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8:53 am, Apr 04, 2011

Alameda County

Environmental Health

Thomas Bauhs
Project Manager
Marketing Business Unit

Chevron Environmental Management Company 6101 Bollinger Canyon Road San Ramon, CA 94583 Tel (925) 790-6231 Fax (925) 984-8373 tbauhs@chevron.com

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

Re: Former Chevron Service Station No. 21-1253

930 Springtown Road Livermore, California

I accept the First Semi-Annual 2011 Groundwater Monitoring and Sampling Report dated March 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 **First 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,

Thomas Bauhs Project Manager

Attachment: First 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

April 1, 2011 Reference No. 060058

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

Re: First Semi-Annual 2011

Groundwater Monitoring and Sampling Report

Former Texaco Service Station 21-1253

930 Springtown Boulevard Livermore, California

ACEH Case No. RO0000189

Dear Mr. Jerry Wickham:

Conestoga-Rovers & Associates (CRA) is submitting this First Semi-Annual 2011 Groundwater Monitoring and Sampling Report for the site referenced above (Figure 1) on behalf of Chevron Environmental Management Company. Groundwater monitoring and sampling was performed by Gettler-Ryan, Inc. (G-R) of Dublin, California. G-R's February 7, 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' February 18, 2011 Analytical Results is included as Attachment B. Historical groundwater monitoring and sampling data are included as Attachment C.

Equal Employment Opportunity Employer



April 1, 2011 Reference No. 060058

Please contact David Grunat at (510) 420-3353 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Brandon S. Wilken, PG 7564

AA/aa/10

David Grunat

Encl.

Figure 1 Vicinity Map

Figure 2 Groundwater Elevation and Hydrocarbon Concentration Map

Table 1 Groundwater Monitoring and Sampling Data

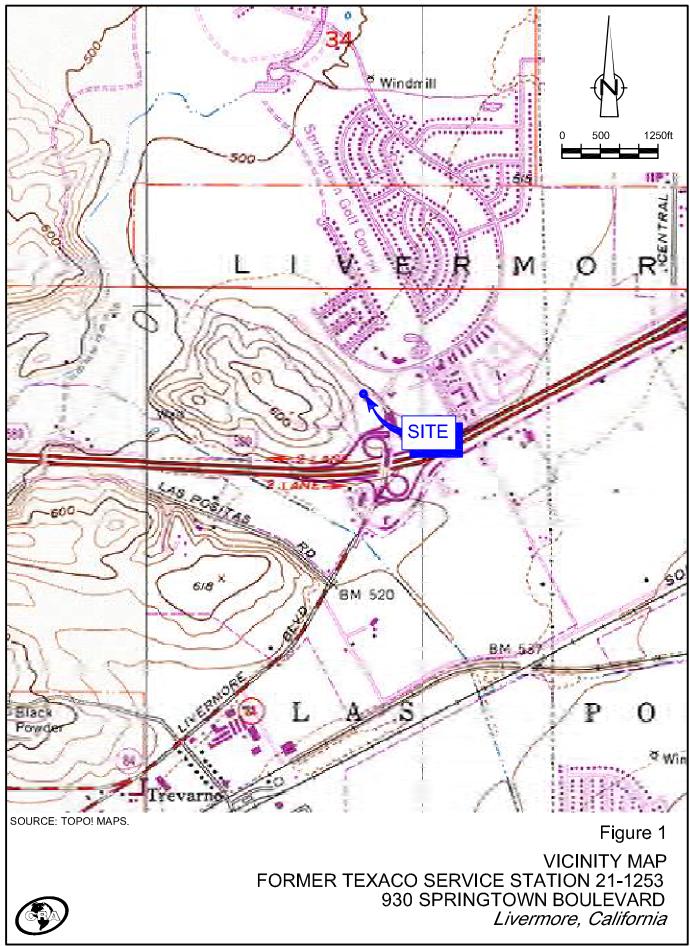
Attachment A Monitoring Data Package
Attachment B Laboratory Analytical Report

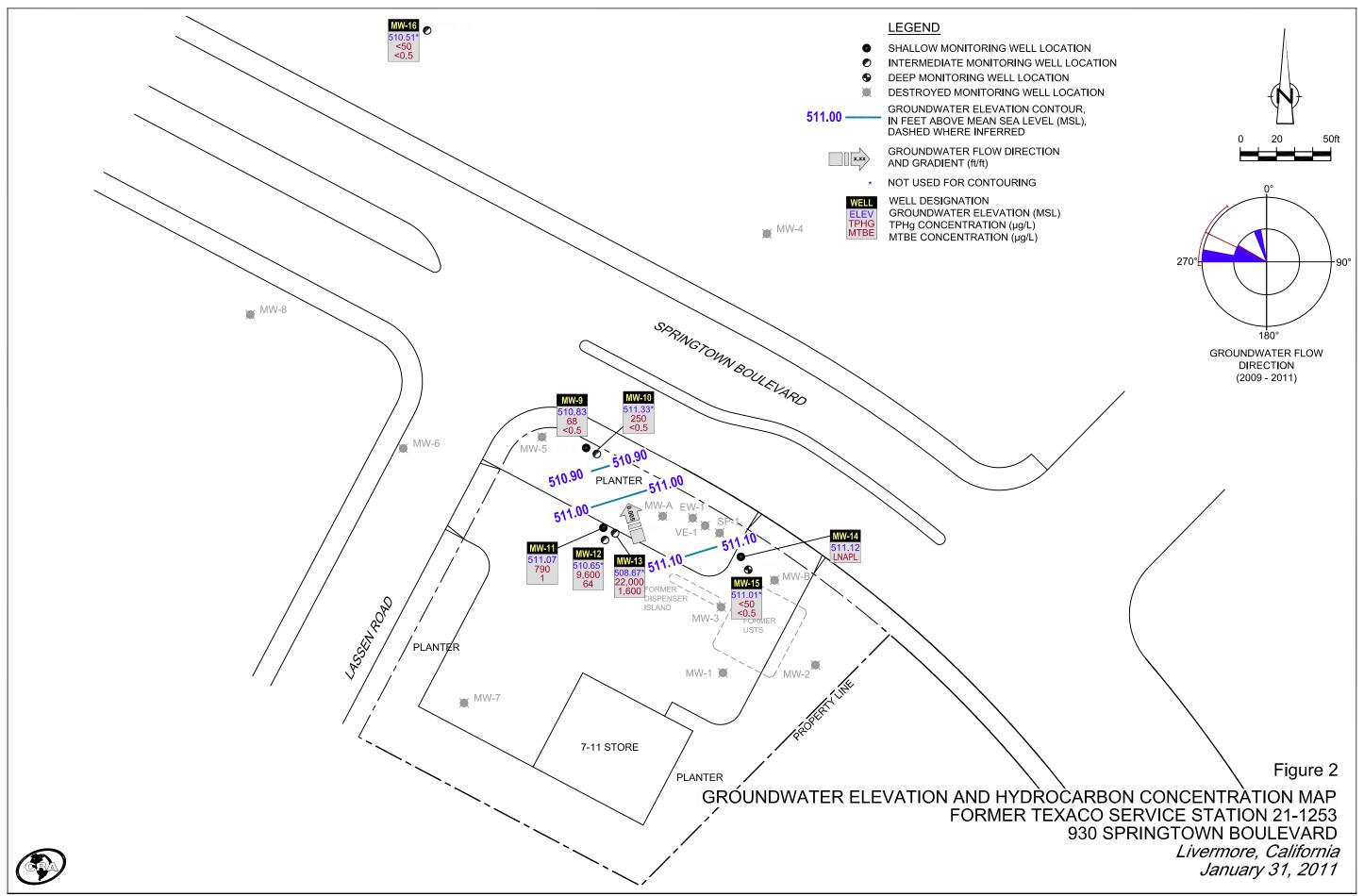
Attachment C Historical Groundwater Monitoring and Sampling Data

cc: Mr. Tom Bauhs, Chevron

Mr. Joe Zadik

FIGURES





TABLE

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	Т	E	X
	Units	ft	ft	ft-amsl	ft	gallons	µg/L	µg/L	µg/L	µg/L	µg/L
MW-9 MW-9	08/24/2010 01/31/2011	523.14 523.14	13.58 12.31	509.56 510.83	-	-	3,500 68	6 <0.5	8 <0.5	180 3	79 <0.5
MW-10 MW-10	08/24/2010 01/31/2011	523.25 523.25	13.07 11.92	510.18 511.33	-	-	1,300 250	<0.5 <0.5	<0.5 <0.5	2 <0.5	<0.5 <0.5
MW-11 MW-11	08/24/2010 01/31/2011	523.42 523.42	13.80 12.35	509.62 511.07	- -	- -	2,000 J 790	6 1	2 <0.5	9 5	5 3
MW-12 MW-12	08/24/2010 01/31/2011	523.12 523.12	12.84 12.47	510.28 510.65	-	-	18,000 9,600	210 64	650 180	330 180	1,900 400
MW-13 MW-13	08/24/2010 01/31/2011	520.88 520.88	13.69 12.21	507.19 508.67	-	-	13,000 22,000	810 1,600	710 1,600	76 270	660 1,600
MW-14 MW-14	08/24/2010 ¹ ,** 01/31/2011 ¹ ,**	520.88 520.88	10.36 9.96	510.75 510.92	0.29 0.25	0.00 0.00	-	-	- -	- -	-
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

TABLE 1 Page 2 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
MW-16 MW-16	08/24/2010 01/31/2011	520.50 520.50	11.07 9.99	509.43 510.51	-	-	68 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
QA QA	08/24/2010 01/31/2011	- -	- -	-	-	- -	<50 < 50	<0.5 <0.5	<0.5 <0.5	<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

 $\mu g/L$ = Micrograms per Liter

TPH-GRO = Total Petroleum Hydrocarbons - Gasoline Range Organics

VOCS = Volatile Organic Compounds

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylene

-- = Not available / not applicable

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

TABLE 1 Page 3 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	µg/L	µg/L	µg/L	µg/L

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

February 7, 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 First Semi-Annual Event of January 31, 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 #:	Chevron #211253	Job#	385867
Site Address:	930 Springtown Blvd.	Event Date:	1/2./4
City:	Livermore, CA	Sampler:	KE

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M)missing	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 Yes / No
mw9	OK						>	¥	¥	EMCO/12/2	
mu-10	OK-							Y	4	V V	
ma-1(OX-						-	٧.	1		
ma-12	04-							,	y		
na-13	OK						>	\	Y	10	
nu-lit	OK							γ.	\ \ \		
ma-B	OX-						\rightarrow	*	4		
ma-16	OK				>	3.3 FF	OK	n	N	e	
				-g							

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#:	Chevron #2	11253		_ Job Number:	385867	
	Site Address:	930 Springt	own Blv	d.	Event Date:	1/3(11)	(inclusive)
	City:	Livermore,	CA		Sampler:	KE	
	Well ID Well Diameter Total Depth Depth to Water Depth to Water v Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos	14.85 ft 12-31 ft 2-54 w/ 80% Recharge	xVFxV	Check if water colu Water Column x 0.20 Sampling Equipmen Disposable Bailer Pressure Bailer Discrete Bailer Peristaltic Pump) + DTW]: 12-8(02 1"= 0.04 2"= 0.17 66 5"= 1.02 6"= 1.50 60 ft. Estimated Purge Volume:	s:ft escription:
	Peristaltic Pump QED Bladder Pump Other:			QED Bladder Pump Other:		Amt Removed from Sk Amt Removed from We Water Removed: Product Transferred to	immer: gal ell: gal
	Start Time (purge) Sample Time/Dat Approx. Flow Rate Did well de-water Time (2400 hr.) 1125 1131	e: 1145 / e:	gpm. yes, Time pH 7,85	Conductivity (µmhos/cm (µS)) 101(1017 1025	Temperature (C) F) 17,2 16,9	gal. DTW @ Sampling:	12,40 RP nV)
_				LABORATORY I			
	SAMPLE ID MW- G	(#) CONTAINER (x voa vial	YES	PRESERV. TYPE HCL	LABORATORY LANCASTER	ANALYS TPH-GRO(8015)/BTEX(8260	
	COMMENTS:						
	Add/Replaced Lo	ock: XI	Add/I	Replaced Plug: _	411	Add/Replaced Bolt:	



	Client/Facility#:	Chevron #2	11253		Job	Number:	385867			
	Site Address:	930 Springt	own Blv	d.	Eve	nt Date:	1/31/11		- (inclusive)	
	City:	Livermore,	CA		Sam	pler:	ME		_ (6,46,76)	
	Well ID Well Diameter Total Depth Depth to Water	MW-10 4 ii 26,5\ ft 14,5q w/ 80% Recharge	n. t. txvr		Volume Factor (VF) column is less	se volume =	5 5"= 1.02 oft. Estimated Purge	2"= 0.17 3"= 0.38 6"= 1.50 12"= 5.80 Volume: 28.8	_ gal.	
	Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:		 	Sampling Equips Disposable Bailer Pressure Bailer Discrete Bailer Peristaltic Pump QED Bladder Pum Other:	np		Skimmer / Amt Remov Amt Remov Amt Remov Water Rem	pleted:	e one)	
	Start Time (purge Sample Time/Dat Approx. Flow Rat Did well de-water Time (2400 hr.)	te: /035 / re: Z	gpm. yes, Time pH 8,19 8,10 8,03	Water C Sedimer	(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	av	Odor: Y/(N C/eqv gal. DTW@S D.O. (mg/L)	Sampling: 12	2.08	
_				LABORATOR	Y INFORM	ATION				
	SAMPLE ID MW- 10	(#) CONTAINER (x voa vial	REFRIG. YES	PRESERV. T	YPE LABO	RATORY	TPH-GRO(8015)	ANALYSES /BTEX(8260)		
	Add/Replaced Lock: Add/Replaced Plug: 44 Add/Replaced Bolt:									
		• *				_	•		-	



	Client/Facility#:	Chevron #2	11253		Job Number:	385867		
	Site Address:	930 Springt	own Blv	d.	Event Date:	1/31/11		- (inclusive)
	City:	Livermore,	CA		Sampler:	KE		
_								
	Well ID	MW-/(Date Monitored:	1(31)11		
	Well Diameter		<u>n.</u>	Volum	ne 3/4"= 0.0		2"= 0.17 3"= 0.38	
	Total Depth	14,73	t.		r (VF) 4"= 0.6		"= 1.50 12"= 5.80	
	Depth to Water			Check if water colun				
		238	xVF	26 = 1.5	x3 case volume =	Estimated Purge \	/olume: 4,7	_ gal.
	Depth to Water v	v/ 80% Recharg	e [(Height of	Water Column x 0.20)	+ DTWJ: <u>12,8</u>	2		
	Duran Faulum at					Time Started		(2400 hrs)
	Purge Equipment: Disposable Bailer			Sampling Equipment:		Time Compl	eted: duct:	(2400 hrs)
	Stainless Steel Bailer			Disposable Bailer Pressure Bailer		Depth to Wa		ft ft
	Stack Pump			Pressure Bailer Discrete Bailer			Thickness:	ft
	Suction Pump			Peristaltic Pump		Visual Confi	mation/Description:	
	Grundfos			QED Bladder Pump		Skimmer / Al	bsorbant Sock (circle	e one)
	Peristaltic Pump			Other:	and the second	Amt Remove	ed from Skimmer: ed from Well:	gal
	QED Bladder Pump						ved:	gal
	Other:					Product Tran	sferred to:	
-								
	Start Time (purge)		1	Weather Co	nditions:	Sunny		
	Sample Time/Dat		13111	Water Color:	Clear	Odor: Y N	Slight	
	Approx. Flow Rate		_gpm.	Sediment De	escription:	Clear		
	Did well de-water	? _ 13	f yes, Time	: Volu	ne:	gal. DTW @ Sa	ampling: _ \Z	50
	Time			Conductivity	Temperature	D.O.	0.00	
	(2400 hr.)	Volume (gal.)	рН	(µmhos/cm (µS)	Temperature (C F)	(mg/L)	ORP (mV)	
	1049	2	7.38	1619	18,2		, ,	
	1054	4	7.27	1635	19/1			
	1057	5	7.21	1643	19,4			
_								
ı	SAMPLE ID	(#) CONTAINER	REFRIG.	LABORATORY IN PRESERV. TYPE	FORMATION LABORATORY		ANALYSES	
Ì	MW- 27	(x voa vial		HCL		TPH-GRO(8015)/B		
		Ψ				<u>/</u> 27	E	
1								
ŀ								
ŀ		B						
t							···	
Ţ								
L								
-	COMMENTS: _							
_								
_								
	Add/Replaced Lo	ock:	Add/	Replaced Plug:		Add/Replaced I	Bolt:	
						I		-



Client/Facility#:	Cnevron #211253		**	Job Number:	385867	
Site Address:	930 Springto	wn Blvo	l.	Event Date:	1/3/1/11	(inclusive)
City:	Livermore, C	A		Sampler:	KE	
Well ID Well Diameter Total Depth Depth to Water Depth to Water	MW- 12 4 in 26-41 ft. 12-47 ft. 13,94 w/ 80% Recharge		Volun Facto Check if water colum (= 9,2	r (VF) 4"= 0.6 nn is less then 0.5 x3 case volume =	02 1"= 0.04 2"= 0.17 66 5"= 1.02 6"= 1.50 0 ft. = Estimated Purge Volume:	3"= 0.38 12"= 5.80 27-le gal.
Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:		D P D P	ampling Equipment: isposable Bailer ressure Bailer iscrete Bailer eristaltic Pump ED Bladder Pump ther:		Time Started: Time Completed: Depth to Product: Depth to Water: Hydrocarbon Thickne Visual Confirmation/D Skimmer / Absorbant Amt Removed from S Amt Removed from W Water Removed: Product Transferred to	Sock (circle one) kimmer: gal Vell: gal
Start Time (purge Sample Time/Dat Approx. Flow Rat Did well de-water (2400 hr.)	te: 1310 / 1 te: 2 -	31 U gpm. yes, Time: pH 7-622 7-58	Sediment De	escription:		5+vary (13,31 ORP (mV)
SAMPLE ID	(#) CONTAINER	REFRIG.	ABORATORY IN		1	10 TO
MW- 17	(x voa vial	YES	HCL	LANCASTER	ANALY TPH-GRO(8015)/BTEX(826	
Add/Replaced L	ock: <u>& \</u>	Add/l	Replaced Plug: _	41	Add/Replaced Bolt:	



	Client/Facility#:	Chevron #2	11253		Job	Number:	385867				
	Site Address:	930 Springt	own Bl	∕d.	Eve	ent Date:	1/3	111	(inclusive)		
	City:	Livermore,	CA	***		npler:		Ē	(molusive)		
					Oai	npiei.		<u> </u>			
	Well ID	MW- \			Data N	fonitored:	16	.lu			
	Well Diameter		<u>> </u>	r	Date IV	ionitorea:	-118	<u>.du </u>			
	Total Depth		_		Volume	3/4"= 0.0			3"= 0.38		
			<u>t.</u> ,,		Factor (VF)	4"= 0.6		6"= 1.50 12	2"= 5.80		
	Depth to Water			Check if water				450	~		
	Donth to Materia	24.53	_xVF	66 = 14	2. / x3 ca	se volume =	Estimated Pur	ge Volume: 40	53 gal.		
	Depth to Water v	w 80% Recnarg	e [(Height o	f Water Column x	0.20) + DTW]						
	Purge Equipment:			Sampling Equipr	mante		Time St		(2400 hrs)		
	Disposable Bailer			Disposable Bailer		_		mpleted:	(2400 hrs)		
	Stainless Steel Bailer			Pressure Bailer			Depth to	Water:			
	Stack Pump			Discrete Bailer			Hydroca	rbon Thickness:	ft		
	Suction Pump			Peristaltic Pump			Visual C	onfirmation/Desc	eription:		
	Grundfos			QED Bladder Pum	пр		Skimme	r / Absorbant Soc	k (circle one)		
	Peristaltic Pump			Other:			Amt Ren	noved from Skimi noved from Well:	mer: gal		
	QED Bladder Pump						Water Re	emoved:	yai		
	Other:						Product	Transferred to:			
-		/0.0			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
	Start Time (purge)			Weathe	r Condition	s:	Sunne				
	Sample Time/Date: 1230 / 1/31/4 Water Color: (lear Odor: Y) / N Strong										
4	Approx. Flow Rate: 3 gpm. Sediment Description:										
	Did well de-water	? If	yes, Time	e:\	/olume:		gal. DTW @	Sampling:	12,56		
	Time			Complex still				_			
	(2400 hr.)	Volume (gal.)	рН	Conductivity (µmhos/cm / µ		erature / F)	D.O. (mg/L)	ORP (mV)			
	1205	15	7.86			रिउ	(···g/=/	(1114)			
	1210	30	7.81	1230		· a					
	1216	49	775	124		0.4		-			
	_					->-					
					- D				-		
_				LABORATOR							
-	SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TY		RATORY		ANALYSES			
H	MW- 13	x voa vial	YES	HCL	LAN	CASTER	TPH-GRO(801	5)/BTEX(8260)			
H				+							
\vdash											
\vdash				-							
卜				 							
_	OBBRENITO	······································		<u> </u>							
C	OMMENTS: _								š.		
_						····					
_					105:						
	Add/Replaced Lo	ck: <u>X/</u>	Add/	Replaced Plug	1: 4"		Add/Replace	ed Bolt:			



Client/Facility#:	Chevron #21	1253		Job Number:	385867		
Site Address:	930 Springto	wn Blv	i.	Event Date:	1/31/10		(inclusive)
City:	Livermore, C	A		Sampler:	KE		
Well ID	MW- 14	_		Date Monitored:	1/31/	ч	
Well Diameter	4 in		Volum	e 3/4"= 0.0	2 1"= 0.04	2"= 0.17 3"= 0.3	-
Total Depth	14,44 11.			(VF) 4"= 0.66		6"= 1.50 12"= 5.8	
Depth to Water	9,90e, ft.		Check if water colum	n is less then 0.50	O ft.		
	4.48	xVF	==	x3 case volume =	Estimated Purg	ge Volume:	gal.
Depth to Water v	w/ 80% Recharge	(Height of	Water Column x 0.20) +	+ DTW]:			
					Time Sta		(2400 hrs)
Purge Equipment:			ampling Equipment:		Time Co	mpleted:	(2400 hrs)
Disposable Bailer			isposable Bailer		Depth to	Product: 9,71 Water: 9,90	ft
Stainless Steel Bailer			ressure Bailer		Hydrocal	bon Thickness:	ft 2.5 ft
Stack Pump			iscrete Bailer		Visual Co	onfirmation/Description	1;
Suction Pump	\ ——		eristaltic Pump	<u></u>	Skimmer	/ Absorbant Sock (circ	de ana)
Grundfos	\		ED Bladder Pump	\	Amt Rem	noved from Skimmer:	gal
Peristaltic Pump QED Bladder Pump	\	C	ther:		Amt Rem	oved from Well:	gal
Other:						emoved:	
Other							
Sample Time/Da Approx. Flow Rat Did well de-water Time (2400 hr.)	te:	pH	Water Color: Sediment De Volur Conductivity (µmhos/cm - µS)	Scription: ne: Temperature (C / F)	gal. DTVV.@ D.O. (mg/L)		
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY		ANALYSES	\
MW-	x voa vial	YES	HCL	LANCASTER	TPH-GRO(801		
				\vdash			
					1		
		777					
COMMENTS:		51	H/m/c				
_			1				
							-
			6. (1	î v			
Add/Replaced L	ock: X	Add/	Replaced Plug:	<u> </u>	Add/Replace	ed Bolt:	_



Cli	ient/Facility#:	Chevron #2	11253		Job Number:	385867	
Sit	te Address:	930 Springt	own Blv	d.	Event Date:	1/3/111	(inclusive)
Cit	ty:	Livermore,	CA		Sampler:	KF	(moidsive)
	ell ID	MW-15		i	Date Monitored:	1/31/11	
We	ell Diameter		<u>n.</u>	Volum	ne 3/4"= 0.0		3"= 0.38
To	tal Depth		<u>t.</u>		r (VF) 4"= 0.6		
De	pth to Water			Check if water colum	n is less then 0.5	0 ft.	24 5
		36:16	_xvF(<u> = 23.8</u>	x3 case volume :	Estimated Purge Volume:	gal.
De	pth to Water	w/ 80% Recharg	e [(Height of	Water Column x 0.20)	+ DTWJ: 1 1,04	1	
Pun	ge Equipment:			Sampling Equipment:		Time Started:	(2400 hrs)
	osable Bailer			Disposable Bailer	_	Time Completed: Depth to Product:	(2400 hrs)
•	nless Steel Baile	r		Pressure Bailer		Depth to Water:	ft
	k Pump			Discrete Bailer		Hydrocarbon Thickn	
Suct	tion Pump			Peristaltic Pump	***	Visual Confirmation/	Description:
Grur	ndfos			ED Bladder Pump		Skimmer / Absorban	t Sock (circle one)
Peris	staltic Pump			Other:		Amt Removed from	Skimmer: gal Well: gal
QED	Bladder Pump					Water Removed:	
Othe	er:					Product Transferred	to:
App	nple Time/Da prox. Flow Rate well de-water Time (2400 hr.)	Volume (gal.)	рн 8,14 8,06 7,99	Water Color: Sediment De Conductivity (µmhos/cm µs) 1551 1559	Temperature (C F) 18.3	gal. DTW @ Samplin D.O. (mg/L)	g: <u>/c9.</u> Z7 ORP (mV)
S	AMPLE ID	(#) CONTAINER	REFRIG.	ABORATORY IN PRESERV. TYPE	FORMATION LABORATORY	I ANIALS	V050
	MW- 15	x voa viai		HCL		ANALY TPH-GRO(8015)/BTEX(82	
					D II TO TO TELL	Sito(0010)/B1E(02	
<u> </u>				1			
-		_					
							el el
COM	IMENTS:						
• •							9.01
							- K-E
Add	d/Replaced L	ock: <u>Y(</u>	Add/F	Replaced Plug:	A)(Add/Replaced Bolt: _	



Client/Facility#:	Chevron #2	11253		Job Numbe	r: 385867		
Site Address:	930 Springt	own Blv	d.	Event Date:	40 (1	31/11	— (inclusive)
City:	Livermore,	CA		Sampler:		E	
Well ID Well Diameter Total Depth Depth to Water	29.30 f 9.99 f 19.31	_xVF	Check if water co		0.02 1"= 0.04 0.66 5"= 1.02 50 ft.	2"= 0.17 3"= 0.3 6"= 1.50 12"= 5.8 Volume:	
Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	-		Sampling Equipme Disposable Bailer Pressure Bailer Discrete Bailer Peristaltic Pump QED Bladder Pump Other:		Time Start Time Com Depth to P Depth to V Hydrocarb Visual Con Skimmer / Amt Remo Water Ren	pleted:	ftft :
Start Time (purge Sample Time/Dat Approx. Flow Rat Did well de-water Time (2400 hr.)	te: 0845 / te: 2	gpm. yes, Time pH 8.33 8.12 7.90	Water Co Sediment	Conditions: lor: (Q q /) Description: Dlume: Temperature (C / F)	D.O. (mg/L)	S(:5h	o.st
SAMPLE ID MW- 1 (2) COMMENTS:	(#) CONTAINER	REFRIG. YES	PRESERV. TYP	INFORMATION PE LABORATORY LANCASTER	TPH-GRO(8015)	ANALYSES /BTEX(8260)	
Add/Replaced Lo	ock:	Add/	Replaced Plug:		Add/Replaced	l Bolt:	

Chevron California Region Analysis Request/Chain of Custody



111 1	1-06	For Lancas	ter Laboratories use only
02911	1 43	Acct. #: Sample #	Group #:
		Analyses Pa	- I

										An	alys	es	es Requested							
Facility #: SS#211253-OML G-R#38586	7 Global ID#	1			Matrix					Pr	eser	vat	ion C	odes	3			Preserva	tive Co	des
Site Address: 930 SPRINGTOWN BLVD., LI	VERMORE,	CA					17	H	윽			1					-	H = HCI N = HNO ₃	T = Thic B = NaC	
Chevron PM: EF Lead	Consultant:	RAHK	Hoe	У		8		ĕ	Silica Gel Cleanup									S = H ₂ SO ₄		
Consulani/Onice			9456	8	able	iner	ō		Gel									☐ J value report		
Consultant Prj. Mgr.: (de					□ Potable □ NPDES	Containers	3 802		Silice			1						Must meet iov possible for 8		
Consultant Phone #:925-551-7555	Fax #: ⁹²⁵ -	551-7899				4	8260 € 8021	ဓ္	000			Method	Method					8021 MTBE Cor	ifirmation	
Consultant Phone #.925-551-7555 Fax #: 925-551-7899 Sampler:				0		per	100,000	3D GF	00		nates	\$						☐ Confirm highe	st hit by 8	3260
			Sit	Air	Nun	E	15 MC	8015 MOD DRO	Scar	Oxygenates	gg	ad Le					Confirm all hit			
Sample Identification	Date Collected	Time Collected	Grab	Composite	Water	Fotal Number	BTEX	TPH 8015 MOD GRO	TPH 80	8260 full scan	Ĭ	i otal Lead	Dissolved Lead					☐ Run oxy		
Q4	131/11		X		Y	7	×		-								+	Comments / F	lemarks	
- mu-9		1145	\times		X	16	X	×												
100-110		1035	X	-	X	6	×	1		_	-			\perp		_	4			
- Inc (40-7)		1105	X	-	X	4	×	X		_			-			_	4	Please forwar directly to the		
mu-13		1310	X		X	6	$\stackrel{\star}{\supset}$	\times		+	+	+				-	\exists	and d	c: G-R.	
- print - 15		0945	X		×	96	X	Ž									┪			
mu-lla		0845	X		X	6	×	X										*		
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				40																
Turnaround Time Requested (TAT) (please cir		Reiinqui	shed t	16	46	V			4 Birm	ate	Tim		Rec	bevie	by:		R	411V FRIDER	Date	Time _
STD. TAT 72 hour 48 hou 24 hour 4 day 5 day		Relingui	shed t	y:	17	1	7		D	ate	Tim			eived		1			Date	Time
		Relinqui	shed h	W.	7	farmi	1	22-	711	ate	//3 Tim	_	Boo	eived	TEC	ext	2	ØIF	EBII	1135
Data Package Options (please circle if required)			oriou L	7.		3				ale	1111	9	Hece	oiveu :	IJy.			4	Date	Time
Type VI (naw Data) Uccelt Deliverable not needed					ommercial Carrier:					Received by: Date			Date	Time						
WIP (RWQCB)		UPS		1550	FedEx Other															
Disk Temperature U					Upon Receipt C°					Custody Seals Intact? Yes No										

ATTACHMENT B

LABORATORY ANALYTICAL REPORT



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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

February 18, 2011

Project: 211253

Submittal Date: 02/03/2011 Group Number: 1231581 PO Number: 0015075227 Release Number: FROHNAPPLE State of Sample Origin: CA

Client Sample Description	<u>Lancaster Labs (LLI) #</u>
QA-T-110131 NA Water	6197759
MW-9-W-110131 Grab Water	6197760
MW-10-W-110131 Grab Water	6197761
MW-11-W-110131 Grab Water	6197762
MW-12-W-110131 Grab Water	6197763
MW-13-W-110131 Grab Water	6197764
MW-15-W-110131 Grab Water	6197765
MW-16-W-110131 Grab Water	6197766

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

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



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Sample Description: QA-T-110131 NA Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 QA

LLI Sample # WW 6197759 LLI Group # 1231581

Account # 10904

Project Name: 211253

Collected: 01/31/2011 Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 02/03/2011 09:45 Reported: 02/18/2011 21:15

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	F110344AA	02/04/2011 02:52	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F110344AA	02/04/2011 02:52	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11035A07A	02/04/2011 17:39	Carrie E Miller	1
01146	GC VOA Water Prep	SW-846 5030B	1	11035A07A	02/04/2011 17:39	Carrie E Miller	1



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Sample Description: MW-9-W-110131 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-9

LLI Sample # WW 6197760 LLI Group # 1231581 Account # 10904

Project Name: 211253

Collected: 01/31/2011 11:45 by KE Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 02/03/2011 09:45 Reported: 02/18/2011 21:15

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	3	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.	68	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	P110351AA	02/04/2011 18:53	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P110351AA	02/04/2011 18:53	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11035A07A	02/04/2011 19:45	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11035A07A	02/04/2011 19:45	Katrina T Longenecker	1



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Sample Description: MW-10-W-110131 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-10

LLI Sample # WW 6197761

LLI Group # 1231581 Account # 10904

Project Name: 211253

Collected: 01/31/2011 10:35 by KE Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 02/03/2011 09:45 Reported: 02/18/2011 21:15

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 TPH-GRO N. CA water	SW-846 C6-C12	8015B n.a.	ug/l 250	ug/1 50	1

General Sample Comments

State of California Lab Certification No. 2501

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

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution			
No.					Date and Time					
10943	BTEX 8260B Water	SW-846 8260B	1	P110351AA	02/05/2011 00:56	Kelly E Keller	1			
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P110351AA	02/05/2011 00:56	Kelly E Keller	1			
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11035A07A	02/04/2011 20:10	Katrina T	1			
						Longenecker				
01146	GC VOA Water Prep	SW-846 5030B	1	11035A07A	02/04/2011 20:10	Katrina T	1			
						Longenecker				



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Sample Description: MW-11-W-110131 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-11

LLI Sample # WW 6197762 LLI Group # 1231581 Account # 10904

Project Name: 211253

Collected: 01/31/2011 11:05 by KE Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 02/03/2011 09:45 Reported: 02/18/2011 21:15

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	1	0.5	1
10943	Ethylbenzene		100-41-4	5	0.5	1
10943	Toluene		108-88-3	N.D.	0.5	1
10943	Xylene (Total)		1330-20-7	3	0.5	1
GC Vo	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	790	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	P110351AA	02/04/2011 19:13	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P110351AA	02/04/2011 19:13	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11035A07A	02/04/2011 20:35	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11035A07A	02/04/2011 20:35	Katrina T Longenecker	1



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Sample Description: MW-12-W-110131 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-12

LLI Sample # WW 6197763 LLI Group # 1231581 Account # 10904

Project Name: 211253

Collected: 01/31/2011 13:10 by KE Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 02/03/2011 09:45 Reported: 02/18/2011 21:15

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	64	0.5	1
10943	Ethylbenzene		100-41-4	180	0.5	1
10943	Toluene		108-88-3	180	0.5	1
10943	Xylene (Total)		1330-20-7	400	5	10
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	9,600	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.					Date and Time		Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P110351AA	02/04/2011 19:34	Kelly E Keller	1
10943	BTEX 8260B Water	SW-846 8260B	1	F110382AA	02/07/2011 12:10	Anita M Dale	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P110351AA	02/04/2011 19:34	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	F110382AA	02/07/2011 12:10	Anita M Dale	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11035A07B	02/07/2011 16:57	Katrina T	10
						Longenecker	
01146	GC VOA Water Prep	SW-846 5030B	1	11035A07B	02/07/2011 16:57	Katrina T	10
						Longenecker	



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Sample Description: MW-13-W-110131 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-13

LLI Sample # WW 6197764 LLI Group # 1231581 Account # 10904

Project Name: 211253

Collected: 01/31/2011 12:30 by KE Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 02/03/2011 09:45 Reported: 02/18/2011 21:15

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	1,600	10	20
10943	Ethylbenzene		100-41-4	270	1	2
10943	Toluene		108-88-3	1,600	10	20
10943	Xylene (Total)		1330-20-7	1,600	10	20
GC Vol	latiles TPH-GRO N. CA water	SW-846 C6-C12	8015B	ug/l 22,000	ug/1 250	5

General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	BTEX 8260B Water	SW-846 8260B	1	P110351AA	02/04/2011 19:	54 Kelly E Keller	2
10943	BTEX 8260B Water	SW-846 8260B	1	P110351AA	02/04/2011 20:	14 Kelly E Keller	20
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P110351AA	02/04/2011 19:	54 Kelly E Keller	2
01163	GC/MS VOA Water Prep	SW-846 5030B	2	P110351AA	02/04/2011 20:	14 Kelly E Keller	20
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11035A07A	02/04/2011 23:		5
01146	GC VOA Water Prep	SW-846 5030B	1	11035A07A	02/04/2011 23:	Longenecker 57 Katrina T	5



Account

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Sample Description: MW-15-W-110131 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-15

LLI Sample # WW 6197765 LLI Group # 1231581

10904

Project Name: 211253

Collected: 01/31/2011 09:45 by KE Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 02/03/2011 09:45 Reported: 02/18/2011 21:15

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 Vol	latiles	SW-846		ug/l	ug/1	1
U1/28	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.					Factor		
10943	BTEX 8260B Water	SW-846 8260B	1	P110351AA	02/04/2011 20:34	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P110351AA	02/04/2011 20:34	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11035A07B	02/07/2011 16:07	Katrina T	1
						Longenecker	
01146	GC VOA Water Prep	SW-846 5030B	1	11035A07B	02/07/2011 16:07	Katrina T	1
						Longenecker	



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Sample Description: MW-16-W-110131 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-16

LLI Sample # WW 6197766 LLI Group # 1231581 Account # 10904

Project Name: 211253

Collected: 01/31/2011 08:45 by KE Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 02/03/2011 09:45 Reported: 02/18/2011 21:15

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
	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	P110351AA	02/04/2011 20:54	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P110351AA	02/04/2011 20:54	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11035A07A	02/04/2011 21:51	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11035A07A	02/04/2011 21:51	Katrina T Longenecker	1



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Quality Control Summary

Client Name: Chevron Group Number: 1231581

Reported: 02/18/11 at 09:15 PM

Matrix QC may not be reported if 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: F110344AA Benzene Ethylbenzene Toluene Xylene (Total)	Sample numbe N.D. N.D. N.D. N.D.	r(s): 619 0.5 0.5 0.5 0.5	7759 ug/l ug/l ug/l ug/l	88 91 89 88		79-120 79-120 79-120 80-120		
Batch number: F110382AA Xylene (Total)	Sample numbe	r(s): 619 0.5	7763 ug/l	96	95	80-120	2	30
Batch number: P110351AA Benzene Ethylbenzene Toluene Xylene (Total)	Sample numbe N.D. N.D. N.D. N.D.	er(s): 619 0.5 0.5 0.5 0.5	7760-6197' ug/l ug/l ug/l ug/l	766 99 105 109		79-120 79-120 79-120 80-120		
Batch number: 11035A07A TPH-GRO N. CA water C6-C12	Sample numbe	r(s): 619 50.	7759-6197' ug/l	762,619776 100	54,6197766 100	75-135	0	30
Batch number: 11035A07B TPH-GRO N. CA water C6-C12	Sample numbe	r(s): 619 50.	7763,6197 ug/l	765 100	100	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 %REC	MSD <u>%REC</u>	MS/MSD <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG Conc	DUP <u>Conc</u>	DUP RPD	Dup RPD <u>Max</u>
Batch number: F110344AA	Sample	number(s)	: 6197759	UNSPK:	P1947	89			
Benzene	92	99	80-126	8	30				
Ethylbenzene	94	100	71-134	6	30				
Toluene	91	98	80-125	8	30				
Xylene (Total)	90	98	79-125	8	30				
Batch number: P110351AA	Sample	number(s)	: 6197760	-619776	6 UNSPI	K: 6197760			
Benzene	100	107	80-126	7	30				
Ethylbenzene	105	115	71-134	7	30				
Toluene	108	116	80-125	8	30				
Xylene (Total)	106	115	79-125	8	30				

*- Outside of specification

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



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Quality Control Summary

Client Name: Chevron Group Number: 1231581

Reported: 02/18/11 at 09:15 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: F110344AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	l oluene-d8	4-Bromofluorobenzene	
6197759	99	102	97	98	
Blank	103	105	99	98	
LCS	102	104	99	100	
MS	102	104	98	99	
MSD	103	104	99	100	
T.imita:	80-116	77_113	80-113	79_112	

Analysis Name: UST VOCs by 8260B - Water

Batch number: F110382AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
Blank	106	102	98	99	
LCS	105	105	96	98	
LCSD	104	101	97	101	

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

Analysis Name: UST VOCs by 8260B - Water Batch number: P110351AA

Dateir iia	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
6197760	94	99	103	89	
6197761	93	98	104	89	
6197762	93	97	103	90	
6197763	94	97	104	97	
6197764	91	97	102	93	
6197765	93	98	103	87	
6197766	94	101	103	88	
Blank	93	97	105	88	
LCS	93	101	104	90	
MS	94	102	103	89	
MSD	92	100	104	89	
Limits:	80-116	77-113	80-113	78-113	

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

Batch number: 11035A07A

Trifluorotoluene-F

5197759	89
5197760	89
5197761	92
5197762	112
5197764	160*
5197766	90
3lank	87
LCS	99
LCSD	103

*- 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: 1231581

Reported: 02/18/11 at 09:15 PM

Surrogate Quality Control

Limits: 63-135

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

Batch number: 11035A07B

Trifluorotoluene-F

6197763	119
6197765	89
Blank	92
LCS	99
LCSD	103

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



									Ana	lyses	Requ	ested		7 C* 12:	31581		
Facility #: SS#211253-OML G-R#38586	7 Global ID#		T	Matrix					Pre	serve	ation C	odes		Prese	rvative Cod	les	
Site Address: 930 SPRINGTOWN BLVD., LIN	VERMORE, C	CA				14	H	함	-			7		H = HCI N = HNO ₃	T = Thio: B = NaC	sulfate	
Chevron PM: EF Lead	Consultant: CF	RAHK Hoe	• 1		ٰ ہ			Clear	}					$S = H_2SO_4$	O = Othe	ər	
Consultant/Office: G-R, Inc., 6747 Sierra Cou	8	eg S	ie.			[6]						☐ J value rep	orting neede	d			
Deanna L. Harding (de		□ Potable □ NPDES	Containers	\$ 8021□		Silica Gel Cleanup						☐ Must meet possible fo	lowest detec r 8260 compo				
Consultant Phone #.925-551-7555	Fax #: 925-5	551-7899			of C	82607\$	_Q			Method	a de la composición dela composición de la compo			8021 MTBE (Confirmation		
Sampler: KyleErbland			9		ber		TPH 8015 MOD GRO	TPH 8015 MOD DRO	oxymenates	Me	Dissolved Lead Method			☐ Confirm hig	•		
			posi	Air Air	N		015 M	015 M	ell scal	pead 5	98 6			☐ Confirm all	•		
Sample Identification		Time ਜ਼ਿ	Composite Soil	Water Oil		втех	표	E E	8260 full scan	Total Lead	Dissol			☐ Run	_		
QA	131/11	-		X	Z	X	X		I					Comments	/ Remarks		
mw-9		1145 X		X	6	\leq	M										
		1035 ×		X	ام)	X	凶						T		Please forward the lab results directly to the Lead Consultant and cc: G-R.		
mu-11	1	1105 ×		X	16	\succeq	M										
	\leftarrow	1310	\bot	X	6	\bowtie	\bowtie			\perp							
mw-13	 	1230 X		X	19	X	×		\bot	1			$\perp \perp$				
		0945 X		1×1	6		X	+	+			+	++				
mu-lle	 	28777 CT	-	X	6	M	X	+	+	+	-	++	+			Ī	
			+	+	+'	\vdash	-	+	+	╂╌┤	_	+	++				
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Data Package Options (please circle if required)		Relinquished t	oy:	1/	\mathcal{I}	7		Da	ite	Time	Reco	eived by:	4		Date	Time	
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Type VI (Raw Data) ☐ Coelt Deliverable not need WIP (RWQCB)		UPS	FedE)		arner: Other					(Hece	elved by:			Date 213M	Time 0945	
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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)	(#S/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.