.) pH	(μmhos/gm/- μS))	20.8 20.9 20.9	(mg/L) (mg/V)
		LABORATORY IN		
SAMPLE D MW-	(#) CONTAINER REFRIG. x voa vial YES		LABORATORY	ANALYSES
10100-	x voa vial YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)
COMMENTS:				
Add/Replaced L	ock: Add	/Replaced Plug:	· · · · · · · · · · · · · · · · · · ·	Add/Replaced Bolt:



For	Lancaster	Laboratories	use	oniy
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				n	7			\cap
Acct. #:	Sample #	Group #:	U	U		Ø	0	9
					_			

281411-48								Analyses Requested												
Facility #: SS#211253-OML G-R#38586	7 Global ID#				Matrix			111		Р	res	erva	tion	Co	des	au I		Preserva	ative Coc	des
Site Address 930 SPRINGTOWN BLVD., LI	VERMORE, C.	A						114	9			_			_	-	+	H = HCI	T = Thio	
Chevron PM: EFLead			Hoey	-		-			Cleanup			- 11						$N = HNO_3$ $S = H_2SO_4$	B = NaC O = Othe	
Consultant/Office:G-R, Inc., 6747 Sierra Cou				1	ege SI	Containers		1	Sel C			Ш						☐ J value repor		
Consultant Pri. Mgr. Deanna L. Harding (de					Potable NPDES	ntair	8021		Silica Gel									☐ Must meet lo	west detec	tion limits
												8	bol					possible for 8		ounds
Consultant Phone #9 <u>25-551-7555</u> Fax #: <u>925-551-7899</u>						l o	8260	98	DRO		Se	Method	Method					8021 MTBE Co		
Sampler: HAIG KEVORK					Air	Oil □ Air Total Number of	4MBBB	TPH 8015 MOD GRO	TPH 8015 MOD DRO	LE S	Oxygenates		ead	ı				Confirm high		
D-tr			Grab		- G	۲ <u>ت</u>	韓	3015	3015	full sc	Ö	Lead	Medi					☐ Confirm all hi		
Sample Identification	Date Collected (Time Collected	Grab	Soil	Water	Total	ВТЕХ	TH.	TPH	8260 full scan		Total Lead	Dissolved Lead					☐ Run oxy		
- GA	8/09/11		X		X	9	X	X										Comments / F	Remarks	
	0	945	X_{-}		\times	6		\bigcirc												
MW-10		025	<u> </u>		$\langle \langle \rangle \rangle$	9	X	X			_	4	_	_		\perp				-1
MW-12		140	$\langle \cdot \rangle$		$\langle \rangle$	6		X			-	-	\dashv	_	_	_		Please forwar		
MW == 13	1	230	\Diamond			6		X			\dashv	-		-	_	+		directly to the	Lead Cons	ultant
	0	915	\Diamond		\Diamond	6		冷			-	+	+	\dashv	_	+	-	and c	o. G., .	
MW-16		820	\Diamond			6		父		\dashv	_	\dashv	+	\dashv		+	-			
												\dashv	1	\neg		+				
						+-					_	_	_	_						
						+	-			_	\dashv	_	4	4	_	\perp				
Turner of Time Day of J (747)		Relinguis	hed by:)//	NI	/	7		Date	Ti	me	T _B ,	vice	ed by:				Data	
Turnaround Time Requested (TAT) (please cire STD. TAT 72 hour 48 hour	•	Be	eeg	11	12	UL		73	8/	9/1	1/3	01	/4	ET,	The h	C-1	RYA	W FRIDGE O	Date	Time
24 hour 4 day 5 day		Relinquie	hed by:	>>>	3/	7	5/2	×19.	40	ate	,Ti	me 46	100		ed by:		_	7	Date	Time
		Relinquis	hed by.			1		8770	1	Date	1-4	me	Re	Celv	ed by:		or	. 194	Date	1486
Data Package Options (please circle if required) QC Summary Type I - Full	/													,0010	ou by.				Date	Time
Type VI (Raw Data) Coelt Deliverable not needed Relinquished by						Carrie	:		11 1				Re	ceiv	ed by:				Date	Time
WIP (RWQCB)		UPS	Fe	dEx		Othe	er													
Disk		Temperat	ture Upo	n Re	eceipt					-		_ C°	Cu	stod	y Seal	s Inta	act?	Yes No		
Part of the second of the seco								-		- 10						1071		1700		

ATTACHMENT B

LABORATORY ANALYTICAL REPORT



Analysis Report

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

ANALYTICAL RESULTS

Prepared by:

Prepared for:

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

Chevron 6001 Bollinger Canyon Rd L4310 San Ramon CA 94583

August 23, 2011

Project: 211253

Submittal Date: 08/11/2011 Group Number: 1261126 PO Number: 0015075227 Release Number: FROHNAPPLE State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
QA-T-110809 NA Water	6372787
MW-9-W-110809 Grab Water	6372788
MW-10-W-110809 Grab Water	6372789
MW-11-W-110809 Grab Water	6372790
MW-12-W-110809 Grab Water	6372791
MW-13-W-110809 Grab Water	6372792
MW-15-W-110809 Grab Water	6372793
MW-16-W-110809 Grab Water	6372794

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

ELECTRONIC	CRA c/o Gettler-Ryan	Attn: Rachelle Munoz
COPY TO	CI CIDA	Au D
ELECTRONIC COPY TO	Chevron c/o CRA	Attn: Report Contact
ELECTRONIC	Chevron	Attn: Anna Avina
COPY TO		110011 111110 11 1110
ELECTRONIC	CRA	Attn: Kiersten Hoey
COPY TO		



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Questions? Contact your Client Services Representative Jill M Parker at (717) 656-2300 Ext. 1241

Respectfully Submitted,

Robin C. Runkle Senior Specialist



Account

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Sample Description: QA-T-110809 NA Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 QA

LLI Sample # WW 6372787 LLI Group # 1261126

10904

Project Name: 211253

Collected: 08/09/2011 Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 08/11/2011 09:00 Reported: 08/23/2011 20:25

SBLQA

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

General Sample Comments

State of California Lab Certification No. 2501

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

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
10943	BTEX 8260B Water	SW-846 8260B	1	Z112271AA	08/15/2011 16:34	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z112271AA	08/15/2011 16:34	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11227A07A	08/16/2011 14:31	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	11227A07A	08/16/2011 14:31	Elizabeth J Marin	1



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Sample Description: MW-9-W-110809 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-9

LLI Group # 1261126 Account # 10904

LLI Sample # WW 6372788

Project Name: 211253

Collected: 08/09/2011 09:45 by HK Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 08/11/2011 09:00 Reported: 08/23/2011 20:25

SBL09

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	N.D.	0.5	1
10943	Ethylbenzene		100-41-4	N.D.	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Vol	latiles TPH-GRO N. CA water	SW-846	8015B	ug/l 54	ug/l 50	1
01/20	IPH-GRO N. CA Water	C0-C12	II.a.	34	30	1

General Sample Comments

State of California Lab Certification No. 2501

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

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
10943	BTEX 8260B Water	SW-846 8260B	1	Z112271AA	08/15/2011 16:58	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z112271AA	08/15/2011 16:58	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11227A07A	08/16/2011 20:36	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	11227A07A	08/16/2011 20:36	Elizabeth J Marin	1



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Sample Description: MW-10-W-110809 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-10

LLI Sample # WW 6372789

LLI Group # 1261126 Account # 10904

Project Name: 211253

Collected: 08/09/2011 10:25 by HK Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 08/11/2011 09:00 Reported: 08/23/2011 20:25

SBL10

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	N.D.	0.5	1
10943	Ethylbenzene		100-41-4	N.D.	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	300	50	1

General Sample Comments

State of California Lab Certification No. 2501

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

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
10943	BTEX 8260B Water	SW-846 8260B	1	D112281AA	08/16/2011 22:04	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D112281AA	08/16/2011 22:04	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11227A07A	08/16/2011 21:01	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	11227A07A	08/16/2011 21:01	Elizabeth J Marin	1



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Sample Description: MW-11-W-110809 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-11

LLI Sample # WW 6372790

LLI Group # 1261126 Account # 10904

Project Name: 211253

Collected: 08/09/2011 11:00 by HK Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 08/11/2011 09:00 Reported: 08/23/2011 20:25

SBL11

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	N.D.	0.5	1
10943	Ethylbenzene		100-41-4	0.9	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Vol	latiles TPH-GRO N. CA water	SW-846	8015B	ug/l 130	ug/l 50	1
						_

General Sample Comments

State of California Lab Certification No. 2501

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

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
10943	BTEX 8260B Water	SW-846 8260B	1	Z112271AA	08/15/2011 17:21	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z112271AA	08/15/2011 17:21	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11227A07A	08/16/2011 21:27	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	11227A07A	08/16/2011 21:27	Elizabeth J Marin	1



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Page 1 of 1

Sample Description: MW-12-W-110809 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-12

LLI Sample # WW 6372791

LLI Group # 1261126 Account # 10904

Project Name: 211253

Collected: 08/09/2011 11:40 by HK Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 08/11/2011 09:00 Reported: 08/23/2011 20:25

SBL12

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	71	0.5	1
10943	Ethylbenzene		100-41-4	170	0.5	1
10943	Toluene		108-88-3	140	0.5	1
10943	Xylene (Total)		1330-20-7	580	5	10
GC Vol	latiles TPH-GRO N. CA water	SW-846	8015B	ug/l 9,000	ug/l 500	10

General Sample Comments

State of California Lab Certification No. 2501

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

CAT	Analysis Name	Method	Trial#	Batch# Analysis		Analyst	Dilution
No.					Factor		
10943	BTEX 8260B Water	SW-846 8260B	1	Z112271AA	08/15/2011 17:45	Daniel H Heller	1
10943	BTEX 8260B Water	SW-846 8260B	1	Z112271AA	08/15/2011 18:09	Daniel H Heller	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z112271AA	08/15/2011 17:45	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Z112271AA	08/15/2011 18:09	Daniel H Heller	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11227A07A	08/16/2011 23:12	Elizabeth J Marin	10
01146	GC VOA Water Prep	SW-846 5030B	1	11227A07A	08/16/2011 23:12	Elizabeth J Marin	10



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Sample Description: MW-13-W-110809 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-13

LLI Sample # WW 6372792

LLI Group # 1261126 Account # 10904

Project Name: 211253

Collected: 08/09/2011 12:30 by HK Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 08/11/2011 09:00 Reported: 08/23/2011 20:25

SBL13

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	1,200	10	20
10943	Ethylbenzene		100-41-4	120	1	2
10943	Toluene		108-88-3	820	10	20
10943	Xylene (Total)		1330-20-7	710	1	2
GC Vo	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	12,000	1,000	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.

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution		
No.					Date and Time				
10943	BTEX 8260B Water	SW-846 8260B	1	Z112271AA	08/15/2011 18:33	Daniel H Heller	2		
10943	BTEX 8260B Water	SW-846 8260B	1	Z112271AA	08/15/2011 18:57	Daniel H Heller	20		
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z112271AA	08/15/2011 18:33	Daniel H Heller	2		
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Z112271AA	08/15/2011 18:57	Daniel H Heller	20		
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11227D20A	08/17/2011 03:26	Laura M Krieger	20		
01146	GC VOA Water Prep	SW-846 5030B	1	11227D20A	08/17/2011 03:26	Laura M Krieger	20		



Account

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Sample Description: MW-15-W-110809 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-15

LLI Sample # WW 6372793 LLI Group # 1261126

10904

Project Name: 211253

Collected: 08/09/2011 09:15 by HK Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 08/11/2011 09:00 Reported: 08/23/2011 20:25

SBL15

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

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	Z112271AA	08/15/2011 19:21	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z112271AA	08/15/2011 19:21	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11227D20A	08/17/2011 00:08	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	11227D20A	08/17/2011 00:08	Laura M Krieger	1



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Page 1 of 1

Sample Description: MW-16-W-110809 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-16

LLI Sample # WW 6372794 LLI Group # 1261126

Account # 10904

Project Name: 211253

Collected: 08/09/2011 08:20 by HK Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 08/11/2011 09:00 Reported: 08/23/2011 20:25

SBL16

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10943	Benzene		71-43-2	N.D.	0.5	1
10943	Ethylbenzene		100-41-4	N.D.	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Vol	latiles TPH-GRO N. CA water	SW-846 C6-C12	8015B	ug/l 66	ug/l 50	1

General Sample Comments

State of California Lab Certification No. 2501

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

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
10943	BTEX 8260B Water	SW-846 8260B	1	Z112271AA	08/15/2011 19:45	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z112271AA	08/15/2011 19:45	Daniel H Heller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11227D20A	08/17/2011 00:52	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	11227D20A	08/17/2011 00:52	Laura M Krieger	1



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Quality Control Summary

Client Name: Chevron Group Number: 1261126

Reported: 08/23/11 at 08:25 PM

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

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD <u>%REC</u>	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: D112281AA	Sample numbe	er(s): 637	72789					
Benzene	N.D.	0.5	ug/l	80		79-120		
Ethylbenzene	N.D.	0.5	ug/l	91		79-120		
Toluene	N.D.	0.5	ug/l	90		79-120		
Xylene (Total)	N.D.	0.5	ug/l	89		80-120		
Batch number: Z112271AA Benzene Ethylbenzene Toluene Xylene (Total)	Sample number N.D. N.D. N.D. N.D. N.D.	er(s): 637 0.5 0.5 0.5 0.5	72787-6372 ug/l ug/l ug/l ug/l	788,637279 95 98 96 98	90-6372794	79-120 79-120 79-120 80-120		
Batch number: 11227A07A	Sample numbe	er(s): 637	72787-6372	791				
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	109	100	75-135	9	30
Batch number: 11227D20A	Sample numbe	er(s): 637	72792-6372	794				
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	109	109	75-135	0	30

Sample Matrix Quality Control

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

Analysis Name	MS <u>%REC</u>	MSD <u>%REC</u>	MS/MSD <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG Conc	DUP <u>Conc</u>	DUP <u>RPD</u>	Dup RPD <u>Max</u>
Batch number: D112281AA	Sample	number(s)	: 6372789	UNSPK:	P3756	08			
Benzene	88	92	80-126	5	30				
Ethylbenzene	96	103	71-134	7	30				
Toluene	98	106	80-125	8	30				
Xylene (Total)	96	103	79-125	7	30				
Batch number: Z112271AA	Sample	number(s)	: 6372787	-637278	88,6372	790-637279	4 UNSPK: P3	372773	
Benzene	104	99	80-126	4	30				
Ethylbenzene	108	106	71-134	1	30				
Toluene	105	102	80-125	3	30				
Xylene (Total)	108	105	79-125	3	30				

Surrogate Quality Control

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



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Quality Control Summary

Group Number: 1261126 Client Name: Chevron

Reported: 08/23/11 at 08:25 PM

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: D112281AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
6372789	95	100	105	98	
Blank	96	106	104	96	
LCS	93	104	102	97	
MS	95	106	101	97	
MSD	94	105	104	98	
Limits:	80-116	77-113	80-113	78-113	

Analysis Name: UST VOCs by 8260B - Water

	mber: Z112271AA Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
6372787	100	98	99	98	
6372788	102	99	99	98	
6372790	100	98	101	99	
6372791	101	98	100	108	
6372792	99	100	99	100	
6372793	101	97	99	97	
6372794	99	99	99	98	
Blank	103	102	98	99	
LCS	102	102	98	99	
MS	101	101	99	100	
MSD	101	100	99	100	
Limits:	80-116	77-113	80-113	78-113	

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

Batch number: 11227A07A

Trifluorotoluene-F

6372787	95
6372788	94
6372789	100
6372790	97
6372791	115
Blank	94
LCS	105
LCSD	103

Limits: 63-135

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

Batch number: 11227D20A Trifluorotoluene-F

6372792	113
6372793	105
6372794	107
Blank	101
LCS	133

*- Outside of specification

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



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Quality Control Summary

Client Name: Chevron Group Number: 1261126

Reported: 08/23/11 at 08:25 PM

Surrogate Quality Control

LCSD 135

Limits: 63-135

^{*-} Outside of specification

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

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

Chevron California Region Analysis Request/Chain of Custody

Lancaster	Acct. #:	For Lancaster Laboratories use only Sample # 6372787.94 Group #: 007869
Laboratories $481911-98$		Analyses Requested G# 1361126
Facility #:SS#211253-OMLG_R#385867_Global ID# Site Address@30_SPRINGTOWN_BLVDLIVERMORE_CA	Matrix	Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH
Chevron PM: EF Lead Consultant: CRAHK Hoev		
Consultant/Office:G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568 Consultant Prj. Mgr.:Deanna L. Harding (deanna@grinc.com)	□ Potable □ NPDES	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
Consultant Phone #:925-551-7555 Fax #: 925-551-7899 Sampler: HAIG KEVORK Date Time Collected C	Soil Water Oil □ Air	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
Collected Coll		Comments / Remarks Comments / Remarks Comments / Remarks Comments / Remarks Please forward the lab results directly to the Lead Consultant and cc: G-R.
Type VI (Haw Data)	Commercial Carri	Date Time Received by: Date Time Received by:
WIP (RWQCB) Disk Temperature Up		C° Custody Seals Intact? Yes No

/E :



Explanation of Symbols and Abbreviations

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

RL N.D. TNTC IU umhos/cm C meq g ug	Reporting Limit none detected Too Numerous To Count International Units micromhos/cm degrees Celsius milliequivalents gram(s) microgram(s)	BMQL MPN CP Units NTU ng F Ib. kg	Below Minimum Quantitation Level Most Probable Number cobalt-chloroplatinate units nephelometric turbidity units nanogram(s) degrees Fahrenheit pound(s) kilogram(s) milligram(s)
ml m3	milliliter(s) cubic meter(s)	I ul	liter(s) microliter(s)
_	\ /		` '

- 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 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 basis on an as-received basis.

U.S. EPA CLP Data Qualifiers:

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

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

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

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

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ATTACHMENT C

HISTORICAL GROUNDWATER MONITORING AND SAMPLING DATA

Table 1
Groundwater Monitoring Data and Analytical Results

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

	Livermore, Camornia									
WELL ID/	TOC*	DTW	GWE	SPHT	SPH REMOVED	TPH-GRO	В	Т	E	X
DATE	(ft.)	(ft.)	(msl)	(ft.)	(gallons)	(µg/L)	(μg/L)	(µg/L)	(μg/L)	(µg/L)
MW-9										
07/23/09 ¹	523.14	13.00	510.14	0.00	0.00	5,200	4	5	310	100
11/09/09	523.14	12.70	510.44	0.00	0.00	240	4	4	2	5
02/22/10	523.14	11.93	511.21	0.00	0.00	< 50	< 0.5	< 0.5	< 0.5	< 0.5
05/24/10	523.14	12.22	510.92	0.00	0.00	6,200	9	5	470	110
MW-10										
$07/23/09^1$	522.76	12.59	510.17	0.00	0.00	16,000	220	440	440	660
11/09/09	522.76	12.30	510.46	0.00	0.00	2,800	1	2^3	30	30
02/22/10	522.76	11.52	511.24	0.00	0.00	3,600	9	2	61	10
05/24/10	522.76	11.82	510.94	0.00	0.00	3,000	12	3	110	22
MW-11										
$07/23/09^1$	523.25	13.05	510.20	0.00	0.00	5,400	25	28	62	66
11/09/09	523.25	12.73	510.52	0.00	0.00	1,100	3	0.6^{3}	2	2
02/22/10	523.25	11.96	511.29	0.00	0.00	1,400	2	< 0.5	5	0.9
05/24/10	523.25	12.27	510.98	0.00	0.00	1,700	1	<0.5	10	0.6
MW-12										
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/	TOC*	DTW	GWE		PH REMOVED	TPH-GRO	В	T	E	X
DATE	(ft.)	(ft.)	(msl)	(ft.)	(gallons)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)
	U s y	(J.	(mar)	(July	(Suitons)	(#8/L)	(με/Ε)	(PS/L)	(#g/L)	(#8/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 SAMPLE	ED DUE TO THE P	RESENCE (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(msl) = Mean Sea LevelE = Ethylbenzene(ft.) = FeetTPH = Total Petroleum HydrocarbonsX = XylenesDTW = Depth to WaterGRO = Gasoline Range Organics-- = Not Measured/Not Analyzed

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

ANALYTICAL METHODS:

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

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

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

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

Well development preformed.