

**Alame**da County

September 30, 2002

G-R #386420

OCT 1 8 2002

TO:

Mr. James Brownell

Delta Environmental Consultants, Inc. 3164 Gold Camp Drive, Suite 200

Rancho Cordova, California 95670

Environmentar enestraich

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 17, 2002	Groundwater Monitoring and Sampling Report Second Semi-Annual - Event of August 5, 2002

#### **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 15*, 2002, 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, 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 17, 2002 G-R Job #386420

Ms. Karen Streich Chevron Products Company P.O. Box 6004-San Ramon, CA 94583

RE: Second Semi-Annual Event of August 5, 2002

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

3900 Piedmont Avenue Oakland, California

Dear Ms. Streich:

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.

No. 6882

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

Sincerely,

Deanna L. Harding Project Coordinator

Doublas I. Lee

Senior Geologist, R.G. No. 6882

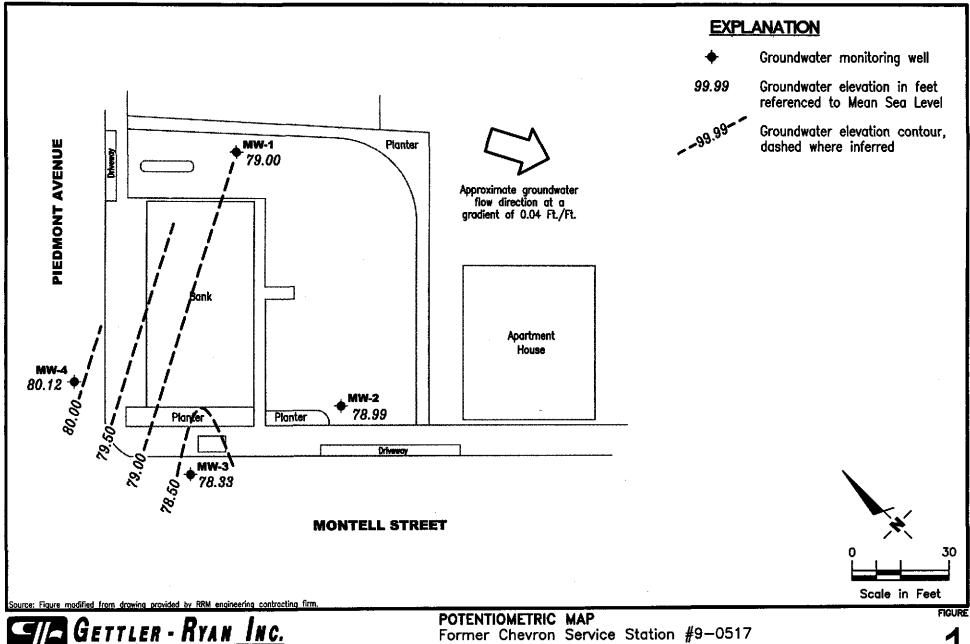
Figure 1:

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



6747 Sierra Ct., Suite J (925) 551-7555

3900 Piedmont Avenue Oakland, California

PROJECT NUMBER 386420

REVIEWED BY

DATE August 5, 2002

REVISED DATE

FILE NAME: P:\ENVIRO\CHEVRON\9-0517\Q02+9-0517.DWG | Layout Tab: Pot3

**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	<b>T</b> 1	E	X	MTBE
ATE	(ft.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
∕IW-1									
08/03/98	87.89	75.46	12.43	<50	<0.5	<0.5	<0.5	<0.5	<2.5
1/23/98	87.89	78.84	9.05	<50	<0.5	<0.5	< 0.5	< 0.5	<2.0
)2/08/99	87.89	81.39	6.50	<50	< 0.5	<0.5	<0.5	<0.5	<2.5
)5/07/99	87.89	80.76	7.13	<50	<0.5	<0.5	<0.5	<0.5	<5.0
)8/23/99	87.89	78.74	9.15	<50	< 0.5	<0.5	<0.5	<0.5	<2.5
1/03/99	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
5/15/01	87.89	80.18	7.71	<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50
8/23/01	87.89	DRY						<b></b>	
02/25/02	87.89	81.18	6.71	<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5
8/05/02	87.89	79.00	8.89	<50	<0.50	<0.50	<0.50	<1.5	<2.5
MW-2									
8/03/98	86.09	74.75	11.34	<50	<0.5	<0.5	<0.5	<0.5	3.4
1/23/98	86.09	79.19	6.90	<50	<0.5	<0.5	<0.5	<0.5	<2.0
2/08/99	86.09	80.86	5.23	<50	<0.5	<0.5	<0.5	< 0.5	<2.5
5/07/99	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
1/03/99	86.09	78.80	7.29	<50	<0.5	<0.5	<0.5	< 0.5	<2.5
2/15/00	86.09	81.60	4.49	<50	<0.5	<0.5	<0.5	<0.5	- <5.0
5/12/00	86.09	80.19	5.90	_4,000 <sup>3</sup>	240	26	100	76	<100
7/31/00	86.09	79.51	6.58	<50	< 0.50	<0.50	<0.50	<0.50	<2.5
0/30/00	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
5/15/01	86.09	79.79	6.30	<50.0	< 0.500	<0.500	< 0.500	< 0.500	<2.50

Table 1
Groundwater Monitoring Data and Analytical Results
Former Chevron Service Station #9-0517

Former Chevron Service Station #9-051
3900 Piedmont Avenue
Oakland, California

WELL ID/	TOC	GWE	DTW	TPH-G	В	T	E	X	МТВЕ
DATE	(ft.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
					(PPO)	(PPO)	(PPO)	φρο	(PPO)
MW-2 (cont)									
08/23/01	86.09	78.81	7.28	<50	< 0.50	<0.50	<0.50	< 0.50	<2.5
02/25/02	86.09	80.48	5.61	<50	<0.50	< 0.50	< 0.50	<1.5	<2.5
08/05/02	86.09	78.99	7.10	<50	<0.50	<0.50	< 0.50	<1.5	<2.5
MW-3									
08/03/98	86.28	74.20	12.08	4000	160	<5.0	<5.0	73	180
1/23/98	86.28	78.59	7.69	4000	67.7	7.56	17.1	24.5	41.2
2/08/99	86.28	80.01	6.27	<50	<0.5	<0.5	<0.5	<0.5	<2.5
)5/07/99	86.28	79.32	6.96	1800	53.6	8.96	33	18.6	21.4
8/23/99	86.28	78.36	7.92	3970	155	24	88.8	39.8	185
1/03/99	86.28	78.36	7.92	3320	108	19.9	98.4	44.8	<25
2/15/00	86.28	80.54	5.74	779	26.7	3.82	15.4	4.24	<12.5
5/12/00	86.28	79.52	6.76	$12,000^3$	3,100	120	980	1,400	820
07/31/00	86.28	78.98	7.30	$1,200^3$	32	<5.0	11	7.3	39
10/30/00	86.28	79.26	7.02	3,300 <sup>4</sup>	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
02/25/02	86.28	79.55	6.73	3,100	27	2.1	4.8	6.6	<2.5
8/05/02	86.28	78.33	7.95	4,100	87	21	90	47	21
MW-4	_								
08/03/98	87.22	74.30	12.92	1900	110	12	<0.5	55	130
1/23/98	87.22	77.82	9.40	4080	136	17.8	37.2	30.1	51.8
2/08/99 <sup>1</sup>	87.22	79.40	7.82	2900	150	16	<5.0	15	230/30.7
5/07/99	87.22	79.80	7.42	6050	161	<25	39.8	36.9	<250/30.2
18/23/99	87.22	77.83	9.39	3930	203	37.6	58.6	42.2	255
1/03/99	87.22	77.41	9.81	5350	324	44.7	91.5	56.1	<50
2/15/00	87.22	79.50	7.72	4080	161	_ 27.7	31.1	39.1	73.9
)5/12/00	87.22	79.31	7.91	3,600 <sup>3</sup>	170	27	49	64	170

Table 1
Groundwater Monitoring Data and Analytical Results
Former Chevron Service Station #9-0517

Former Chevron Service Station #9-05 3900 Piedmont Avenue Oakland, California

WELL ID/	TOC	GWE	DTW	TPH-G	В	T	E	X	MTBE
DATE	(ft.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
AW-4 (cont)									
07/31/00	87.22	78.57	8.65	$2,900^3$	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	$2,140^3$	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
02/25/02	87.22	79.42	7.80	4,100	100	18	27	39	<10
08/05/02	87.22	80.12	7.10	4,100	130	18	50	20	<10
TRIP BLANK									
8/03/98		<b></b> '		<50	< 0.5	<0.5	<0.5	<0.5	<2.5
1/23/98				<50	< 0.5	<0.5	<0.5	<0.5	<2.0
2/08/99				<50	<0.5	< 0.5	<0.5	<0.5	<2.5
15/07/ <del>99</del>	***			<50	< 0.5	<0.5	<0.5	<0.5	<5.0
8/23/99				<50	<0.5	<0.5	<0.5	<0.5	<2.5
1/03/99				<50	< 0.5	<0.5	<0.5	<0.5	<2.5
2/15/00		<del></del>		<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/12/00				<50	< 0.50	< 0.50	< 0.50	<0.50	<2.5
7/31/00		<del></del> -	**	<50	< 0.50	<0.50	< 0.50	<0.50	<2.5
0/30/00				<50.0	< 0.500	< 0.500	< 0.500	<1.50	<2.50
2/27/01				<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50
5/15/01				<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50
8/23/01	<del></del>			<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
)A									
2/25/02		<del></del> .		<50	< 0.50	<0.50	<0.50	<1.5	- <2.5
8/05/02			••	_ <50	<0.50	< 0.50	< 0.50	<1.5	<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

TPH-G = Total Petroleum Hydrocarbons as Gasoline

MTBE = Methyl tertiary butyl ether

(ft.) = Feet

B = Benzene

(ppb) = Parts per billion

GWE = Groundwater Elevation

T = Toluene

-- = Not Measured/Not Analyzed

(msl) = Mean sea level

E = Ethylbenzene

QA = Quality Assurance

DTW = Depth to Water

X = Xylenes

- Confirmation run.
- 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.



Client/Facility #:		ico #9-0					
Site Address:	3900 Piedmo	nt Aven	ue	Event Date:	08/0	s/or	
City:	Oakland, CA			Sampler:	Du	·	<u>,,</u>
		<del></del>		<del></del>			
Well ID	MW- /		Well Condition:	OK.			
Well Diameter	in.	<del></del>	Hydrocarbon			t Bailed	<b></b>
Total Depth	16.01 ft.		Thickness:	ft.			<del>-⊘</del> gal
Depth to Water	<u>4.89</u> fl.		Volume Factor (V	3/4"= 0.02 =) 4"= 0.66	1"= 0.04 5"= 1.02	2°=0.17 6°= 1.50	
	<u>7./2</u> xv	<sub>/F</sub>	= 1.21	<u> </u>	Estimated Pu	rge Volume:	3.5 gal
Purge	Disposable Baile	<b>,</b> p		Sampling	Disposab	le Bailer	./
Equipment:	Stainless Steel E			Equipment:	Pressure		
	Stack Pump				Discrete	1	
	Suction Pump	_		1			
	Grundfos						
	Other:						
	ate: / 453 / 0: ate: — gpm.	Sedin	ather Conditions  Water Color  nent Description  me:	Clear			Mgkt
Sample Time/Da Purging Flow Ra Did well de-wate Time	ate: /453/09 ate:gpm. er?w  Volume	Sedin	Water Color: ment Description: me: Conductivity	Volume:	ga	al. .o.	ORP
Sample Time/Da Purging Flow Ra Did well de-wate Time (2400 hr.)	ate: 1453 10. ate: — gpm. er? W	Sedin If yes, Ti	2 Water Color: nent Description: me: Conductivity (u mhos/cm)	Volume:	ga	al.	
Sample Time/Da Purging Flow Ra Did well de-wate	ate: /453/09 ate:gpm.  volume (gal.)	Sedim Sedim If yes, Ti	Water Color: ment Description: me: Conductivity	Volume: Temperature (C/F) Z-2.5	ga	al. .o.	ORP
Sample Time/Da Purging Flow Ra Did well de-wate Time (2400 hr.)	volume (gal.)	Sedin Sedin If yes, Ti pH	2 Water Color: nent Description: me: Conductivity (u mhos/cm) 328	Volume:	ga	al. .o.	ORP
Sample Time/Da Purging Flow Ra Did well de-wate Time (2400 hr.)	volume (gal.)	Sedin Sedin If yes, Ti pH 2.54	2 Water Colors nent Descriptions me: Conductivity (u mhos/cm) 328 332	Volume: Temperature (C/F) Z-2.5	ga	al. .o.	ORP
Sample Time/Da Purging Flow Ra Did well de-wate Time (2400 hr.)	volume (gal.)	Sedin Sedin If yes, Ti pH 2.54	2 Water Colors nent Descriptions me: Conductivity (u mhos/cm) 328 332	Volume: Temperature (C/F) Z-2.5	ga	al. .o.	ORP
Sample Time/Da Purging Flow Ra Did well de-wate Time (2400 hr.)	volume (gal.)	Sedin If yes, Ti pH -2.59 3.53 2.48	2 Water Colors nent Descriptions me: Conductivity (u mhos/cm) 328 332	Volume: Temperature (C/F) Z-2.5 Z-2.5	ga	o. g/L)	ORP (mV)
Sample Time/Da Purging Flow Ra Did well de-wate  Time (2400 hr.)  / 439 / 440 / 447	volume (gal.)  (#) CONTAINER	Sedin If yes, Ti  pH  2.54  3.53  2.48  LA  REFRIG.	2 Water Colors nent Descriptions me: Conductivity (umhos/cm) 328 332 327 327  BORATORY INF	Volume:	ga D. (mg	ANA	ORP (mV)
Sample Time/Da Purging Flow Ra Did well de-wate Time (2400 hr.) 1440 1447	volume (gal.)	Sedin If yes, Ti pH -2.59 5.53 2.48	Water Colors nent Descriptions me: Conductivity (umhos/cm) 328 332 324 324	Volume:	ga D. (mg	ANA	ORP (mV)
Sample Time/Da Purging Flow Ra Did well de-wate  Time (2400 hr.)  / 439 / 440 / 447	volume (gal.)  (#) CONTAINER	Sedin If yes, Ti  pH  2.54  3.53  2.48  LA  REFRIG.	2 Water Colors nent Descriptions me: Conductivity (umhos/cm) 328 332 327 327  BORATORY INF	Volume:	ga D. (mg	ANA	ORP (mV)
Sample Time/Da Purging Flow Ra Did well de-wate  Time (2400 hr.)  / 439 / 440 / 447  SAMPLE ID	volume (gal.)  (#) CONTAINER	Sedin If yes, Ti  pH  2.54  3.53  2.48  LA  REFRIG.	2 Water Colors nent Descriptions me: Conductivity (umhos/cm) 328 332 327 327  BORATORY INF	Volume:	ga D. (mg	ANA	ORP (mV)
Sample Time/Da Purging Flow Ra Did well de-wate  Time (2400 hr.)  / 439 / 440 / 447  SAMPLE ID	volume (gal.)  (#) CONTAINER	Sedin If yes, Ti pH 2.59 5.53 2.48 LA REFRIG. YES	Water Colors nent Descriptions me: Conductivity (umhos/cm) 328 332 324  BORATORY INF PRESERV. TYPE HCL	Volume:	ga D. (mg	ANA	ORP (mV)



lient/Facility#			<del></del>		386420					
ite Address:	3900 Piedmo	ont Avenue	9	Event Date:	0405/0-					
ity:	Oakland, CA	\		Sampler: DM						
/ell ID	MW-z	V	Vell Condition	on: OK-						
Vell Diameter	<b>2</b> in	•	ydrocarbon		Amount Bailed					
otal Depth	1/0.61 ft.	=	hickness:	- <b>∕-</b> ft.						
epth to Water		•	Volume	3/4"= 0.02	1"= 0.04 (2")= 0.					
		•	Factor (V		5"= 1.02 6"= 1.					
••,	<u>451</u> ×	vF <u>.LZ</u>	= 1.61	x3 (case volume) = E	stimated Purge Volum	ie: <u>5</u> ga				
urge	Disposable Baile	er		Sampling	Disposable Bailer					
quipment:	Stainless Steel I			Equipment:	Pressure Bailer					
•	Stack Pump				Discrete Bailer	<u></u>				
	Suction Pump				Other:					
	Grundfos				****					
	Other:									
ample Time/Da urging Flow Ra	ate: /522-10	Sedimen	er Conditions: Water Color: It Description:	clear	Odor	. No				
urging Flow Ra	ate: /522-10a ate:gpm. er?  Volume (gal.)	Sedimen If yes, Time  pH  7.60  7.56	Water Color: it Description:	clear	Odo	ORP (mV)				
ample Time/Daurging Flow Raid well de-water (2400 hr.)	ate: /522-10a ate:gpm. er?  Volume (gal.)	Sedimen If yes, Time  pH  7.60  7.56	Water Color: It Description: Conductivity (u mhos/cm) 3 2 2	Clear   Clea	gal.	ORP				
ample Time/Daurging Flow Raid well de-water (2400 hr.)  /\$// /\$//3 /\$//5	ate: /522-10. ate:gpm. er?vo  Volume (gal.)	9H 7.60 2.50 LABO	Water Color: at Description: Conductivity (umhos/cm) 3 7 2 3 6 0  RATORY INF	Clear  Volume:  Temperature (C/F)  2 4. 2-  2 3. 4  2 3. 4  DRMATION	gal.  D.O. (mg/L)	ORP (mV)				
ample Time/Daurging Flow Raid well de-water (2400 hr.)	volume (gal.)  2  (#) CONTAINER	9H 7.60 2.50 LABO	Water Color: It Description: Conductivity (u mhos/cm) 3 4 2 3 6 0  RATORY INF	Volume: Temperature (C/F) 2 4. 2- 2 3. 4 2 3. 4  ORMATION LABORATORY	gal.  D.O. (mg/L)	ORP (mV)				
ample Time/Daurging Flow Raid well de-water (2400 hr.)  /\$// /\$//3 /\$//5/	ate: /522-10. ate:gpm. er?vo  Volume (gal.)	Sedimen If yes, Time  pH  7.60  7.50  LABO REFRIG. PF	Water Color: at Description: Conductivity (umhos/cm) 3 7 2 3 6 0  RATORY INF	Clear  Volume:  Temperature (C/F)  2 4. 2-  2 3. 4  2 3. 4  DRMATION	gal.  D.O. (mg/L)	ORP (mV)				
ample Time/Daurging Flow Raid well de-water (2400 hr.)  /\$// /\$//3 /\$//5/	volume (gal.)  2  (#) CONTAINER	Sedimen If yes, Time  pH  7.60  7.50  LABO REFRIG. PF	Water Color: It Description: Conductivity (u mhos/cm) 3 4 2 3 6 0  RATORY INF	Volume: Temperature (C/F) 2 4. 2- 2 3. 4 2 3. 4  ORMATION LABORATORY	gal.  D.O. (mg/L)	ORP (mV)				
ample Time/Daurging Flow Raid well de-water (2400 hr.)  /\$// /\$//3 /\$//5/	volume (gal.)  2  (#) CONTAINER	Sedimen If yes, Time  pH  7.60  7.50  LABO REFRIG. PF	Water Color: It Description: Conductivity (u mhos/cm) 3 4 2 3 6 0  RATORY INF	Volume: Temperature (C/F) 2 4. 2- 2 3. 4 2 3. 4  ORMATION LABORATORY	gal.  D.O. (mg/L)	ORP (mV)				
ample Time/Daurging Flow Raid well de-water (2400 hr.)  /\$/ / /\$/ 3 /\$/ 5  SAMPLE ID  MW- Z	volume (gal.)  2  (#) CONTAINER	Sedimen If yes, Time  pH  7.60  7.50  LABO REFRIG. PF	Water Color: It Description: Conductivity (u mhos/cm) 3 4 2 3 6 0  RATORY INF	Volume: Temperature (C/F) 2 4. 2- 2 3. 4 2 3. 4  ORMATION LABORATORY	gal.  D.O. (mg/L)	ORP (mV)				



# GETTLER-RYAN INC.

Client/Facili	ity #: _	ChevronTe	xaco #9-(	U\$17	Job Number:	386420	
Site Addres	ss: 🛓	3900 Piedn	ont Aver	nue	Event Date:	oslaston	
City:	_5	Oakland, C	A		Sampler:	D14.	
		NAVA	<del></del>	144 B Q B B		<u> </u>	······
Vell ID		MW- 5	<del></del>	Well Condition:		O.K.	
Well Diame	_	-	<u>n.</u>	Hydrocarbon		Amount Bailed	
Total Depth	_		<u>ft.</u>	Thickness:	ft.	(product/water):	gal.
Depth to Wa	ater _	2.95	<u>tt.</u>	Volume Factor (V	3/4"= 0.02 F) 4"= 0.66	1"= 0.04 (2"=)0.1 5"= 1.02 6"= 1.5	
•	-	9.64	xVF	7=1.63	x3 (case volume) = E	stimated Purge Volume	:gal.
ourge		Disposable Ba	iler _		Sampling	Disposable Bailer	
Equipment	t: 5	Stainless Stee	l Bailer		Equipment:	Pressure Bailer	
	5	Stack Pump	_			Discrete Bailer	
	\$	Suction Pump				Other:	
	(	Grundfos	_				
	(	Other:			•		
	ne/Date w Rate	: gpm	<u>&gt; s/<i>os/o</i> ₂</u> n. Sedir	ather Conditions: Water Color: ment Description: ime:	Olear		yes
Sample Tim Purging Flo	ne/Date ow Rate -water? ne Ohr.)	: <u>//24 /</u> : gpm	<u>&gt; s/<i>os/o</i> ₂</u> n. Sedir	Water Color: ment Description:	Olear		ORP (mV)
Sample Tim Purging Flor Did well de- Tim (2400	ne/Date ow Rate -water? ne Ohr.)	Volume (gal.)	Sedir Sedir If yes, Ti	Water Color: ment Description: ime: Conductivity (umhos/cm) 464 474	Volume: Temperature (C/F) ZZ.4 ZZ.1	gal.	ORP
Sample Tim Purging Flor Did well de- Tim (2400	ne/Date ow Rate -water? ne Ohr.)	Volume (gal.)	2 8/05/02 Sedir If yes, Ti pH →2.27 →2.21	Water Color: ment Description: ime: Conductivity (umhos/cm) 464 474	Volume: Temperature (C/F) ZZ.4 ZZ.1 Z-1.5	gal.	ORP
Sample Tim Purging Flor Did well de- Tim (2400	ne/Date ow Rate -water? ne ohr.)	Volume (gal.)	pH 2.27 2.21	Water Color: ment Description: ime:  Conductivity (umhos/cm)  464  474  491	Volume:	D.O. (mg/L)	ORP
Sample Tim Purging Flor Did well de- Tim (2400	ne/Date ow Rate -water? ne ohr.)	Volume (gal.)  7  4  5	2.24 2.21 REFRIG.	Water Color: ment Description: ime:  Conductivity (umhos/cm)  464  494  444/	Volume:	gal.  D.O. (mg/L)	ORP (mV)
Sample Tim Purging Flor Did well de- Tim (2400 	ne/Date ow Rate -water? ne 0 hr.) 25	Volume (gal.)  2  4  (#) CONTAINER	2.24 2.21 REFRIG.	Water Color: ment Description: ime:  Conductivity (umhos/cm)  464  474  437  ABORATORY INF	Volume: Temperature (C/F) ZZ. 4 ZZ. /	gal.  D.O. (mg/L)	ORP (mV)
Sample Tim Purging Flor Did well de- Tim (2400 	ne/Date ow Rate -water? ne 0 hr.) 25	Volume (gal.)  2  4  (#) CONTAINER	2.24 2.21 REFRIG.	Water Color: ment Description: ime:  Conductivity (umhos/cm)  464  474  437  ABORATORY INF	Volume: Temperature (C/F) ZZ. 4 ZZ. /	gal.  D.O. (mg/L)	ORP (mV)
Sample Tim Purging Flor Did well de- Tim (2400 	ne/Date ow Rate -water? ne Ohr.)	Volume (gal.)  2  4  (#) CONTAINER	2.24 2.21 REFRIG.	Water Color: ment Description: ime:  Conductivity (umhos/cm)  464  474  437  ABORATORY INF	Volume: Temperature (C/F) ZZ. 4 ZZ. /	gal.  D.O. (mg/L)	ORP (mV)



# GETTLER-RYAN INC.

Client/Facility #:	ChevronTex	(aco #9-(	0517	Job Number:	386420	
Site Address:	3900 Piedm	ont Aver	nue	Event Date:	64/05/02	-
City:	Oakland, CA	4		Sampler:	DM.	
Well ID	MW- 4		Well Condition	ok.		
Well Diameter	2 in	<u>ı.</u>	Hydrocarbon		Amount Baile	d
Total Depth	16.61 ft	_	Thickness:	ft.	(product/water)	gal.
Depth to Water	<del>9</del> ./0 ft	<u>.</u>	Volume Factor (V	3/4"= 0.02 (F) 4"= 0.66	1"= 0.04 2" 5"= 1.02 6"=	0.17 3"= 0.38 1.50 12"= 5.80
	<u>9.51</u> ,	(VF <u>· / <del>)</del></u>	= /.61	x3 (case volume) = E	stimated Purge Volu	me: gal.
Purge	Disposable Bail	ler		Sampling	Disposable Baile	ar
Equipment:	Stainless Steel			Equipment:	Pressure Bailer	
	Stack Pump	_			Discrete Bailer	
	Suction Pump	_			Other:	
	Grundfos	_				
	Other:					
	ate: <u>/550 / p</u> ate: gpm.	Sedin	nent Description:	Clovas	Odd	or: <u>jes</u>
Sample Time/Da Purging Flow Ra Did well de-wate Time (2400 hr.)	ate: <u>/550 / p</u> ate: gpm.	Sedin If yes, Ti	water Color: nent Description: me: Conductivity (umhos/cm) 525	Volume:	Odd	ORP (mV)
Sample Time/Da Purging Flow Ra Did well de-wate  Time (2400 hr.)  1535	volume (gal.)	Sedin If yes, Ti	Water Color: nent Description: me: Conductivity (umhos/cm) 525	Volume:	gal.	ORP
Sample Time/Da Purging Flow Ra Did well de-wate Time (2400 hr.)	volume (gal.)	Sedin If yes, Ti	water Color: nent Description: me: Conductivity (umhos/cm) 525	Volume:	gal.	ORP
Sample Time/Da Purging Flow Ra Did well de-wate Time (2400 hr.) 1535	volume (gal.)	Sedin If yes, Ti	Water Color: nent Description: me: Conductivity (umhos/cm) 525	Volume:	gal.	ORP
Sample Time/Da Purging Flow Ra Did well de-wate Time (2400 hr.)	volume (gal.)	Sedin If yes, Ti	Water Color: nent Description: me: Conductivity (umhos/cm) 525	Volume:	gal.	ORP
Sample Time/Da Purging Flow Ra Did well de-wate  Time (2400 hr.)  1535	volume (gal.)	Feding Seding If yes, Ti	Water Color: nent Description: me: Conductivity (umhos/cm) 525	Volume:	gal.	ORP
Sample Time/Da Purging Flow Ra Did well de-wate  Time (2400 hr.)  / 5 3 5 / 5 5 7 / 5 10	volume (gal.)	Sedin If yes, Ti	Water Color: nent Description: me:  Conductivity (umhos/cm) 525 516	Volume:	gal.  D.O. (mg/L)	ORP
Sample Time/Da Purging Flow Ra Did well de-wate  Time (2400 hr.)  1535 1552 1540	volume (gal.)	Sedin If yes, Ti  pH  2.33  2.24	Water Color: nent Description: me:  Conductivity (umhos/cm) 525  520  516  BORATORY INFO	Volume:	gal.  D.O. (mg/L)	ORP (mV)
Sample Time/Da Purging Flow Ra Did well de-wate  Time (2400 hr.)  / 5 3 5 / 5 5 7 / 5 7 70  SAMPLE ID	volume (gal.)  2  (#) CONTAINER	Sedin If yes, Ti	Water Color: nent Description: me: Conductivity (umhos/cm) 525 520 516 BORATORY INFO	Volume:	gal.  D.O. (mg/L)	ORP (mV)
Sample Time/Da Purging Flow Ra Did well de-wate  Time (2400 hr.)  / 5 3 5 / 5 5/2 / 5 1/0  SAMPLE ID	volume (gal.)  2  (#) CONTAINER	Sedin If yes, Ti	Water Color: nent Description: me: Conductivity (umhos/cm) 525 520 516 BORATORY INFO	Volume:	gal.  D.O. (mg/L)	ORP (mV)
Sample Time/Da Purging Flow Ra Did well de-wate  Time (2400 hr.)  / 5 3 5 / 5 5/2 / 5 1/0  SAMPLE ID	volume (gal.)  2  (#) CONTAINER	Sedin If yes, Ti	Water Color: nent Description: me: Conductivity (umhos/cm) 525 520 516 BORATORY INFO	Volume:	gal.  D.O. (mg/L)	ORP (mV)
Sample Time/Da Purging Flow Ra Did well de-wate  Time (2400 hr.)  / 5 3 5 / 5 5/2 / 5 1/0  SAMPLE ID	volume (gal.)  2  (#) CONTAINER	Sedin If yes, Ti	Water Color: nent Description: me: Conductivity (umhos/cm) 525 520 516 BORATORY INFO	Volume:	gal.  D.O. (mg/L)	ORP (mV)
Sample Time/Da Purging Flow Ra Did well de-wate  Time (2400 hr.)  / 5 3 5 / 5 5 7 / 5 40  SAMPLE ID MW- 4/	volume (gal.)  2  (#) CONTAINER	Sedin If yes, Ti	Water Color: nent Description: me: Conductivity (umhos/cm) 525 520 516 BORATORY INFO	Volume:	gal.  D.O. (mg/L)	ORP (mV)

# Chevron California Region Analysis Request/Chain of Custody

4	<u>Lancaster</u>	Laboratories science.
70.	Where quality is a	a science.

Where quality is a science.	<u>cories</u>	1)8()=	102-00	Σ		,	Acct.	<b>#</b> :	<u>10</u>	19 <u>10</u>	$\sqrt{s}$	i ampl	-or L e #:_	ап <u>с</u> а:	<u>8</u>	157	200 C	)	) (	SCR#:		
• Whate quality is a science.				O					Г		<del></del>			yses						7 35	8181	80
Facility #: 9-0517 Job# 38	36420 G	lobal ID#	т060010	2248	T	Mati	rix	T					Pres	erval	ion (	Code	98			Preserv	ative Code	es
Site Address: 3900 PIEDMONT					-				77	#	g				+	_	+	+	-	H = HCI N = HNO <sub>3</sub>	T = Thios B = NaO	Н
Chevron PM: Karen Streich	Lead (	Consultant: D	elta/G-R		_			p	l		Cleanup		1							\$ = H <sub>2</sub> SO <sub>4</sub>	O = Othe	
Consultant/Office: G-R Inc 674	7 Sierra	Ct #J Du	blin CA	9456	8	Potable	ğ	Number of Containers	8021		□Silica Gel (									☐ J value repor	_	
Consultant Prj. Mgr.: Deanna L	Harding	(deanna@g	rinc.com	)	_	Po		ji ji	]802		Sign		İ							Must meet lo possible for 8		
Consultant Phone #: 925-551-7	7555	_ Fax #: <u>925</u> -	-551-789°	9		므	4	of C	8260	88	l Q			미						8021 MTBE Co	nfirmation	
Sampler: Pavid Ma				П				ğ			ğ	<u> </u> _	3468	7421				-		☐ Confirm high	est hit by 82	260
Service Order #:	DNo	on SAR:	·		Sosit	_	₹	Į	E	15 MC	15 IMC	<u>§</u>	Oxygenates	7420						Confirm all hi	-	
Sample Identification		Date Collected	Time Collected	Q ag	Composite	Water	ē	Total	BTEX + MIBE	TPH 8015 MOD	TPH 8015 MOD DRO	8260 full scan		Lead 74						Run ox	-	
	QA	02/05/04				X		72	_	X						_	1	丁		Comments / I	Remarks	
	Mu-1	04/05/02	1455	X		7		3	X	4												
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8TD. TAT 72 hour 24 hour 4 day	48 hour 5 day		Relinqui	shed t			7					Date	_	Time	Re	ceive		T. C.		11 -	Date	Time
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Data Package Options (please circle QC Summary Type I — Full	if required)				.,.		f					7000	+		146	VISIA	5U D)	<i>y</i>			Date	Time
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#### ANALYTICAL RESULTS

Prepared for:

ChevronTexaco 6001 Bollinger Canyon Rd L4310 San Ramon CA 94583

925-842-8582

Prepared by:

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

### SAMPLE GROUP

The sample group for this submittal is 818180. Samples arrived at the laboratory on Thursday, August 08, 2002. The PO# for this group is 99011184 and the release number is STREICH.

Client Description		Lancaster Labs Number
QA-T-020805	NA Water	3875087
MW-1-W-020805	Grab Water	3875088
MW-2-W-020805	Grab Water	3875089
MW-3-W-020805	Grab Water	3875090
MW-4-W-020805	Grab Water	3875091

1 COPY TO

Delta C/O Gettler-Ryan

Attn: Deanna L. Harding

Questions? Contact your Client Services Representative Teresa M Lis at (717) 656-2300.

Respectfully Submitted,

Victoria M. Martell
Chemist



# Analysis Report



Page 1 of 1

Lancaster Laboratories Sample No. WW 3875087

Collected:08/05/2002 00:00

Account Number: 10905

Submitted: 08/08/2002 09:25

ChevronTexaco

Reported: 08/20/2002 at 18:19

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Discard: 09/20/2002

QA-T-020805

NA

Water

Facility# 90517 Job# 386420

GRD

3900 Piedmont Ave-Oakland T0600102248 QA

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of T gasoline constituents eluting p start time. A site-specific MSD sample was a was performed to demonstrate pro	rior to the C6 not submitted :	(n-hexane) TPH-G for the project.	RO range A LCS/LCSD		
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/1	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	N.D.	2.5	ug/1	1
	A site-specific MSD sample was was performed to demonstrate pr					

State of California Lab Certification No. 2116

		Laboratory	Chro	uicie		
CAT		_		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	<b>Factor</b>
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	08/08/2002 22:59	Patrick N Evans	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	08/08/2002 22:59	Patrick N Evans	1
01146	GC VOA Water Prep	SW-846 5030B	1	08/08/2002 22:59	Patrick N Evans	n.a.

717-656-2300 Fax: 717-656-2681



Lancaster Laboratories Sample No. WW 3875088

Collected: 08/05/2002 14:53

by DM

Water

Account Number: 10905

Submitted: 08/08/2002 09:25

Reported: 08/20/2002 at 18:19

ChevronTexaco

Discard: 09/20/2002

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

MW-1-W-020805

Grab

GRD

Facility# 90517 Job# 386420

3900 Piedmont Ave-Oakland T0600102248 MW-1

M1420

CAT			As Received	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01729	TPH-GRO - Waters					1
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of T gasoline constituents eluting p start time. A site-specific MSD sample was was performed to demonstrate pr	rior to the C6 not submitted :	(n-hexane) TPH-0 for the project.	RO range A LCS/LCSD		
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	N.D.	2.5	ug/l	1
	A site-specific MSD sample was was performed to demonstrate pr					

State of California Lab Certification No. 2116

		Laboratory	Chro	nicle		
CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	<b>Factor</b>
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	08/09/2002 12:46	Patrick N Evans	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	08/09/2002 12:46	Patrick N Evans	1
01146	GC VOA Water Prep	SW-846 5030B	1	08/09/2002 12:46	Patrick N Evans	n.a.



Lancaster Laboratories Sample No. WW 3875089

Collected: 08/05/2002 15:22

by DM

Account Number: 10905

Submitted: 08/08/2002 09:25

Reported: 08/20/2002 at 18:19

Discard: 09/20/2002

ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

MW-2-W-020805

Grab

Water

GRD

Facility# 90517 Job# 386420 3900 Piedmont Ave-Oakland T0600102248 MW-2

M2420

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of T gasoline constituents eluting p start time.  A site-specific MSD sample was	rior to the C6	(n-hexane) TPH-G	RO range		
	was performed to demonstrate pr	ecision and ac	curacy at a batch	level.		
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/1 .	1
00778	Ethylbenzene	100-41-4	N.D.	0.50	ug/1	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	N.D.	2.5	ug/l	1
	A site-specific MSD sample was a was performed to demonstrate pro					

State of California Lab Certification No. 2116

Labora	torv	Chron	icle
	,	~=== ~==	

CAT		-		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	08/09/2002 13:20	Patrick N Evans	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	08/09/2002 13:20	Patrick N Evans	1
01146	GC VOA Water Prep	SW-846 5030B	1	08/09/2002 13:20	Patrick N Evans	n.a.



Lancaster Laboratories Sample No. WW 3875090

Collected: 08/05/2002 16:24

by DM

Account Number: 10905

Submitted: 08/08/2002 09:25

Reported: 08/20/2002 at 18:19

Water

ChevronTexaco 6001 Bollinger Canyon Rd L4310

Discard: 09/20/2002

Grab Job# 386420

San Ramon CA 94583

GRD

Facility# 90517 3900 Piedmont Ave-Oakland T0600102248 MW-3

M3420

MW-3-W-020805

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
				Dimit		
01729	TPH-GRO - Waters					,
01730	TPH-GRO - Waters	n.a.	4,100.	250.	ug/l	5
08214	The reported concentration of Tigasoline constituents eluting pastart time.  A site-specific MSD sample was a was performed to demonstrate problem.  BTEX, MTBE (8021)	rior to the C6 not submitted :	(n-hexane) TPH-( for the project.	RO range A LCS/LCSD		·
00776	Benzene	71-43-2	87.	1.0	ug/l	5
00777	Toluene	108-88-3	21.	1.0	ug/l	5
00778	Ethylbenzene	100-41-4	90.	1.0	ug/1	5
00779	Total Xylenes	1330-20-7	47.	3.0	ug/1	5
00780	Methyl tert-Butyl Ether	1634-04-4	21.	2.5	ug/l	5
	A site-specific MSD sample was mas performed to demonstrate pro-				<del>-</del> -	

State of California Lab Certification No. 2116

Labora		

CAT				Dilution		
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	08/09/2002 13:55	Patrick N Evans	5
08214	BTEX, MTBE (8021)	SW-846 B021B	1	08/09/2002 13:55	Patrick N Evans	5
01146	GC VOA Water Prep	SW-846 5030B	1	08/09/2002 13:55	Patrick N Evans	n.a.



Lancaster Laboratories Sample No. 3875091

Collected: 08/05/2002 15:50 Account Number: 10905

Water

Submitted: 08/08/2002 09:25

Reported: 08/20/2002 at 18:19

Discard: 09/20/2002

MW-4-W-020805 Grab

Facility# 90517 Job# 386420

3900 Piedmont Ave-Oakland T0600102248 MW-4

M4420

CAT			As Received	As Received Method	•	Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01729	TPH-GRO - Waters			,	ī	•
01730	TPH-GRO - Waters	n.a.	4,100.	250.	ug/l	<b>5</b> .
08214	The reported concentration of T gasoline constituents eluting p start time. A site-specific MSD sample was was performed to demonstrate pr BTEX, MTBE (8021)	rior to the C6	(n-hexane) TPH-G for the project.	RO range A LCS/LCSD		e.
00776	Benzene	71-43-2	130.	1.0	ug/l	5
00777	Toluene	108-88-3	18.	1.0	ug/l	5
00778	Ethylbenzene	100-41-4	50.	1.0	ug/1	5
00779	Total Xylenes	1330-20-7	20.	3.0	ug/l	5
00780	Methyl tert-Butyl Ether	1634-04-4	N.D. #	10.	ug/l	5
	A site-specific MSD sample was was performed to demonstrate pr			•		

GRD

ChevronTexaco

San Ramon CA 94583

6001 Bollinger Canyon Rd L4310

Due to the presence of an interferent near its retention time, the normal reporting limit was not attained for MTBE. The presence or concentration of this compound cannot be determined due to the presence of this interferent.

State of California Lab Certification No. 2116

Laboratory	Chronicle
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CAT				Dilution		
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	08/09/2002 14:29	Patrick N Evans	5
08214	BTEX, MTBE (8021)	SW-846 8021B	1	08/09/2002 14:29	Patrick N Evans	5
01146	GC VOA Water Prep	SW-846 5030B	1	08/09/2002 14:29	Patrick N Evans	n.a.

717-656-2300 Fax: 717-656-2681

2216 Rev. 9/11/00

# Analysis Report



Page 1 of 2

Quality Control Summary

Client Name: ChevronTexaco

Group Number: 818180

Reported: 08/20/02 at 06:20 PM

## Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank <u>MDL</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD %REC	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: 02220A53A	Sample nu	mber(s):	3875087					
Benzene	N.D.	. 2	ug/l	102	99	80-118	3	30
Toluene	N.D.	. 2	ug/1	105	102	82-119	4	30
Ethylbenzene	N.D.	. 2	ug/l	105	102	81-119	2	30
Total Xylenes	N.D.	.6	ug/l	106	104	82-120	2	30
Methyl tert-Butyl Ether	N.D.	. 3	ug/l	104	101	79-127	3	30
TPH-GRO - Waters	N.D.	50.	ug/l	109	107	74-116	2	30
Batch number: 02220A53B	Sample nu	mber(s):	3875088-38	75091				
Benzene	N.D.	.2	ug/l	102	99	80-118	3	30
Toluene	N.D.	. 2	ug/l	105	102	82-119	4	30
Ethylbenzene	N.D.	. 2	ug/l	105	102	81-119	2	30
Total Xylenes	N.D.	. 6	ug/l	106	104	82-120	2	30
Methyl tert-Butyl Ether	N.D.	. 3	ug/l	104	101	79-127	3	30
TPH-GRO - Waters	N.D.	50.	ug/l	109	107	74-116	2	30

## Sample Matrix Quality Control

	ms	MSD	ms/msd		RPD	BKG	DUP	DUP	Dup
Analysis Name	%REC	<b>%REC</b>	Limite	RPD	MAX	Conc	Conc	RPD	RPD <u>Max</u>
Batch number: 02220A53A	Sample	number	(s): 387508	7					
Benzene	91		83-130						
Toluene	94		87-129						
Ethylbenzene	101		86-133						
Total Xylenes	102		86-132						
Methyl tert-Butyl Ether	96		66-140						
TPH-GRO - Waters	117		74-132						
Batch number: 02220A53B	Sample	number	(s): 387508	8-38750	91			,	
Benzene	91 -		83-130						
Toluene	94		87-129						
Ethylbenzene	101		86-133						
Total Xylenes	102		86-132						
Methyl tert-Butyl Ether	96		66-140						
TPH-GRO - Waters	117		74-132						

### Surrogate Quality Control

Analysis Name: TPH-GRO - Waters

Batch number: 02220A53A

	Trifluorotoluene-F	Trifluorotoluene-P						
3875087	89	89						
Blank	84	91						
LCS	94	91						
LCSD	91	92						
MS	94	92						
Limits:	57-146	71-130						

Analysis Name: TPH-GRO - Waters Batch number: 02220A53B

\*- Outside of specification

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

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



Lancaster Laboratories, Inc. 2425 New Holland Pike PO Box 12425 Lancaster, PA 17605-2425 717-656-2300 Fax: 717-656-2681

# Analysis Report



Page 2 of 2

Client Name: ChevronTexaco

Group Number: 818180

Reported: 08/20/02 at 06:20 PM

Surrogate Quality Control

	Trifluorotoluene-F	Trifluorotoluene-P
3875088	86	91
3875089	83	92
3875090	78	83
3875091	79	82
Blank	83	90
LCS	94	91
LCSD	91	92
MS	94	92
Limits:	57-146	71-130

\*- Outside of specification

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

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

