#### RECEIVED



9:02 am, Apr 19, 2010

Alameda County
Environmental Health

### TRANSMITTAL

March 24, 2010 G-R #385867

TO: Ms. Charlotte Evans

Conestoga-Rovers & Associates 5900 Hollis Street, Suite A Emeryville, CA 94608 (VIA PDF)

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	DATED	DESCRIPTION
1	March 16, 2010	Groundwater Monitoring and Sampling Report First Quarter Event of February 22, 2010

#### **COMMENTS:**

Pursuant to your request, we are providing you with a copy of the above referenced report for <u>your</u> <u>use and distribution to the following:</u>

Mr. Ian Robb, Chevron EMC, 6111 Bollinger Canyon Road, Room 3612, San Ramon, CA 94583 (NO COPY)

Mr. Jerry Wickham, Alameda County Environmental Health, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502-6577 (Distributed by CRA via PDF)

Mr. Ken Hilliard, Environmental Services, 7-Eleven, Inc., One Arts Plaza, 1722 Routh St., Suite 1000, Dallas, TX 75201

Mr. Wyman Hong, Zone 7 Water Agency, 100 North Canyons Parkway, Livermore, CA 94551

Enclosures

Trans/211253-IR

March 16, 2010 G-R Job #385867

Mr. Ian Robb Chevron Environmental Management Company 6111 Bollinger Canyon Road, Room 3612 San Ramon, CA 94583

RE: First Quarter Event of February 22, 2010

Groundwater Monitoring & Sampling Report Former Texaco Service Station #211253 930 Springtown Boulevard Livermore, California

Dear Mr. Robb:

This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

Static groundwater levels were measured and the wells were checked for the presence of separate-phase hydrocarbons. Static water level data, groundwater elevations, and separate-phase hydrocarbon thickness (if any) are presented in the attached Table 1. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells and submitted to a state certified laboratory for analyses. The field data sheets for this event are attached. Analytical results are presented in the table(s) listed below. The chain of custody document and laboratory analytical report are also attached. All groundwater and decontamination water generated during sampling activities was removed from the site, per the Standard Operating Procedure.

No. 6882

Please call if you have any questions or comments regarding this report. Thank you.

Sincerely,

Deanna L. Harding Project Coordinator

Douglas J. Lee

Senior Geologist, P.G. No. 6882

Figure 1:

Potentiometric Map

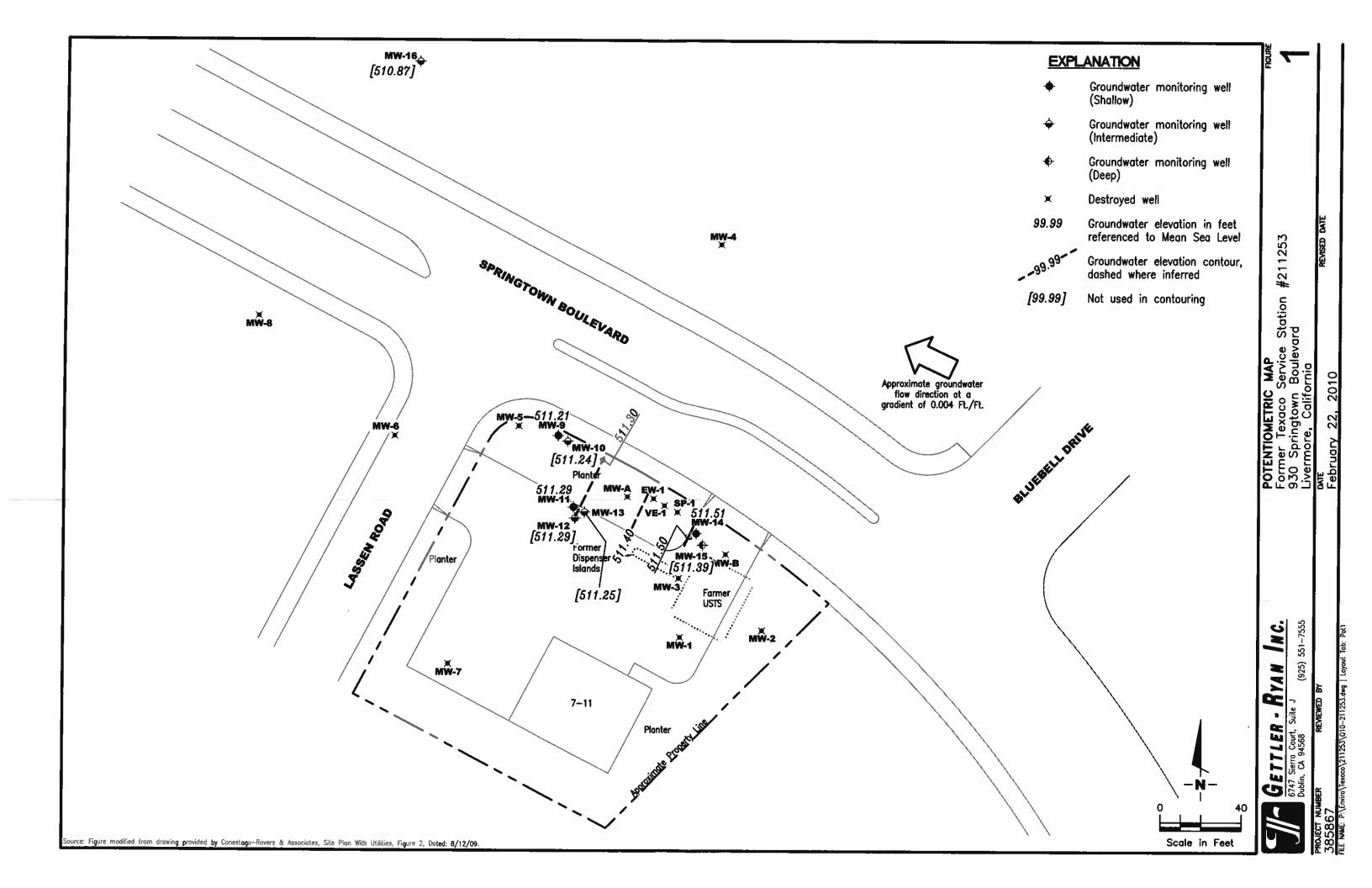
Table 1: Attachments: Groundwater Monitoring Data and Analytical Results Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports

#### **WELL CONDITION STATUS SHEET**

illent/Facility #: ite Address: ity:		n#211253 ingtown B ire, CA	Blvd.				Job # Event Date: Sampler:	385867 2/22 52			· ·
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
MW-9	ok-						->	W	N)	12"/EMCO/2	N
MW-10	de -						->	<i>w</i>	N	12"/Emcc/2	
MW-11	oh -						->	N	N	12"/Enco/2	
MW-12	oh-						>	N	N	12"/ Encc/ 2	,
MW-13 MW-14	oh-						>	Ď	N	121/ Ence/ 2	
MW-14	oh-						<del>-</del> >	N	N	121/ Enco/2	
MW-15	de -						<del></del>	N	$\tilde{\mathcal{N}}$	12'/Enco/2	<del>-  </del>
MW-16	Ole.				~~	48"	de	N	D	12"/Enco/2	1/
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# Table 1 Groundwater Monitoring Data and Analytical Results

Former Texaco Service Station #211253 930 Springtown Boulevard

Livermore, California

WELL ID/	TOC*	DTW	GWE	SPHT	SPH REMOVED	TPH-GRO		T	00000000 - 000000	000000000000000000000000000000000000000
DATE	(ft.)	(ft.)	(msi)	(fl.)	(gallons)		B		E	X
		0.9	(2004)	<i>y</i> -y	(guitons)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-9										
07/23/09 <sup>1</sup>	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
MW-10										
07/23/09 <sup>1</sup>	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 <sup>3</sup>	30	30
02/22/10	522.76	11.52	511.24	0.00	0.00	3,600	9	2	61	10
MW-11										
07/23/09 <sup>1</sup>	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	0.63	2	2
02/22/10	523.25	11.96	511.29	0.00	0.00	1,400	2	<0.5	5	0.9
MW-12			-	- 1035						
07/23/09 <sup>1</sup>	523.42	13.03	510.41**	0.02	5.01 <sup>2</sup>	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
MW-13										
07/23/09 <sup>1</sup>	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
MW-14										
07/23/09 <sup>1</sup>	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

# Table 1 Groundwater Monitoring Data and Analytical Results

Former Texaco Service Station #211253 930 Springtown Boulevard

Livermore, California

		- 10			civerniore, Camornia					
WELL ID/	TOC*	DTW	GWE	SPHT	SPH REMOVED	TPH-GRO	В	T	E	X
DATE	(ft.)	(ft)	(msl)	(fl.)	(galions)	(µg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)
MW-15										
07/23/09 <sup>1</sup>	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
MW-16										
07/23/09 <sup>1</sup>	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
QA										
07/23/09					-	<50	<0.5	<0.5	<0.5	<0.5
1/09/09		-		_		<50	<0.5	14	<0.5	<0.5
02/22/10	_			_	_	<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

(msi) = Mean Sea Level

E = Ethylbenzene

(ft.) = Feet

TPH = Total Petroleum Hydrocarbons

X = Xylenes

DTW = Depth to Water

GRO = Gasoline Range Organics

-- = Not Measured/Not Analyzed

GWE = Groundwater Elevation

B = Benzene

QA = Quality Assurance/Trip Blank

SPHT = Separate Phase Hydrocarbon Thickness

T = Toluene

 $(\mu g/L)$  = Micrograms per liter

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

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

#### **ANALYTICAL METHODS:**

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

- Well development preformed.
- 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.

## 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 #2112	253	Job Number:	385867	
Site Address:	930 Springtow	n Blvd.	Event Date:	2/22/10	(inclusive)
City:	Livermore, CA		Sampler:	SZ	
Well ID	MW- 9		Date Monitored:	2/22/10	
Well Diameter	<b>4</b> in.	Ţ	Volume 3/4"= 0.0	-	3"= 0.38
Total Depth	14.79 ft.	1	Factor (VF) 4"= 0.6		
Depth to Water	11.93 ft.		olumn is less then 0.50		
	2.86 x	f <u>.66   = 1.8   </u>	x3 case volume =	Estimated Purge Volume:	5.5 gal.
Depth to Water v	w/ 80% Recharge [(H	eight of Water Column x 0	1.20) + DTWJ: 12,50	)	
Purge Equipment:		Samuelton English		Time Started:	(2400 hrs) (2400 hrs)
Disposable Bailer		Sampling Equipm	ient:	Depth to Product:	
Stainless Steel Bailer	. <del></del>	Disposable Bailer Pressure Bailer		Depth to Water:	t
Stack Pump	<del></del>	Discrete Bailer		Hydrocarbon Thickr	ness:ft
Suction Pump		Peristaltic Pump		Visual Confirmation	/Description:
Grundfos		QED Bladder Pump		Skimmer / Absorbar	nt Sock (circle one)
Peristaltic Pump		Other:		Amt Removed from	Skimmer: gal
QED Bladder Pump		04101		Amt Removed from	Well: gal
Other:				Water Removed:	to:
				1 100200 112110101100	
Start Time (purge	1715	Monthe	Canditioner		
			Conditions: 5	unny	
	e: 1240 12/2	<del></del>	olor: brown	Oder (V) N	
Approx. Flow Rat				77	and
Did well de-water	? If yes	, Time:v	/olume:	gal. 竹TW @ Samplin	9:12.07
Time	N	Conductivity	Femperature	D.O.	ORP
(2400 hr.)	Volume (gal.)	μmhos/cm - μS	() / F)	(mg/L)	(mV)
1220	1 7	57 797 C	KG.		
1225	4 7	51 809	- 10,70 -	<del></del>	<del></del>
1229	5,5 7,4	77 718	- 18 8	<del></del>	·
<del></del>		<u> </u>		<del></del>	<del></del>
	8:0 <b>6</b> %			- 27 - 7	<del></del>
			Y INFORMATION		
SAMPLE ID MW- 9		FRIG. PRESERV. TY		ANAL	
NIVV- 7	6 x voa vial	YES HCL	LANCASTER	TPH-GRO(8015)/BTEX(82	(60)
- 7				<del>-</del>	
					<del></del>
<del></del>			<del></del>		
	-	<del></del>		· · · · · · · · · · · · · · · · · · ·	
COMMERTITO				<del>-</del>	
COMMENTS: _				<u> </u>	<del></del>
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<del>-</del>			43	100	
Add/Replaced Lo	ock:	Add/Replaced Plug	•	Add/Replaced Bolt: _	



Client/Facility#	Chevron #21	1253		_ Job Number:	385867		
Site Address:	930 Springto	wn Blv	d.	Event Date:	2/22/10	')	— (inclusive)
City:	Livermore, C	A	-	– Sampler:	32	32	
				<u> </u>		<u> </u>	<del>-</del>
Well ID	MW-10	_		Date Monitored:	2/22/10	>	
Well Diameter	4 in	 <u>-</u>	Vo	lume 3/4"= 0.		2*= 0.17 3*= 0.3	<u></u>
Total Depth	26.51 ft.	_		otor (VF) 4"= 0.0		6"= 1.50 t2"= 5.8	·- 1
Depth to Water	11.52 ft.		Check if water colu	ımn is less then 0.5	iO ft.		_
	14.99			x3 case volume :		/olume: 30	gal.
Depth to Water	w/ 80% Recharge						
Burns Seutierent		_		_	Time Starte		(2400 hrs)
Purge Equipment: Disposable Bailer			Sampling Equipmen	nt:		oduct:	(2400 hrs)
Stainless Steel Baile			Disposable Bailer		Depth to Wa	ater:	ft
Stack Pump			ressure Bailer Discrete Bailer			n Thickness:	ft
Suction Pump			Peristaltic Pump		Visual Confi	rmation/Déscription	1:
Grundfos			ED Bladder Pump	<del></del>	Skimmer / A	bsorbant Sock (cir	cle one)
Peristaltic Pump			Other:		Amt Remov	ed from Skimmer:	gai
QED Bladder Pump				<u> </u>	Amt Remove	ed from Well:	gal
Other:					Product Train		
Start Time (purge	e): 1250	4	Weather C	onditions:	unny.		
Sample Time/Da	ite: 1320 12	122/10		or:Clear	Odor N	Modero	12
Approx. Flow Ra		gpm.		Description:		Macro	
Did well de-wate				· —	gal. DTW @ Sa	ampling: 17.3	31
<b></b>				<del></del>			
Time (2400 hr.)	Volume (gal.)	pΗ	Conductivity (µmhos/cm/- µS)	Temperature (C/F)	D.O.	ORP	
1255	100	722	821	ا نہ جی	(mg/L)	(mV)	
<u> </u>	- 10	<u>رد ؛</u>	02-(	18.6			
1300 BOS	30	116	<del>X4</del> Z	<u> 19.  </u>			
	· <u>30</u>	1.16	<u> </u>	19.4		·	
						<del></del> -	
			LABORATORY				
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE			ANALYSES	
MW-10	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/B	TEX(8260)	
			· · · · · · · · · · · · · · · · · · ·	<del>-</del>			
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A 1100					-	<del></del>	<del></del>
Add/Replaced L	.ock:	Add/F	Replaced Plug: _		Add/Replaced I	3olt:	



Client/Facility#:	Chevron #2112	253	Job Number:	385867	
Site Address:	930 Springtow	n Blvd.	 Event Date:	2/22/10	(inclusive)
City:	Livermore, CA		Sampler:	SR	(molusive)
Well ID Well Diameter Total Depth Depth to Water  Depth to Water  Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	w/ 80% Recharge [(H	F	20) + DTWJ: <u>12.4</u>	7 Time Started: Time Completed: Depth to Product: Depth to Water: Hydrocarbon Thickn Visual Confirmation/ Skimmer / Absorbar Amt Removed from,	12"= 5.80
Start Time (purge) Sample Time/Dat Approx. Flow Rate Did well de-water  Time (2400 hr.)  1105	e: 1125 12/2 e: gp ? If yes  Volume (gal.)	m. Water Co	Description:		
				<u> </u>	
SAMPLE ID MW-//		EFRIG. PRESERV. TYPES HCL		ANALY TPH-GRO(8015)/BTEX(82	
Add/Replaced Lo	ock:	Add/Replaced Plug:		Add/Replaced Bolt:	



Client/Facility#:	Chevron #21	1253		Job Number:	385867		
Site Address:	930 Springto	wn Blv	d.	Event Date:	2/22/10	) Š	– (inclusive)
City:	Livermore, C	A	<del></del>	Sampler:	SÉ	5 <u>P</u>	
				·			<del>-</del>
Well ID	MW-12	•		Date Monitored:	2/22/1	0	
Well Diameter	4 in.	<u>-</u>	Volui	ne 3/4"= 0.0	02 1"= 0.04	2"= 0.17 3"= 0.3	<u></u>
Total Depth	26.61 ft.	_		or (VF) 4"= 0.6		"= 1.50 t2"= 5.8	-
Depth to Water	12.13 ft.		Check if water colum			N N	
	14.48	XVF 466		x3 case volume =		/olume: <u>29</u>	gal.
Depth to Water v	w/ 80% Recharge	{(Height of \	Water Column x 0.20)	+ DTWJ: <u>/5. 0</u> 1	2		
During Frankrausset		_		_	Time Starte	d: leted:	(2400 hrs) (2400 hrs)
Purge Equipment:			Sampling Equipment			oduct:	(2400 fits)
Disposable Bailer			Disposable Bailer		Depth to W	ater:	ft
Stainless Steel Bailer			Pressure Bailer			n Thickness:	ft
Stack Pump Suction Pump			Discrete Bailer		Visual Conf	rmation/Description	):
Grundfos			Peristattic Pump QED Bladder Pump		Skimmer / A	bsorbant Sock (circ	cle one)
Peristaltic Pump			Other:		Amt Remov	ed from Skimmer:_	gal
QED Bladder Pump			λυτοι			ed from Well:	gal
Other:						oved: nsferred to:	<del></del>
Chart Time (assess	. 1138		\4\\\\ 0		- 1		
Start Time (purge	***	11	Weather Co	)	sunnt		
Sample Time/Da		122/1		clear	_Odor	Strong	
Approx. Flow Rat		gpm.	Sediment D			<u> </u>	
Did well de-water	r? <u> </u>	yes, Time	:Volu	me:	gal. DTW @ S	ampling: <u>/ス。</u>	89
Time			Conductivity	Tobanasakun	D.O.	000	
(2400 hr.)	Volume (gal.)	рН	Conductivity (µmhos/cm/- µS)	Temperature F)	D.O. (mg/L)	ORP (mV)	
1140	10	7.19	979	196	(11.3-2)	(,	
1145	20	7 14	70	1113			•
1149,5	79	7:17	9.76	19. Y			•
11713	-	1.03	460	19.9			
			<del></del>			-, -,	•
121			LABORATORY II	VEORMATION			
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	T	ANALYSES	7
MW-; 2	💪 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/	BTEX(8260)	
<u> </u>			<u> </u>		<del> </del>	<del></del> .	
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<b>———</b>	<del></del>		<del> </del>	-			<del></del>
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				<del></del>			
Add/Replaced L			Replaced Plug: _		Add/Replaced		



Client/Facility#:	Chevron #211253		Job Number:	385867	
Site Address:	930 Springtown E	livd.	Event Date:	2/22/10	 (inclusive)
City:	Livermore, CA		Sampler:	32	()
- 					<del></del>
Well ID	MW-13		Date Monitored:	2/22/10	
Well Diameter	4 in.	Г	9		<u></u>
Total Depth	36.66 ft.		Volume 3/4"= 0.4 Factor (VF) 4"= 0.4		3°= 0.38 2"= 5.80
•		va	column is less then 0.5		2 - 3.60
,		66 = 16.	3 v3 casa volumo -	= Estimated Purge Volume:	7
Depth to Water v	v/ 80% Recharge [(Height	t of Water Column x	0 20) + DTWI: 16 . 8	2	gal.
,	, , , , , , , , , , , , , , , , , , ,	o. vidio. ovidilini X	0.20) · Divij. <u>70 ; 0</u>	Time Started:	(2400 hrs)
Purge Equipment:		Sampling Equipa	ment:	Time Completed:	(2400 hrs)
Disposable Bailer		Disposable Bailer	<b>√</b>	Depth to Product: Depth to Water:	ft
Stainless Steel Bailer		Pressure Bailer	7 1	Hydrocarbon Thickness:	ft
Stack Pump		Discrete Bailer		Visual Confirmation/Des	cription:
Suction Pump		Peristaltic Pump	4)	01	·
Grundfos		QED Bladder Pum	· ———	Skimmer / Absorbant So Amt Removed from Skim	ck (circle one)
Peristaltic Pump QED Bladder Pump	<del></del>	Other:		Amt Removed from Well	: gal
Other:				Water Reproved:	<del></del>
	· · · · · · · · · · · · · · · · · · ·			Product Transferred to:_	<del></del>
Start Time (purge) Sample Time/Date Approx. Flow Rate Did well de-water  Time (2400 hr.)  1018 1026 1034: 5	e: <u>/050 /2/22/</u> e: <u>= 2                                   </u>	Water C Sedimer me: Conductivity (µmhos/cm/ µ	color:	gal. DTW @ Sampling: 1  D.O. ORF (mg/L) (mV	13.02
		LABORATOR	Y INFORMATION		<del> </del>
SAMPLE ID	(#) CONTAINER REFRI	G. PRESERV. T		ANALYSES	
MW-/3	6 x voa vial YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(8260)	
F	<del></del>				
			<del></del>		
			<del></del>		
					<del></del>
<del></del>					
COMMENTS:					
Add/Replaced Lo	ock: Ac	id/Replaced Plug		Add/Replaced Bolt:	<del> </del>



Client/Facility#:	<b>Chevron #21125</b>	3 3	Job Number:	385867	
Site Address:	930 Springtown	Blvd.	Event Date:	2/22/10	(inclusive)
City:	Livermore, CA		Sampler:	52	()
			<del></del>		
Well ID	MW-/4		Date Monitored:	2/22/10	
Well Diameter	4 in.	Ţ.	Volume 3/4"= 0.0	02 1"= 0.04 2"= 0.	17 3"= 0.38
Total Depth	14.44 ft.		Factor (VF) 4"= 0.6		
Depth to Water	9.37 ft.	Check if water of	column is less then 0.5	0 ft.	
	5.07 xVF	.66 = 3.°	3 x3 case volume =	Estimated Purge Volume	:_ <i>/O</i> ≘:gal.
Depth to Water v	v/ 80% Recharge [(Helg	jht of Water Column x (	0.20) + DTWJ: <u>10.3</u>	8	
D			_	Time Started: Time Completed:_	(2400 hrs)
Purge Equipment:		Sampling Equipm	nent:		(2400 hrs)
Disposable Bailer Stainless Steel Bailer	· · · · · · · · · · · · · · · · · · ·	Disposable Bailer		Depth to Water:	ft
Stack Pump		Pressure Bailer Discrete Bailer		Hydrocarbon Thic	
Suction Pump		Peristaltic Pump		Visual Confirmation	n/Description:
Grundfos		QED Bladder Pum	p	Skimmer / Absorb	ant Sock (circle one)
Peristaltic Pump		Other:	· ———————	Amt Removed from	n Skimmer: gal n Well: gal
QED Bladder Pump				Water Removed:	n Well:gal
Other:				Product Transferre	ed to:
		<u></u>			
Start Time (purge)				cloudy	
Sample Time/Dat		//C) Water C	olor: It. gray	Odor: (Y) N	ne strong
Approx. Flow Rate			it Description: 🗸 🚄	loudy	
Did well de-water	? If yes, `	Time:\	/olume:	gal. DTW @ Sampli	ing: 9.56
Time		Conductivity	Temperature	D.O.	000
(2400 hr.)	Volume (gal.) pH	(µmhos/cm - µs		(mg/L)	ORP (mV)
0938	3 7.2	8 1026	15.9	- -	, ,
0941	6 7.19	1 1091	- 16.1		<del></del>
0945	10 7.0	9 1057	16.4		
					<del></del>
<u> </u>					
SAMPLE ID	(#) CONTAINER   REF		Y INFORMATION		
MW-14	x voa vial YE		/PE LABORATORY LANCASTER	TPH-GRO(8015)/BTEX(8	LYSES
			<u> </u>	GI.(G(GG)(G)) D.(E.((	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
<del></del>					
		···			
<u></u>					
COMMENTS:	Sheen				
-			· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
				<del></del>	
Add/Replaced Lo	ock:	Add/Replaced Plug	:	Add/Replaced Bolt	¥



Client/Facility#:	Chevron #2	11253		Job Number:	: <u>38586</u> 7	
Site Address:	930 Springt	own Blv	d.	Event Date:	2/22/10	(inclusive)
City:	Livermore,	CA		— Sampler:	52	
			<del></del>			
Well ID	MW-/5	<u>1                                    </u>		Date Monitored:	: 2/22/10	
Well Diameter	4 i	<u>n.</u>	[v	olume 3/4"= 0.	.02 1"= 0.04 2"= 0.17	7 3"= 0.38
Total Depth	45,95 1	<u>-</u> t		actor (VF) 4"= 0.		
Depth to Water			Check if water co	lumn is less then 0.5	50 ft.	••••••••••••••••••••••••••••••••••••••
	36,47	_xvF <u>•6</u>	<u>6 = 24.0</u>	x3 case volume :	= Estimated Purge Volume:	172 gal.
Depth to Water	w/ 80% Recharg	— e [(Height of	Water Column x 0.2	20) + DTWJ: <u>/6.7</u>	7	
				•	Time Started: Time Completed:	(2400 hrs)
Purge Equipment:			Sampling Equipme	ent:	Depth to Product:	1
Disposable Bailer Stainless Steel Bailer	-		Disposable Bailer		Depth to Water:	ft
Stack Pump			Pressure Bailer Discrete Bailer	<del></del>	Hydrocarbon Thick	ness:ft
Suction Pump			Peristaltic Pump		Visual Confirmation	/Description:
Grundfos	*		QED Bladder Pump		Skimmer / Absorba	At Sock (circle one)
Peristaltic Pump			Other:	<del></del>	Amt Removed from	Skimmer: gal
QED Bladder Pump				<del></del>	Water Removed:	Well:gal
Other:						f to:
Start Time (purge	): 0845		Weather (	Conditions:	cloudy	
Sample Time/Dat	te: 0925 /2	122/10		lor: clear	Odor: Y	
Approx. Flow Rat		gpm.		Description:		· · · · · · · · · · · · · · · · · · ·
Did well de-water					gal. DTW @ Samplin	1431
		,,			9a 5 @ Gaip	9. <del>[11.5]</del>
Time (2400 hr.)	Volume (gal.)	pН	Conductivity	Temperature	D.O.	ORP
•	7/1		(µmhos/cm (µS)		(mg/L)	(mV)
0853	49	7.61	1026	16.1		
0901	78	7.44	1078	16.8		
0104	12	1.5.1	1104	17.2		<del></del>
<del></del>	-		<del></del>			<del></del>
			LABORATORY	INFORMATION		
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYP		ANAL	YSES
MW- /5	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX(82	260)
<b> </b>			<del></del>			
<del></del>	<del></del>		<del> </del>		-	
		<u> </u>	<del>-</del> -	<del></del>		
		_				
<del></del>						
		<del>- · · · · · · · · · · · · · · · · · · ·</del>	L		<u> </u>	
COMMENTS:		<del>_</del> -				
						W
Add/Replaced Lo	ock:	Add/	Replaced Plug:		Add/Replaced Bolt:	<del>-</del>



	Client/Facility#:	Chevron #2	11253		Job	Number:	385867			
	Site Address:	930 Springt	town Blv	d.	Eve	nt Date:	2/22/10	2/22/10		
	City:	Livermore,	CA			pler:	<2		(inclusive)	
_										
	Well ID	mw-16	, 2		Date M	onitored:	2/22/	0		
	Well Diameter	4	in.	Г	Volume	3/4"= 0.0	2 1"= 0.04	2"= 0.17 3"= 0.		
	Total Depth	29.12	ft.		Factor (VF)	4"= 0.6		5"= 1.50 12"= 5.1	1	
	Depth to Water	9.63	ft.	Check if water o	column is les	s then 0.50	) ft.			
		19.49	_xvF6	6 = 12.	<b>≪</b> x3 cas	se volume =	Estimated Purge \	/olume: 39	gal.	
	Depth to Water v	w/ 80% Recharg	—   <b>e</b> [(Height of	Water Column x I	0.20) + DTW]:	13.57	·			
							Time Starte		(2400 hrs)	
	Purge Equipment:			Sampling Equipr	ment:		Time Comp Depth to Pro		(2400 hrs)	
	Disposable Bailer			Disposable Bailer		<u></u>	Depth to Wa		" ft	
	Stainless Steel Bailer			Pressure Bailer				n Thickness:	ft	
	Stack Pump Suction Pump	_1/		Discrete Bailer			Visual Confi	rmation/Descriptio	n:	
	Grundfos			Peristaltic Pump QED Bladder Pum			Skimmer / A	bsorbant Sock (cir	rde one)	
	Peristaltic Pump			zen bizader Pum Other:	'P		Amt Remov	ed from Skimmer:	de one <i>)</i> dal	
	QED Bladder Pump		,	Julei			Amt Remov	ed from Well:	gai	
	Other:						Water Reme	íved: nsferred to:	<del></del>	
							r roddict rrai	isieried (U		
,	Start Time (purge Sample Time/Dal Approx. Flow Rat Did well de-water Time	e: 1405 /· e: =3	2/22/c _gpm. f yes, Time	Water C Sedimer	r Conditions color: <u>e</u> nt Descriptio /olume:	on:	Odor: N N @ S		47	
	(2400 hr.)	Volume (gal.)	рН	(µmhos/cm/ µ	3) 73	/ F )	(mg/L)	ORP (mV)		
	1339	12	7.62	943	21.	9		()		
	1343	74	740	aro	- 71	<del></del>	<del></del>	<del></del> _	-	
	1348	39	7.29	986	- 21.4	<del>/</del> ·			-	
				10~					•	
									•	
_	SAMPLE ID	(#) CONTAINER		LABORATOR						
H	MW-16	G x voa vial	REFRIG. YES	PRESERV. TO		RATORY CASTER	TPH-GRO(8015)/B	ANALYSES		
r		A TOU VIEW	<del>                                     </del>	HOL.	CAIN	PASTER	TF FF-GRO(8013)/E	1EA(026U)	. 12	
Ľ							***	<del></del>		
L										
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$\vdash$				<del> </del>						
۲						+		<del></del>		
	W T					-+				
С	OMMENTS: _									
_	Add/Replaced Lo	ock:		Replaced Pluc	······································		Add/Panlaged I	Politi	<del></del>	

# Chevron California Region Analysis Request/Chain of Custody



0224 0 - 02 Acct # 10904 Sample # 5914434-42 Group #: 017645

								A	natys	es i	Requested		] Grp#118378
Facility #: SS#211253-OML G-R#38586			Matrix			177		P	reser	vati	on Codes		Preservative Codes
930 SPRINGTOWN BLVD., L	VERMORE, C	CA	1		#_	#		$\dashv$	$\dashv$	+			H = HCI T = Thiosulfate
Chevron PM: Lead Consultant/Office: G-R, Inc., 6747 Sierra Co	CR/	ACE	$\vdash$		l		Cleanup		ŀ	$\parallel$			N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other
			를 있 물 있	919			3	į				1 1	☐ J value reporting needed
Deanna L. Harding (de Consultant Prj. Mgr.:	eanna@grinc.	com)	□ Potable □ NPDES	Containers	B260 X 8021		Silica						☐ Must meet lowest detection ilm possible for 8260 compounds
Consultant Phone #925-551-7555	51-7899		و د د	<b>3</b>	٥					Method	Method	11	8021 MTBE Confirmation
Sampler: Steve Rice					88	8	<b>E</b>	ŀ	sette:				Confirm highest hit by 8260
			₹	Number		<b>₩</b>	5 KO	8	Oxygenates				☐ Confirm all hits by 8260
Sample Identification	Date Collected	Time &	Soll Water Oil □ Air	Totali	BTEX #	TPH 8015 MOD GRO	IPH 8015 MOD DRO	8280 full scen			Dissolved Lead		Run oxy's on highest hit
QA	2/22/10	COMPACTED TO TO		之	Ž	与	튀	**		+		+ +	
MW-9		1240		6	$\Rightarrow$	X	+	$\dashv$	+	╁	<del></del>	╁┼	Comments / Remarks
MW-10	1	320 X		6	$\triangleright$	X	_	寸		+	<del>                                     </del>	+ + -	İ
MW-11		1125 X		6	$\stackrel{\checkmark}{\searrow}$	X		$\neg$	-	+	<del>       </del>	<del>                                     </del>	
MW-12		205 X		6	X	X	+	$\dashv$		+	+ + +	+	1
MW-13	/	050 X		6	$\nabla$	X	$\top$	十	_	+	<del>                                     </del>	+	· .
MW-14	/	000 X	X	6	X	X		$\top$		+	<del>-     -   -</del>	<del>                                     </del>	1
MW-15		9925 X	X	6	X	又		7	$\top$	_	<del>                                     </del>	-	PA
MW-16	V /	405 X		6	X	X					+		
	<del>                                     </del>												
	<del>                                     </del>									$oxed{T}$			
						$\dashv$	$\bot$	4	1	$\perp$			
Turnaround Time Requested (TAT) (please of		Relinquished by:						ate	Then	1	Beech and buy		4 601 -
STD. TAT 72 hour 48 hou			ETAL.			3	22,	10	150	20	Received by:	2	Date Time  127 22-10 /50
24 hour 4 day 5 day	-	Relinquished the	MAL	1	W	02	24	ate	The		Received W.	رك	Date Time
Data Package Options (please circle if required)				<i>a</i> /	- Da	ate .	Time	#	Received by:	<del></del>	Date, Time		
QC Summary Type I - Full	C Summary Type ( - Full EDECEDITE						þ/3	1//		$\perp$	Received by:	red	ax 2/24/10 Time
Type VI (Haw Data) Coelt Deliverable not nee	De VI (Haw Data) Coelt Deliverable not needed						•	•		- 1	Received by.	1	Date Time
WIP (RWQCB) Disk	let.								<del></del>	$\bot$		4	thelio ofic
Parent		Temperature Upo	n Receipt	1.2	- 3,	<u> </u>				<b>2°</b> ∤	Customy Seet	Maior?	After No

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#### ANALYTICAL RESULTS

RECEIVED

Prepared for:

MAR 0 5 2007

Chevron
6001 Bollinger Canyon Rd L4310
GETTLER-RYAN INC. GENERAL CONTRACTORS

925-842-8582

Prepared by:

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

March 04, 2010

Project: 211253

Samples arrived at the laboratory on Thursday, February 25, 2010. The PO# for this group is 0015058478 and the release number is ROBB. The group number for this submittal is 1183780.

Client Sample Description	Lancaster Labs (LLI) #
QA-T-100222 NA Water	5914434
MW-9-W-100222 Grab Water	5914435
MW-10-W-100222 Grab Water	5914436
MW-11-W-100222 Grab Water	5914437
MW-12-W-100222 Grab Water	5914438
MW-13-W-100222 Grab Water	5914439
MW-14-W-100222 Grab Water	5914440
MW-15-W-100222 Grab Water	5914441
MW-16-W-100222 Grab Water	5914442

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

**ELECTRONIC** COPY TO

CRA c/o Gettler-Ryan

Attn: Cheryl Hansen



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

Respectfully Submitted,

Robin C. Runkle Senior Specialist

Pula CAM



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Page 1 of 1

Sample Description: QA-T-100222 NA Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 QA

LLI Group # 1183780

LLI Sample # WW 5914434

Project Name: 211253

Collected: 02/22/2010

Account Number: 10904

Submitted: 02/25/2010 09:10

Reported: 03/04/2010 at 18:59

Discard: 04/04/2010

Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

SLQA-

me	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846	8260B	ug/l	ug/l	
	71-43-2	N.D.	0.5	1
e	100-41-4	N.D.	0.5	1
	108-88-3	N.D.	0.5	1
al)	1330-20-7	N.D.	0.5	1
SW-846	8015B	ug/l	ug/l	
CA water C6-C12	n.a.	N.D.	50	1
	e al)	SW-846 8260B 71-43-2 100-41-4 108-88-3 1330-20-7 SW-846 8015B	The CAS Number Result SW-846 8260B ug/l 71-43-2 N.D. e 100-41-4 N.D. 108-88-3 N.D. 1330-20-7 N.D. SW-846 8015B ug/l	### CAS Number   As Received   Result   Detection Limit

#### 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
01728	BTEX by 8260B GC/MS VOA Water Prep TPH-GRO N. CA water C6-C12 GC VOA Water Prep	SW-846 8260B SW-846 5030B SW-846 8015B SW-846 5030B	1 1 1 1	Z100604AA Z100604AA 10057C07A 10057C07A	03/01/2010 22:17 03/01/2010 22:17 03/02/2010 13:27 03/02/2010 13:27	Ginelle L Feister Ginelle L Peister Marie D John Marie D John	1



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Page 1 of 1

Sample Description: MW-9-W-100222 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-9

LLI Sample # WW 5914435 LLI Group # 1183780

CA

Project Name: 211253

Collected: 02/22/2010 12:40

by SR

Account Number: 10904

Submitted: 02/25/2010 09:10

Reported: 03/04/2010 at 18:59

Discard: 04/04/2010

Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

SLM9-

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	
06053	Benzene		71-43-2	N.D.	0.5	1
06053	Ethylbenzene		100-41-4	N.D.	0.5	1
06053	Toluene		108-88-3	N.D.	0.5	ī
06053	Xylene (Total)		1330-20-7	N.D.	0.5	1
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	N.D.	50	1

#### General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163 01728	BTEX by 8260B GC/MS VOA Water Prep TPH-GRO N. CA water C6-C12 GC VOA Water Prep	SW-846 8260B SW-846 5030B SW-846 8015B SW-846 5030B	1 1 1 1	Z100604AA Z100604AA 10057C07A 10057C07A			1



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Page 1 of 1

Sample Description: MW-10-W-100222 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-10

LLI Sample # WW 5914436 LLI Group # 1183780

Project Name: 211253

Collected: 02/22/2010 13:20

by SR

Account Number: 10904

Submitted: 02/25/2010 09:10

Reported: 03/04/2010 at 18:59

Discard: 04/04/2010

Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

SLM10

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	
06053	Benzene		71-43-2	9	0.5	1
06053	Ethylbenzene		100-41-4	61	0.5	1
06053	Toluene		108-88-3	2	0.5	ĩ
06053	Xylene (Total)		1330-20-7	10	0.5	1
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	3,600	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
01163 01728	BTEX by 8260B GC/MS VOA Water Prep TPH-GRO N. CA water C6-C12 GC VOA Water Prep	SW-846 8260B SW-846 5030B SW-846 8015B SW-846 5030B	ī	Z100604AA Z100604AA 10057C07A 10057C07A	03/01/2010 23:08 03/01/2010 23:08 03/02/2010 23:15 03/02/2010 23:15	Ginelle L Feister Ginelle L Feister Marie D John Marie D John	1



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Page 1 of 1

Sample Description: MW-11-W-100222 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-11

LLI Group # 1183780

LLI Sample # WW 5914437

CA

Project Name: 211253

Collected: 02/22/2010 11:25

by SR

Account Number: 10904

Submitted: 02/25/2010 09:10

Reported: 03/04/2010 at 18:59

Discard: 04/04/2010

Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

SLM11

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	
06053	Benzene		71-43-2	2	0.5	1
06053	Ethylbenzene		100-41-4	5	0.5	1
06053	Toluene		108-88-3	N.D.	0.5	1
06053	Xylene (Total)		1330-20-7	0.9	0.5	ī
GC Vol	atiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	1,400	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
01163 01728	BTEX by 8260B GC/MS VOA Water Prep TPH-GRO N. CA water C6-C12 GC VOA Water Prep	SW-846 8260B SW-846 5030B SW-846 8015B SW-846 5030B	1	Z100604AA Z100604AA 10057C07A 10057C07A	03/01/2010 23:59 03/01/2010 23:59 03/02/2010 19:42 03/02/2010 19:42	Ginelle L Feister Ginelle L Feister Marie D John Marie D John	1



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Page 1 of 1

Sample Description: MW-12-W-100222 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-12

LLI Sample # WW 5914438 LLI Group # 1183780

CA

Project Name: 211253

Collected: 02/22/2010 12:05

by SR

Account Number: 10904

Submitted: 02/25/2010 09:10

Reported: 03/04/2010 at 18:59

Discard: 04/04/2010

Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

SLM12

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	
06053	Benzene		71-43-2	190	5	10
06053	Ethylbenzene		100-41-4	310	5	10
06053	Toluene		108-88-3	590	5	10
06053	Xylene (Total)		1330-20-7	1,400	5	10
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	14,000	500	10

#### General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06053	BTEX by 8260B	SW-846 8260B	1	Z100621AA		Ginelle L Feister	
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z100621AA	· · · · · · · · · · · · · · · · · · ·	Ginelle L Feister	
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	10057C07A	03/02/2010 20:08	Marie D John	10
01146	GC VOA Water Prep	SW-846 5030B	1	10057C07A	03/02/2010 20:08	Marie D John	10



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Sample Description: MW-13-W-100222 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-13

LLI Sample # WW 5914439 LLI Group # 1183780

C2

Project Name: 211253

Collected: 02/22/2010 10:50

by SR

Account Number: 10904

Submitted: 02/25/2010 09:10

Reported: 03/04/2010 at 18:59

Discard: 04/04/2010

 ${\tt Chev}{\bf ron}$ 

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

SLM13

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Nethod Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
06053	Benzene		71-43-2	630	5	10
06053	Ethylbenzene		100-41-4	22	5	10
06053	Toluene		108-88-3	600	5	10
06053	Xylene (Total)		1330-20-7	960	5	10
GC Vol	latiles	8W-846	8015B	ug/l	ug/1	
01728	TPH-GRO N. CA water	C6-C12	n.a.	13,000	500	10

#### General Sample Comments

State of California Lab Certification No. 2501

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163 01728	BTEX by 8260B GC/MS VOA Water Prep TPH-GRO N. CA water C6-C12 GC VOA Water Prep	SW-846 8260B SW-846 5030B SW-846 8015B SW-846 5030B	1 1 1 1	Z100621AA Z100621AA 10060A20A 10060A20A	03/03/2010 16:04 03/03/2010 16:04 03/01/2010 17:50 03/01/2010 17:50	Ginelle L Feister Marie D John	10



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Sample Description: MW-14-W-100222 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-14

LLI Sample # WW 5914440 LLI Group # 1183780

CA

Project Name: 211253

Collected: 02/22/2010 10:00

by SR

Account Number: 10904

Submitted: 02/25/2010 09:10

Reported: 03/04/2010 at 18:59

Discard: 04/04/2010

Chevron

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San Ramon CA 94583

SLM14

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/M	S Volatiles	SW-846	8260B	ug/l	ug/l	
0605	3 Benzene		71-43-2	3,600	50	100
0605	3 Ethylbenzene		100-41-4	2,100	50	100
0605			108-88-3	7,900	50	100
0605	3 Xylene (Total)		1330-20-7	9,400	50	100
GC V	olatiles	SW-846	8015B	ug/l	ug/l	
0172	8 TPH-GRO N. CA water	C6-C12	n.a.	48,000	1,300	25

#### 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
01163 01728	BTEX by 8260B GC/MS VOA Water Prep TPH-GRO N. CA water C6-C12 GC VOA Water Prep	SW-846 8260B SW-846 5030B SW-846 8015B SW-846 5030B	1 1 1	Z100621AA Z100621AA 10060A20A 10060A20A		Ginelle L Feister Ginelle L Feister Marie D John Marie D John	100



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Sample Description: MW-15-W-100222 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-15

LLI Sample # WW 5914441 LLI Group # 1183780

CA

Project Name: 211253

Collected: 02/22/2010 09:25

by SR

Account Number: 10904

Submitted: 02/25/2010 09:10

Reported: 03/04/2010 at 18:59

Chevron

6001 Bollinger Canyon Rd L4310 Discard: 04/04/2010

San Ramon CA 94583

SLM15

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Pactor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
06053	Benzene		71-43-2	N.D.	0.5	1
06053	Ethylbenzene		100-41-4	1	0.5	ī
06053	Toluene		108-88-3	3	0.5	ī
06053	Xylene (Total)		1330-20-7	6	0.5	ī
GC Vol	latiles	SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	66	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 Dete and Time	Analyst	Dilution Factor
	BTEX by 8260B	SW-846 8260B	1	Z100621AA	03/03/2010 17:18	Ginelle L Feister	
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z100621AA	03/03/2010 17:18	Ginelle L Feister	
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	10060A20A			1
01146	GC VOA Water Prep	SW-846 5030B	1	10060A20A	03/01/2010 14:56	Marie D John	ī



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Sample Description: MW-16-W-100222 Grab Water

Facility# 211253 Job# 385867 GRD

930 Springtown-Livermore T0600101353 MW-16

LLI Sample # WW 5914442

LLI Group # 1183780

Project Name: 211253

Collected: 02/22/2010 14:05

by SR

Account Number: 10904

Submitted: 02/25/2010 09:10

Reported: 03/04/2010 at 18:59

Discard: 04/04/2010

Chevron

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

#### SLM16

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Nethod Detection Limit	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/1	ug/1	
06053	Benzene		71-43-2	N.D.	0.5	1
06053	Ethylbenzene		100-41-4	N.D.	0.5	1
06053	Toluene		108-88-3	N.D.	0.5	1
06053	Xylene (Total)		1330-20-7	N.D.	0.5	ī
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
		SW-846 8260B	1	Z100621AA	03/03/2010 17:43	Ginelle L Feister	
	GC/MS VOA Water Prep	SW-846 5030B	1	Z100621AA	03/03/2010 17:43		
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	10060A20A			1
01146	GC VOA Water Prep	SW-846 5030B	1	10060A20A	03/01/2010 15:18		1



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### Quality Control Summary

Client Name: Chevron

Reported: 03/04/10 at 06:59 PM

Group Number: 1183780

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

1 Addition Seatiful Coulties							
Blank <u>Result</u>	Blank <u>MDL</u>	Report Units	LCS *REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Sample nu	mber(s): 59:		437				
N.D.	0.5	ug/l	96 96		79-120 79-120		
N.D.	0.5 0.5	ug/l ug/l	9 <u>4</u> 98		79-120		
Sample num	mber(s): 591 0.5						
N.D. N.D.	0.5 0.5	ug/l ug/l	99 97		79-120		
N.D.	0.5	ug/l	100		80-120		
Sample num	ber(s): 591		138				
			109	100	75-135	9	30
Sample num	ber(s): 591						
н.р.	50.	ug/l	100	109	75-135	9	30
	Result  Sample num N.D. N.D. N.D. Sample num N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D	Blank Result MDL  Sample number(s): 59  N.D. 0.5  N.D. 0.5  N.D. 0.5  N.D. 0.5  N.D. 0.5  N.D. 0.5  Sample number(s): 591  N.D. 0.5  N.D. 0.5  N.D. 0.5  N.D. 0.5  Sample number(s): 591  Sample number(s): 591  Sample number(s): 591  Sample number(s): 591	Blank         Blank         Report           Result         MDL         Units           Sample number(s):         5914434-5914           N.D.         0.5         ug/l           Sample number(s):         5914434-59144           N.D.         50         ug/l           Sample number(s):         5914439-59144	Blank         Blank         Report         LCS           Result         MDL         Units         \$REC           Sample number(s):         5914434-5914437         96           N.D.         0.5         ug/l         96           N.D.         0.5         ug/l         94           N.D.         0.5         ug/l         94           N.D.         0.5         ug/l         92           N.D.         0.5         ug/l         99           N.D.         0.5         ug/l         97           N.D.         0.5         ug/l         100           Sample number(s):         5914434-5914438           N.D.         50         ug/l         109           Sample number(s):         5914439-5914442	Blank Blank Report LCS LCSD Result MDL Units 125 125 125 125 125 125 125 125 125 125	Blank Result         Blank Pub.         Report Into Inits         LCS Inits         LCS Inits           Sample number(s):         5914434-5914437         Sample number(s):         5914434-5914437         Sample number(s):         79-120           N.D.         0.5         ug/l         96         79-120           N.D.         0.5         ug/l         94         79-120           N.D.         0.5         ug/l         94         79-120           Sample number(s):         5914438-5914442         Sample number(s):         79-120           N.D.         0.5         ug/l         99         79-120           N.D.         0.5         ug/l         99         79-120           N.D.         0.5         ug/l         97         79-120           N.D.         0.5         ug/l         100         80-120    Sample number(s): 5914434-5914438  N.D.  Sample number(s): 5914439-5914442  N.	Blank Blank Report LCS LCSD LCS/LCSD Limits RPD  Sample number(s): 5914434-5914437  N.D. 0.5 ug/l 96 79-120  N.D. 0.5 ug/l 96 79-120  N.D. 0.5 ug/l 98 79-120  N.D. 0.5 ug/l 98 80-120  Sample number(s): 5914438-5914442  N.D. 0.5 ug/l 92 79-120  N.D. 0.5 ug/l 92 79-120  N.D. 0.5 ug/l 92 79-120  N.D. 0.5 ug/l 99 79-120  N.D. 0.5 ug/l 97 79-120  N.D. 0.5 ug/l 97 79-120  N.D. 0.5 ug/l 100 80-120  Sample number(s): 5914434-5914438  N.D. 50. ug/l 109 100 75-135 9  Sample number(s): 5914439-5914442  N.D. 50. ug/l 109 100 75-135 9

### 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

		_		wapii	cace				
Analysis Name	MS BREC	MSD RRC	MS/MSD <u>Limits</u>	RPD	RPD MAX	BKG Conc	DUP Conc	DUP <u>RPD</u>	Dup RPD
Batch number: Z100604AA Benzene Ethylbenzene Toluene Xylene (Total)	Sample 99 102 100 102	number(s) 99 100 100 102	: 5914434 80-126 71-134 80-125 79-125	-59144 0 1 0	37 UNSP 30 30 30 30 30	(: P910486		_	
Batch number: Z100621AA Benzene Ethylbenzene Toluene Xylene (Total)	Sample 99 104 101 105	number(s) 100 105 102 106	: 5914438- 80-126 71-134 80-125 79-125	-591444 1 1 1 2	12 UNSPK 30 30 30 30 30	: P914455			
Batch number: 10057C07A TPH-GRO N. CA water C6-C12	Sample :	number(s)	: 5914434- 63-154	591443	6 UNSPK	: P913362			
Batch number: 10060A20A TPH-GRO N. CA water C6-C12	Sample 1	number(s)	: 5914439- 63-154	591444	2 UNSPK	P914392			

### \*- 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

Reported: 03/04/10 at 06:59 PM

Group Number: 1183780

### 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: BTEX by 8260B Batch number: Z100604AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5914434 5914435 5914436 5914437 Blank LCS MS	98 99 98 100 101 101 100	95 94 93 94 96 97 95	101 100 100 101 100 99 100	97 96 102 99 97 98 99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX by 8260B

Batch number: Z100621AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzer
5914438 5914440 5914440 5914441 5914442 Blank LCS MS MSD	98 97 97 98 99 105 104 105	92 93 93 93 94 94 96 93	100 101 101 100 101 98 98 98 98	99 98 97 96 96 97 100 100
DIMILE:	80-116	77-113	80-113	78-113

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

Batch number: 10057C07A

Trifluorotoluene-F

5914434	103
5914435	100
5914436	114
5914437	134
5914438	134
Blank	103
LCS	113
LCSD	112
MS	113

Limits: 63-135

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

Batch number: 10060A20A

Trifluorotoluene-F

5914439 121

\*- 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

Reported: 03/04/10 at 06:59 PM

Group Number: 1183780

Surrogate Quality Control

5914440 106 5914441 79 5914442 93 Blank 85 LCS 120 LCSD 113 MS 113

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.

# Lancaster Laboratories Explanation of Symbols and Abbreviations

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

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
С	degrees Celsius	F	degrees Fahrenheit
Cal	(diet) calories	lb.	pound(s)
meq	milliequivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	Ĩ	liter(s)
mi	milliliter(s)	u/	microliter(s)
m3	cubic meter(s)	fib >5 um/mi	fibers greater than 5 microns in length per ml

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

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

inorganic Qualifiers

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

#### **Organic Qualifiers**

	Α	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
	В	Analyte was also detected in the blank	E	Estimated due to interference
	С	Pesticide result confirmed by GC/MS	М	Duplicate injection precision not met
	D	Compound quatitated on a diluted sample	N	Spike amount not within control limits
	E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
	J	Estimated value	U	Compound was not detected
	N	Presumptive evidence of a compound (TICs only)	w	Post digestion spike out of control limits
	P	Concentration difference between primary and	*	Duplicate analysis not within control limits
		confirmation columns >25%	+	Correlation coefficient for MSA <0.995
	U	Compound was not detected		The state of the s
X,Y	1,Z	Defined in case narrative		

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

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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