

# GETTLER-RYAN INC.

## TRANSMITTAL

September 28, 2001 G-R #386420

TO:

Mr. James Brownell

Delta Environmental Consultants, Inc. 3164 Gold Camp Drive, Suite 200 Rancho Cordova, California 95670

CC: Mr. Thomas Bauhs

Chevron Products Company

P.O. Box 6004

San Ramon, California 94583

FROM:

Deanna L. Harding **Project Coordinator** 

Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568

**RE:** Former Chevron Service Station

#9-0517

3900 Piedmont Avenue Oakland, California

### WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	September 26, 2001	Groundwater Monitoring and Sampling Report Third Quarter - Event of August 23, 2001

### COMMENTS:

This report is being sent for your review. Please provide any comments/changes and propose any groundwater monitoring modifications for the next event prior to October 12, 2001, at which time the final report will be distributed to the following:

Mr. Larry Seto, Alameda County Health Care Services, Dept. of Environmental Health, 1153 Harbor Bay Parkway, cc: Suite 250, Alameda, CA 94502-6577

Mr. Greg Gurss, Gettler-Ryan Inc., 3140 Gold Camp Drive, Suite 170, Rancho Cordova, CA 95670 Neil B. Goodhue and Mrs. Diane C. Goodhue, 300 Hillside Avenue, Piedmont, CA 94611

Enclosures

September 26, 2001 G-R Job #386420

Mr. Thomas Bauhs Chevron Products Company P.O. Box 6004 San Ramon, CA 94583

RE:

Third Quarter Event of August 23, 2001

Groundwater Monitoring & Sampling Report Former Chevron Service Station #9-0517 3900 Piedmont Avenue

Oakland, California

#### Dear Mr. Bauhs:

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.

6882

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

Sincerely,

Deanna L. Harding Project Coordinator

Douglas Lee

Senior Geblogist, R.G. No. 6882

Figure 1:

Potentiometric Map

Table 1:

Groundwater Monitoring Data and Analytical Results Standard Operating Procedure - Groundwater Sampling

Attachments: Standard Operatin Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports

## **EXPLANATION** Groundwater monitoring well 99.99 Groundwater elevation in feet referenced to Mean Sea Level (MSL) Groundwater elevation contour, **MW-1 Planter** PIEDMONT AVENUE dashed where inferred Approximate groundwater flow direction at a gradient of 0.01 Ft./Ft. Bank **Apartment** 78.25 House **MW-4** 77.89 78.81 Planter Planter Driveway мw-з 78.23 **MONTELL STREET** 30 Scale in Feet jource: Figure modified from drawing provided by RRM engineering contracting firm. FIGURE POTENTIOMETRIC MAP Former Chevron Service Station #9-0517 6747 Sierro Ct., Suite J Dublin, CA 94568 3900 Piedmont Avenue (925) 551-7555 Oakland, California DATE REVISED DATE PROJECT NUMBER REVIEWED BY

August 23, 2001

FILE NAME: P:\Envira\Chevron\9-0517\Q01-9-0517.DWG | Layout Tab: Pol3

386420

Table 1
Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #9-0517 3900 Piedmont Avenue Oakland, California

				Oukland,	Curron.u				
WELL ID/	TOC	GWE	DTW	TPH-G	В	T	E	X	MTBE
DATE	(ft.)	(msl)	(ft.)	(pph)	(ррв)	(ppb)	(ppb)	(ppb)	(ppb)
MW-1									
08/03/98	87.89	75.46	12.43	<50	<0.5	<0.5	<0.5	< 0.5	<2.5
11/23/98	87.89	78.84	9.05	<50	< 0.5	< 0.5	< 0.5	< 0.5	<2.0
02/08/99	87.89	81.39	6.50	<50	< 0.5	< 0.5	< 0.5	< 0.5	<2.5
05/07/99	87.89	80.76	7.13	<50	< 0.5	< 0.5	< 0.5	< 0.5	<5.0
08/23/99	87.89	78.74	9.15	<50	< 0.5	< 0.5	< 0.5	< 0.5	<2.5
11/03/99	87.89	78.35	9.54	<50	< 0.5	<0.5	< 0.5	< 0.5	<2.5
02/15/00	87.89	81.99	5.90	<50	< 0.5	< 0.5	< 0.5	< 0.5	<5.0
05/12/00 <sup>3</sup>	87.89	80.84	7.05	<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
07/31/00	87.89	79.49	8.40	<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
10/30/00	87.89	79.24	8.65	< 50.0	< 0.500	< 0.500	< 0.500	<1.50	<2.50
02/27/01	87.89	82.06	5.83	<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50
05/15/01	87.89	80.18	7,71	<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50
08/23/01	87.89	DRY			••				
MW-2									
08/03/98	86.09	74.75	11.34	<50	< 0.5	<0.5	<0.5	<0.5	3.4
11/23/98	86.09	79.19	6.90	<50	<0.5	<0.5	<0.5	<0.5	<2.0
02/08/99	86.09	80.86	5.23	<50	< 0.5	<0.5	<0.5	<0.5	<2.5
05/07/99	86.09	79.97	6.12	<50	<0.5	<0.5	<0.5	<0.5	<5.0
08/23/99	86.09	79.68	6.41	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/03/99	86.09	78.80	7.29	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/15/00	86.09	81.60	4.49	<50	<0.5	<0.5	< 0.5	<0.5	<5.0
05/12/00	86.09	80.19	5.90	4,000 <sup>3</sup>	240	26	100	76	<100
07/31/00	86.09	79.51	6.58	<50	< 0.50	<0.50	<0.50	<0.50	<2.5
10/30/00	86.09	79.86	6.23	<50.0	< 0.500	2.92	<0.500	1.88	4.89
02/27/01	86.09	81.49	4.60	<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50
05/15/01	86.09	79.79	6.30	<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50
08/23/01	86.09	78.81	7.28	<50	< 0.50	< 0.50	<0.50	<0.50	<2.5

Table 1
Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #9-0517 3900 Piedmont Avenue Oakland, California

			· · · · · · · · · · · · · · · · · · ·	Oukitano,				energia esta esta esta esta esta esta esta est	g drawn an
WELL ID/	TOC	GWE	DTW	TPH-G	В	T	E	X	MTBE
DATE	(ft.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ррь)	(ppb)	(ppb)
MW-3									
08/03/98	86.28	74.20	12.08	4000	160	<5.0	<5.0	73	180
11/23/98	86.28	78.59	7.69	4000	67.7	7.56	17.1	24.5	41.2
02/08/99	86.28	80.01	6.27	<50	< 0.5	< 0.5	< 0.5	< 0.5	<2.5
05/07/99	86.28	79.32	6.96	1800	53.6	8.96	33	18.6	21.4
08/23/99	86.28	78.36	7.92	3970	155	24	88.8	39.8	185
11/03/99	86.28	78.36	7.92	3320	108	19.9	98.4	44.8	<25
02/15/00	86.28	80.54	5.74	779	26,7	3.82	15.4	4.24	<12.5
05/12/00	86.28	79.52	6.76	12,000 <sup>3</sup>	3,100	120	980	1,400	820
07/31/00	86.28	78.98	7.30	1,200 <sup>3</sup>	32	<5.0	11	7.3	39
10/30/00	86.28	79.26	7.02	3,300⁴	119	< 5.00	40.0	<15.0	<25.0
02/27/01	86.28	80.39	5.89	432 <sup>3</sup>	15.5	1.53	14.9	1.06	15.7
05/15/01	86.28	79.21	7.07	$3,220^3$	96.4	12.6	11.5	11.6	128
08/23/01	86.28	78.23	8.05	2,300	48	<10	<10	<10	100
		·							
MW-4									
08/03/98	87.22	74.30	12.92	1900	110	12	<0.5	55	130
11/23/98	87.22	77.82	9.40	4080	136	17.8	37.2	30.1	51.8
02/08/99 <sup>1</sup>	87.22	79.40	7.82	2900	150	16	<5.0	15	230/30.7 <sup>2</sup>
05/07/99	87.22	79.80	7.42	6050	161	<25	39.8	36.9	<250/30.2 <sup>2</sup>
08/23/99	87.22	77.83	9.39	3930	203	37.6	58.6	42.2	255
11/03/99	87.22	77.41	9.81	5350	324	44.7	91.5	56.1	<50
02/15/00	87.22	79.50	7.72	4080	161	27.7	31.1	39.1	73.9
05/12/00	87.22	79.31	7.91	$3,600^3$	170	27	49	64	170
07/31/00	87.22	78.57	8.65	2,900 <sup>3</sup>	160	20	15	56	170
10/30/00	87.22	78.14	9.08	5,630 <sup>4</sup>	301	17.8	11.8	51.5	<25.0
02/27/01	87.22	79.92	7.30	2,140 <sup>3</sup>	95.1	12.8	53.4	43.0	235
05/15/01	87.22	79.07	8.15	4,580 <sup>3</sup>	200	44.1	46.3	51.7	172
08/23/01	87.22	77.89	9,33	2,700	250	44	21	72	130

**Table 1 Groundwater Monitoring Data and Analytical Results** 

Former Chevron Service Station #9-0517 3900 Piedmont Avenue Oakland, California

WELL ID/	TOC	GWE	DTW	TPH-G	В	T	E	X	MTBE
DATE	(ft.)	(msl)	(ft.)	(pph)	(ppb)	(ррь)	(ppb)	(pph)	(ppb)
TRIP BLANK									
08/03/98				<50	< 0.5	< 0.5	< 0.5	< 0.5	<2.5
11/23/98				<50	< 0.5	< 0.5	< 0.5	< 0.5	<2.0
02/08/99				<50	< 0.5	< 0.5	< 0.5	< 0.5	<2.5
05/07/99				<50	< 0.5	< 0.5	<0.5	< 0.5	<5.0
08/23/99				<50	< 0.5	< 0.5	< 0.5	< 0.5	<2.5
11/03/99				<50	< 0.5	< 0.5	< 0.5	< 0.5	<2.5
02/15/00			· 	<50	< 0.5	<0.5	<0.5	< 0.5	<5.0
05/12/00				<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
07/31/00				<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
10/30/00				<50.0	< 0.500	< 0.500	< 0.500	<1.50	< 2.50
02/27/01				<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50
05/15/01				<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50
08/23/01				<50	<0.50	< 0.50	< 0.50	<0.50	<2.5

#### Table 1

#### **Groundwater Monitoring Data and Analytical Results**

Former Chevron Service Station #9-0517 3900 Piedmont Avenue Oakland, California

#### **EXPLANATIONS:**

Groundwater monitoring data and laboratory analytical results prior to May 12, 2000, were compiled from reports prepared by Blaine Tech Services, Inc.

TOC = Top of Casing

B = Benzene

(ppb) = Parts per billion

(ft.) = Feet

T = Toluene

-- = Not Measured/Not Analyzed

GWE = Groundwater Elevation

E = Ethylbenzene

(msl) = Mean sea level

X = Xylenes

DTW = Depth to Water

MTBE = Methyl tertiary butyl ether

TPH-G = Total Petroleum Hydrocarbons as Gasoline

- Confirmation run.
- <sup>3</sup> Laboratory report indicates gasoline C6-C12.
- Laboratory report indicates hydrocarbon pattern present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

Chromatogram pattern indicates gas and an unidentified hydrocarbon.

## STANDARD OPERATING PROCEDURE -GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

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, static water level measurements are collected with the interface probe and are also recorded in the field notes.

After water levels are collected and prior to sampling, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using Chevron-designated disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. 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. 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. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Products Company, the purge water and decontamination water generated during sampling activities is transported by IWM to McKittrick Waste Management located in McKittrick, California.

## WELL MONITORING/SAMPLING FIELD DATA SHEET

		FIELD DATA				
ient/ Cho	evron Osij		Job#:	386.4		
icility#	DICS. ONL	AVE.	Date:	8/23	01	
	PIEDMONT		_	FRAI	uk T.	
ty: ORKLA	IND, A		Sampler			
	-			\ 1		
Well ID	MW-1_	Well Conditio	n:	o'k'		
AAGU ID		Hydrocerbon		Amount E		IO-Hana)
/ell Diameter		Thickness:		(feet) (product/w		(Gallons) = 0.66
otal Depth	16.35 th	Volume Factor (VF)	2" = 0.17	3" = 0.5 6" = 1.50	12" = 5.80	- 0.00
epth to Water	DRY 15.	Facul (VI)			<u></u>	
repen to troops		*	w 0 1 wol	ume) = Estimated	Purge Volume:	(cal.)
	N/A X.VF			<b>5</b> (1) <b>6</b> (	·	
Purge	Disposable Bailer	S	empling quipment:	Disposable	Bailer	•
Equipment:	Beiler Stack	•	• -	Bailer Pressure Ba		•
<i>بدا</i> به	Suction	,	+	Grab Samp	le	
	Grundfos			Other:		
	Other:					
		Weathe	er Condition	s:S	UNUY	
Starting Time:		<del></del>	Color:		Odor:	/
Sampling Time: Purging Flow Rat		om. Sedime	ent Descript	ion: /		loal.
Did well de-wate	/	If yes;	Time:	Vo	lume:	
Did Mell do Mell		Conductivity	Temper	sture D.O		. Alkalinity
						/———·
T III III .	Volume pli	µmhos/cm	•F	(mg/	L) (mV)	. (ppm)
T Time	Volume plil (gal.)			(mg/	L) (mV)	(ppm)
T Time				(mg/	L) (mV)	. (ppm)
T Time				(mg/	L) (mV)	(ppm)
T Time				(mg/	L) (mV)	(ppm)
T Time				(mg/	L) (mV)	(ppm)
T Time		µmhos/cm	Y INFORMA	TION		
T Time		LABORATOR'	- F	TION		LLYSES
	(gal.)	µmhos/cm	Y INFORMA	TION	ANA	LLYSES
SAMPLE ID	(#) - CONTAINER	LABORATOR'	Y INFORMA	TION	ANA	LLYSES
SAMPLE ID	(#) - CONTAINER	LABORATOR'	Y INFORMA	TION	ANA	LLYSES
SAMPLE ID	(#) - CONTAINER VOAVIAL	LABORATOR'	Y INFORMA SERV. TYPE	TION  LABORATORY  SEQUOIA	ANA	LLYSES

# WELL MONITORING/SAMPLING

	WELL	FIELD D	ATA SHEET	420		•
Ch	evron			386		
ient/ 011 ocility# 9-	PIEDMOUT	WF.	Job#:	8/23/0	<u></u>	
-27_	DIEDHODI		Date:			<del> :-</del>
dress:	AND CA		Sampler	FRAN	16 1.	<del></del>
ty:						
			****	0'K		
Well ID	MW-2	Well Co	ondition:	Pallo		
. Il Diametet	2"h.	Hydroc		Amount Baile	<u> </u>	[Gallons]
/ell Diameter	16.32 ft.	Thickn	ess	3° = 0.98	4" ==	0.66
otal Depth		Volum Factor	12	6* = 1.50	2" = 5.80	
epth to Water	7.28 ti.	ŀ				
•	a Au v	l7 <b></b>	1.53 x 3 (case vo	lume) = Estimated Purge	Yolume: 4	(lat.)
	_					
Purge	(Disposable Bailer )		Samplin <b>g</b> Equipment:	(Disposable Baile	ei)	
Equipment:	Beiler Stack			Bailer Pressure Bailer		
	Suction	•		Grab Sample		
	Grundfos			Other:		
	Other:					
			Weather Condition	s. <u>Shi</u>	727	
Starting Time:	9:31	\	Westner Color: C	LOUDY I LAP	Odor: <u></u> ك	0
Sampling Time:	9:46		Sediment Descrip	tion: SUGHT	TLY SILT	<u>Y</u>
Purging Flow Ra	te:s		If yes; Time:		e:	loal.
Did well de-wat	er?No	<del></del>	11 7007	•	OTT	. Alkalinity
. <u>_</u>	Volume pH	Cond	uctivity Tempe	rature D.O. (mg/L)	ORP (mV)	(ppm)
1 Dite	(gal.) 7.43	μmb ) [ C	os/cm kidd F	2.7(mg/L)		<u></u>
<u> </u>	1:3-		88	2.1		
9:37	$\frac{3.0}{4.5}$ $\frac{7.39}{7.31}$		74 _ 7	2.0	<del></del>	
9:40	4.3 -1:-				<u> </u>	
					,	<del></del>
<del></del>						
		LABOF	ATORY INFORM	ATION	ANAL	YSES
SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	TPH(G)/btex/	
MW- 2	37 VOAVIAL	Y	HCL	SEGOOIA		
11# 🗢						
			1			
COMMENTS:	<del></del>		-			

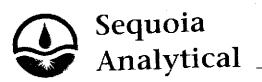
# WELL MONITORING/SAMPLING

		FIELD D	ATA SHEET	420	٥	
cility# 9-	OSI7 PIZOMONI O ELLADO CA	AVE.	Job#: Date: Sampler			
Well ID /ell Diameter otal Depth Depth to Water	MW·3 2" in. 17.42 ft. 8.05 ft. 9.37 x vi	Hydroc Thickn Volum Factor	ess: <u>0</u> ess: <u>2' = 0.17</u> (VF)	Amount Baile  (feet) (product/water):  3° = 0.38  6° = 1.50  1:  plume) = Estimated Purge	4° = 2° = 5.80	(Gallons) 0.66
Purge Equipment:	(Disposable Bailer) Bailer Stack Suction Grundfos Other:		Sampling Equipment:	(Disposable Baile Bailer Pressure Bailer Grab Sample Other:		
Sterting Time: Sampling Time: Purging Flow Ra Did well de-wat  Time  10:01  10:09	16:	Cond	Sediment Descrip  If yes; Time:  Including Temper  Temper	tion: Volum	Odor:	
SAMPLE ID	(#) - CONTAINER  3 × VOAVIAL	LABOF REFRIG.	RATORY INFORM. FRESERV. TYPE HCL	ATION  LABORATORY  SEQUOIA	ANAL TPH(G)/btex/	YSES mtbe
COMMENTS:						

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Chevron  Chevron  Collity # 9-  Conductivity Date:  Sampler: FRADK T.  Amount Beiled  Fractor (VF)  Colling 2* = 0.17 6* = 1.50 * = 0.88			FIELD D	ATA SHEET	420	•
The contains and the co	ch	evron				<b></b>
Date:    Conductivity   Conduction   Conduction   Conduction   Conductivity   Conduction   Conductivity   Conduction   Conductivity   Conduct		0317	AVE.			<b></b>
Well ID  Well Condition:  Well Condition:  Well Condition:  Discontinuous and the product water and pr	dress:	0		·		<del></del>
Well ID  Well Condition:  O'K'  Amount Bailed  Thickness: 4 Hydrocarbon Thickness: 5 Column Thickness: 6 Column Thickness: 7 Column Thickness: 6 Column Thickness: 6 Column Thickness: 7 Column Thickness Thic	DIAKTE	, CA		Sampler	: FRAD	
Well ID MW-Y Well Condition: OK  Amount Bailed Item I	y• <u></u>					
Amount Bailed  16.00 ft. Volume  16.00 ft. Volume  17.00 ft. Volume  18.00 ft. Volum		MW-4_	Well Co	ondition:	016	
Thickness: O feet (processes)  Sampling  Equipment: (Disposable Bailer)  Bailer  Bailer  Bailer  Bailer  Bailer  Grab Sample  Other:  Other:  Thickness: O feet (processes)  Sampling  Equipment: (Disposable Bailer)  Bailer	Vi ilew		Hydroc	erb <b>on</b>	Amount Baile	ad A (Gallon
The Volume PH Conductivity Temperature D.O. ORP (myl.) (ppm)  Time Volume PH (sal.) (pp.)	il Diameter			ess:		
Purge (Disposable Bailer)  Bailer Stack Suction Grundfos Other:  Starting Time:  Purging Flow Rate:  Disposable Bailer  Starting Time:  Disposable Bailer  Stack Suction  Grundfos Other:  Conductivity Time  Volume  Disposable Bailer  Stack Pressure Bailer  Grab Sample Other:  Suppy  Weather Conditions:  Suppy  Weather Conditions:  Suppy  Weter Color:  Conductivity Time:  Conductivity Time:  Disposable Bailer  Bailer  Pressure Bailer  Suppy  Weather Conditions:  Suppy  Weather Conditions:  Suppy  Weter Color:  Conductivity Time:  Volume:  Disposable Bailer  Bailer  Pressure Bailer  Grab Sample  Other:  Other:  Conductivity Time:  Volume:  Disposable Bailer  Bailer  Suppy  Weather Conditions:  Suppy  Weather Conditions:  Suppy  Wester Color:  Conductivity Time:  Volume:  Disposable Bailer  Bailer  Pressure Bailer  Grab Sample  Other:  Conductivity Time:  Disposable Bailer  Bailer  Pressure Bailer  Grab Sample  Other:  Conductivity Time:  Disposable Bailer  Bailer  Pressure Bailer  Grab Sample  Other:  Conductivity Time:  Disposable Bailer  Bailer  Pressure Bailer  Grab Sample  Other:  Conductivity Time:  Disposable Bailer  Bailer  Fressure Bailer	tal Depth			···	_	
Purge (Disposable Bailer) Sampling Equipment: Beiler Stack Pressure Bailer Pressure Bailer Grab Sample Other: Other: Starting Time: 10:24 Weather Conditions: SUPLY Seampling Flow Rate: 10:38 Water Color: CLOUDY Lary Odor: 4CS Did well de-water? 10:44 Conductivity Temperature D.O. ORP Alkalinity (mg/L) (mg/L) (mg/L) (mg/L) (ppm) 10:27 (gal.) 7.44 207 70.5 10:32 3.0 7.27 197 70.5 197 70.2 SAMPLE ID (#) CONTAINER REFRIG. PRESERV. TYPE LABORATORY IPHIGIAtex/mitbe	epth to Water		<u> </u>			
Purge (Disposable Bailer) Bailer Stack Suction Grundfos Other:  Sterting Time: Purging Flow Rate: Purging Flow Rate: Purging Flow Rate: Purging Volume Did well de-water?  Did well de-water?  Did 20 7.42  Did 20 7.	• .	/ / 7	\ <b>)</b>	1.13. x 3 (case vo	lume) = Estimated Purg	s Volume: 3.40 tos
Purge (Disposable Bailer) Bailer Stack Pressure Bailer Stack Suction Grundfos Other:  Starting Time: 10:24 Weather Conditions: SUPPY  Starting Time: 10:38 Water Color: CLOUDY Lacy Odor: YCS  Purging Flow Rate: You com. Sediment Description: SILTY  Did well de-water? You If yes; Time: Yolume: Galland (mg/L) (mv) (ppm)  10:27 10:30 7.41 207 70.5  10:30 3.0 7.27 197 70.5  LABORATORY INFORMATION  SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY TPHG/btex/mtbe					•	
Stack Suction Grundfos Other:  Sterting Time: Stert						er)
Suction Grundfos Other:  Starting Time: 10:24 Weather Conditions: SUPPY  Starting Time: 10:38 Weather Color: CLOUDY Largy Odor: YES  Suppling Time: No. 38 Sediment Description: SILTY  Surging Flow Rate: PA com. Sediment Description: SILTY  Did well de-water? No. 16 yes; Time: Volume: 10s  Time Volume pH Conductivity Temperature D.O. ORP Alkalini (mgl.) (mgl.) (myl) (ppm)  10:27 (pp. 30 2.0 7.34 207 70.5 10.32 3.0 7.27 197 70.2 197	quipment:				Bailer • Pressure Bailer	
Other:			•		Grab Sample	
Starting Time: 10:24 Weather Conditions: SUPPY Sampling Time: 10:38 Water Color: CLOUDY Leasy Odor: 4CS Purging Flow Rate: 10 Sediment Description: SILTY Did well de-water? 10 If yes; Time: Volume: 10s  Time Volume pH Conductivity Temperature D.O. ORP Alkalini (mg/L) (my/L) (ppm)  10:27 (sal.) 7.42 207 7.5 (mg/L) (my/L) (ppm)  10:30 2.0 7.34 203 70.5  10:32 3.0 7.27 197 70.2  LABORATORY INFORMATION  SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES					Other:	
Weather Conditions:    O:38	•	Other:				
Sampling Time:    O:38	<u> </u>			Vesther Condition		
Sampling Time:  Purging Flow Rate:  Purging Fl	Starting Time: -		`	Noter Color: C	oury leney	Odor: YES
Did well de-water?   NO	Sampling Time:			rediment Descript	tion: \$14	<u>-TY</u>
Time	Purging Flow Re	nte:			3 4 - 1	ie:
Time Volume pH Conductivity Temperature D.O. ORP Alkaling (gal.) 7.42 207 70.5 (mg/L) (mV) (ppm)  10: 27	-	4.4		irγes; Inne		·
Time Volume (gal.) 7.42 207 70.5  10: 27 (0 7.42 207 70.5  10: 30 2.0 7.34 203 70.5  10: 32 3.0 7.27 197 70.2  LABORATORY INFORMATION  SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY TPH(G)/btex/mtbe			Cond	uctivity Tempe		
10: 27	Time		umh	02/cm 4100 -F	) (mg/L)	(1114) (FF.
10: 30 2.0 7.30 197 70.2  10: 32 3.0 7.27 197 70.2  LABORATORY INFORMATION  SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY TPH(G)/btex/mtbe	10:27 -	7.42		<u> </u>	2.5	
LABORATORY INFORMATION  SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY TPH(G)/btex/mtbe	10:30					
LABORATORY INFORMATION  SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES  Y UC) SEQUOIA TPH(G)/btex/mtbe		3.0 7.27	<u></u>	<u> </u>	<u> </u>	
SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATOR.  TPH(G)/btex/mtbe						
SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATOR.  TPH(G)/btex/mtbe				<u> </u>		
SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATOR.  TPH(G)/btex/mtbe						<u>, — — — — — — — — — — — — — — — — — — —</u>
SAMPLE ID (#) - CONTAINER REFRIG. PRESERV. TYPE LABORATOR.  TPH(G)/btex/mtbe		<u></u>	LABOR	ATORY INFORMA	ATION	ANALYSES
Y HCI SECONIA	CAMBIEID	(#) - CONTAINER		PRESERV. TYPE	LABORATOIT	
MW- \( \tau_{\text{order}} \)			Υ.	HCL	SEQUOIA	
	MW- 7	<u> </u>			<del> </del>	
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	COMMENTS:					=

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Chevron Prod P.O. BOX ( Son Ramon, C FAX (925)84	5004 A 945	o. 33	Consulto Consulto Addi	Facility Number Facility Address and Project Number GE 6747	ber 38 ITLER SIERR	6420 -RYAN A COU	I INC	SUITI	E J,	DUBL	IN, C		- L - L 568 L	abarator oberator abarator	ry Name ry Servic ry Servic Collecte	(Phan e Orde	SEQU	TOM 25) 8 01A	42-81 FR	[N] [			ואסאו
				(Pi	one) 92						3-331			Signature WA (	<u>'</u> □ NW	/ Sei	ries	☐ C		] UT	IDA	но	Remorks
Sample Number	Number of Containers	Watrix S = Soil A = Air W = Water C = Charcog	Sample Preservation	Date/Time	8020 + 8015)	BTEX + TPH CAS (8020 + 8015)							(A)		ITBE/Naph.	TPH - HCIO	TPH-D Extended						Lab Sample No.
	ì	W	HcT	8/23/01	X			01.	4								<u> </u>	<del> </del> -	ļ <del></del>	<del> </del>			
								A ***								<u></u>	<del> </del>	<del> </del>	<del>                                     </del>	-			
MW-1	3		-	946	x			02	A: -	C						<u> </u>							
MW-3	3	-		1014	X		-	04	1			<b></b>								<u> </u>	<del> </del>	-	
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7-l-	Tee	<u></u>		Organization G-R INC.	5 2 Date/			W/A	By (Sian	2111 2010re)			<i>qu</i> 6 enizatio		8/27 ote/Ilme		Iced		1		,	24 Hrs. 48 Hrs. 5 Days	
Refinquished By			<u>-</u>	Organization Organization	Date/						By (Sign	noture)	<del></del> .	00	ote/Time		lced	Y/N		•	_1	10 Days Contrac	`



10 September, 2001

Deanna L. Harding Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin, CA 94568

RE: Chevron

Sequoia Report: W108481

Enclosed are the results of analyses for samples received by the laboratory on 27-Aug-01 16:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Charlie Westwater Project Manager

CA ELAP Certificate #1271



404 N. Wiget Lane Walnut Creek, CA 94598 (925) 988-9600 FAX (925) 988-9673 www.sequoialabs.com

Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568 Project: Chevron

Project Number: Chevron # 9-0517 Project Manager: Deanna L. Harding Reported: 10-Sep-01 07:37

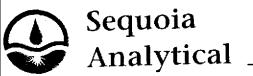
### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	W108481-01	Water	23-Aug-01 00:00	27-Aug-01 16:00
MW-2	W108481-02	Water	23-Aug-01 09:46	27-Aug-01 16:00
MW-3	W108481-03	Water	23-Aug-01 10:14	27-Aug-01 16:00
MW-4	W108481-04	Water	23-Aug-01 10:38	27-Aug-01 16:00

Sequoia Analytical - Walnut Creek

Charlie Westwater, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Gettler Ryan, Inc. - Dublin

6747 Sierra Court Suite J Dublin CA, 94568 Project: Chevron

Project Number: Chevron # 9-0517

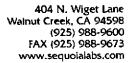
Project Manager: Deanna L. Harding

Reported:

10-Sep-01 07:37

## Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT Sequoia Analytical - Walnut Creek

Analyte	Result	porting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (W108481-01) Water Sa	mpled: 23-Aug-01 00:00	Receive	d: 27-Au	ıg-01 16:00			<u></u> .		
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1		31-Aug-01	31-Aug-01	EPA 8015M/8020	
Benzene	ND	0.50	n	n		ħ	11	<b>B</b> E	
Toluene	ND	0.50	н	н	h	11	n		
Ethylbenzene	ND	0.50	Ħ	н	p	II .	*	**	
Xylenes (total)	ND	0.50	H	n	H	11	п	н	
Methyl tert-butyl ether (MTBE)	ND	2.5	11	**	v	"	H	n	
Surrogate: a,a,a-Trifluorotoluene		96.3 %	70-	-130	"	,,	н	,,	
MW-2 (W108481-02) Water Sa	mpled: 23-Aug-01 09:46	Receive	d: 27-Au	g-01 16:00					
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1	1H30003	31-Aug-01	31-Aug-01	EPA 8015M/8020	
Benzene	ND	0.50	77	11	11	н	H	"	
Toluene	ND	0.50	P	Ħ	n	44	π	H	
Ethylbenzene	ND	0.50	15		**	11	11	n	
Xylenes (total)	ND	0.50	н	n	n	н		•	
Methyl tert-butyl ether (MTBE)	ND	2.5	н	u.	++	"	W	**	
Surrogate: a,a,a-Trifluorotoluene		93.0 %	70	-130	"		"	Ħ	
MW-3 (W108481-03) Water Sa	mpled: 23-Aug-01 10:14	Receive	d: 27-A	ıg-01 16:00	)				
Purgeable Hydrocarbons (C6-C1		1000	ug/l	20	1H30003	31-Aug-01	31-Aug-01	EPA 8015M/8020	
Benzene	48	10	н	19	h	**	11	Hr.	
Toluene	ND	10	**	H	**	n	n	n	
Ethylbenzene	ND	10	*	Ħ		Ħ	*	11	
Xylenes (total)	ND	10		π	tı	н	**	н	
Methyl tert-butyl ether (MTBE)	100	50	**	11	п	**	11	tf	Q-2
Surrogate: a,a,a-Trifluorotoluene		119 %	70	)-130	#	n	н	"	





Gettler Ryan, Inc. - Dublin

Project: Chevron

6747 Sierra Court Suite J

Project Number: Chevron # 9-0517

Reported: 10-Sep-01 07:37

Dublin CA, 94568

Project Manager: Deanna L. Harding

## Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (W108481-04) Water Sample	ed: 23-Aug-01 10:38	Receive	d: 27-Au	g-01 16:00					
Purgeable Hydrocarbons (C6-C12)	2700	1000	ug/l	20	1H30003	31-Aug-01	31-Aug-01	EPA 8015M/8020	
Benzene	250	10	h	19	H	п	И	H	
Toluene	44	10	н	U	11	**	n	7	
Ethylbenzene	21	10	H	*1	"	H	**	u	
Xylenes (total)	72	10	#	TP	*		н	н	
Methyl tert-butyl ether (MTBE)	130	50	u	ėt.	47	H		h	
Surrogate: a,a,a-Trifluorotoluene		144 %	70	-130	н	,,	"	"	S-04



Gettler Ryan, Inc. - Dublin

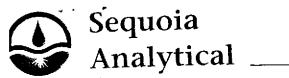
6747 Sierra Court Suite J Dublin CA, 94568 Project: Chevron

Project Number: Chevron # 9-0517 Project Manager: Deanna L. Harding Reported: 10-Sep-01 07:37

ality Control

## Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch 1H30003 - EPA 5030B P/T											
Blank (1H30003-BLK1)	Prepared & Analyzed: 30-Aug-01										
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l		•						
Benzene	ND	0.50	н								
Toluene	ND	0.50	II .								
Ethylbenzene	ND	0.50	Ħ								
Xylenes (total)	ND	0.50	W								
Methyl tert-butyl ether (MTBE)	ND	2.5									
Surrogate: a,a,a-Trifluorotoluene	25.8	<del></del>	"	30.0		86.0	70-130				
Blank (1H30003-BLK2)	Prepared: 31-Aug-01 Analyzed: 06-Sep-01										
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l								
Benzene	ND	0.50	"								
Toluene	ND	0.50	H								
Ethylbenzene	ND	0.50									
Xylenes (total)	ND	0.50									
Methyl tert-butyl ether (MTBE)	ND	2.5	77								
Surrogate: a,a,a-Trifluorotoluene	26.1		**	30.0	•	87.0	70-130				
LCS (1H30003-BS1)				Prepared	& Analyz	ed: 30-Au	ıg-01				
Benzene	23.6	0.50	ug/l	20.0		118	70-130				
Toluene	18.7	0.50	n .	20.0		93.5	70-130				
Ethylbenzene	19.8	0.50	н	20.0		99.0	70-130				
Xylenes (total)	56.8	0.50	**	60.0		94.7	70-130				
Surrogate: a,a,a-Trifluorotoluene	27,7		fr	30.0		92.3	70-130			· · · · ·	
LCS (1H30003-BS2)	Prepared: 31-Aug-01 Analyzed: 06-Sep-01										
Benzene	19.4	0.50	ug/i	20.0		97.0	70-130			~	
Toluene	18.2	0.50		20.0		91.0	70-130				
Ethylbenzene	17.7	0.50		20.0	•	88.5	70-130				
Xylenes (total)	57.2	0.50	*	60.0		95.3	70-130				
Surrogate: a,a,a-Trifluorotoluene	28.5	······································		30.0		95.0	70-130				



Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Project: Chevron

Project Number: Chevron # 9-0517

Reported: 10-Sep-01 07:37

Dublin CA, 94568

Project Manager: Deanna L. Harding

## Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1H30003 - EPA 5030B P/T										
Matrix Spike (1H30003-MS1)	Source: W108442-02			Prepared & Analyzed: 30-Aug-01				_		
Benzene	22.9	0.50	ug/l	20.0	ND	114	70-130			
Toluene	19.1	0.50	*	20.0	ND	95.5	70-130			
Ethylbenzene	19.1	0.50	"	20.0	ND	95.5	70-130			
Xylenes (total)	60.0	0.50	Ħ	60.0	ND	100	70-130			
Surrogate: a,a,a-Trifluorotoluene	27.3		"	30.0		91.0	70-130			
Matrix Spike Dup (1H30003-MSD1)	So	Source: W108442-02			Prepared & Analyzed: 30-Aug-01					
Benzene	22.4	0.50	ug/l	20.0	ND	112	70-130	2.21	20	
Toluene	18.5	0.50	11	20.0	ND	92.5	70-130	3.19	20	
	18.9	0.50	*	20.0	ND	94.5	70-130	1.05	20	
Ethylbenzene Xylenes (total)	57.2	0.50	"	60.0	ND	95.3	70-130	4.78	20	
Surrogate: a,a,a-Trifluorotoluene	27.4		п	30.0		91.3	70-130			



404 N. Wiget Lape Walnut Creek, CA 94598 (925) 988-9600 FAX (925) 988-9673 www.sequoialabs.com

Gettler Ryan, Inc. - Dublin

6747 Sierra Court Suite J Dublin CA, 94568

Project: Chevron

Project Number: Chevron # 9-0517 Project Manager: Deanna L. Harding Reported:

9-Sep-01 07:37

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### **Notes and Definitions**

The opening calibration verification standard was outside acceptance criteria by 5.5%. Althou Q-28 verified the accuracy of the batch, this should be considered in evaluating the data for its intenc The surrogate recovery for this sample is outside control limits due to interference from the samp S-04 Analyte DETECTED DET Analyte NOT DETECTED at or above the reporting limit ND Not Reported

dry

Sample results reported on a dry weight basis

RPD

NR

Relative Percent Difference