

GETTLER-RYAN INC.

TRANSMITAIGMACOUNTY

OCT 2 4 2002

October 7, 2002 G-R #386456

Environmental Heelih Ms. Karen Streich

TO:

Mr. James Brownell

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

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: Chevron Service Station

#9-0338

5500 Telegraph Avenue

Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	September 20, 2002	Groundwater Monitoring and Sampling Report Third Quarter - Event of August 9, 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 21, 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, cc: Suite 250, Alameda, CA 94502-6577

Mr. Greg Gurss, Gettler-Ryan Inc., 3140 Gold Camp Drive, Suite 170, Rancho Cordova, CA 95670

Enclosures

trans/9-0338-ks



September 20, 2002 G-R Job #386456

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

RE:

Third Quarter Event of August 9, 2002 Groundwater Monitoring & Sampling Report Chevron Service Station #9-0338 5500 Telegraph 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.

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

Sincerely,

Deanna L. Harding Project Coordinator

Hagop Kevork P.E. No. C55734

Figure 1: Potentiometric Map

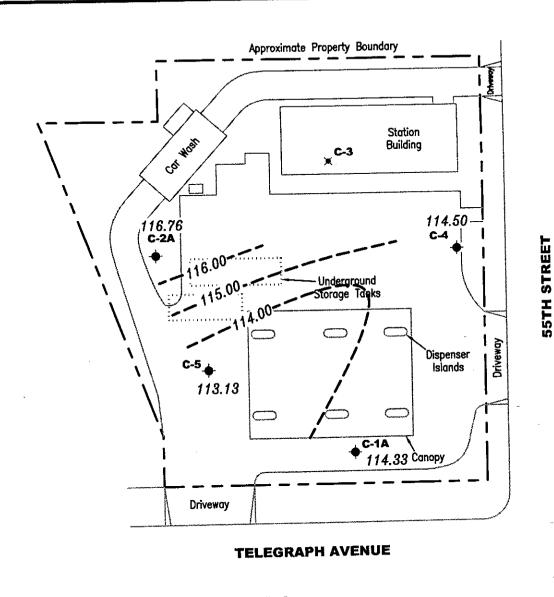
Table 1: Groundwater Monitoring Data and Analytical Results
Table 2: Groundwater Analytical Results – Oxygenate Compounds

Table 3: Groundwater Analytical Results

Attachments: Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports



EXPLANATION

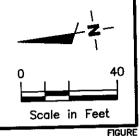
Groundwater monitoring well

★ Destroyed groundwater monitoring well

99.99 Groundwater elevation in feet referenced to Mean Sea Level

Groundwater elevation contour, dashed where inferred

Groundwater flow direction varies at a gradient of 0.02 to 0.07 Ft./Ft.



Source: Figure modified from drawing provided by RRM engineering contracting firm.

GETTLER - RYAN INC.
6747 Sierra Ct., Suite J

Dublin, CA 94568

(925) 551-7555

POTENTIOMETRIC MAP
Chevron Service Station #9-0338
5500 Telegraph Avenue
Oakland, California

DATE

August 9, 2002

REVISED DATE

PROJECT NUMBER 386456 REVIEWED BY

FILE NAME: P:\ENVIRO\CHEVRON\9-0338\Q02-9-0338.DWG | Layout Tab: Pot3

1

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Service Station #9-0338

Chevron Service Station #9-033 5500 Telegraph Avenue Oakland, California

WELL ID/	TOC	GWE	DTW	TPH-G	В	T	E	X	MTBE
DATE	(ft.)	(msl)	(ft.)	(pph)	(pph)	(pph)	(ppb)	(ppb)	(ppb)
C-1A									
05/27/99	123.27	115.93	7.34	9,100	40	25	560	1,900	35
09/02/99	123.27	115.72	7.55	9,700	24	18.4	626	754	66
10/27/99	123.27	115.84	7.43	4,740	<10	<10	276	270	<100/66.6
2/11/00	123.27	115.27	8.00	5,100	17.5	<10	182	333	<50
5/10/00	123.27	116.65	6.62	11,0001	110	170	480	980	<500
7/27/00	123.27	115.14	8.13	6,200 ¹	<50	<50	540	150	<250
1/21/00	123.27	115.60	7.67	6,500 ¹	19	<10	450	360	<50
2/05/01	123.27	115.91	7.36	5,270	1.43	1.04	326	269	15.0
5/07/01	123.27	115.90	7.37	3,0001	37	27	520	490	63
08/06/01	123.27	115.15	8.12	3,300 ¹	3.1	3.8	160	100	47
1/12/01	123.27	116.42	6.85	5,100	1.9	<2.0	230	230	3.1
2/11/02	123.27	114.99	8.28	820	1.3	< 0.50	21	7.7	5.7/4 ³
5/13/02	123.27	114.30	8.97	1,800	<1.0	< 0.50	26	8.6	7.5
8/09/02	123.27	114.33	8.94	2,100	1.7	<5.0	29	<20	<2.5
C-2A	105.00	110.52	6.26	<50	<0.5	<0.5	<0.5	<0.5	44
05/27/99	125.89	119.53	6.36	<50 <50	- <0.5	<0.5	<0.5	<0.5	<2.5
19/02/99	125.89	117.04	8.85	<50 <50	<0.5	<0.5	<0.5	<0.5	8.75/7.77
10/27/99	125.89	116.65	9.24	<50	<0.5	<0.5	<0.5	<0.5	17.8
02/11/00	125.89	117.64	8.25 8.43	<50	<0.50	<0.50	<0.50	<0.50	3.2
05/10/00	125.89	117.46	9.55	- <50	<0.50	<0.50	<0.50	<0.50	20
)7/27/00	125.89	116.34		- <50	<0.50	<0.50	<0.50	< 0.50	<50
11/21/00	125.89	116.39	9.50		<0.500	<0.500	<0.500	<0.500	3.36
02/05/01	125.89	116.50	9.39	<50.0 <50	<0.50	<0.50	<0.50	<0.50	<2.5
5/07/01	125.89	116.29	9.60		<0.50	0.59	<0.50	1.4	12
08/06/01	125.89	115.72	10.17	<50 - 450	<0.50	<0.50	<0.50	<1.5	3,4
1/12/01	125.89	115.28	10.61	- <50		<0.50	<0.50	<1.5	<2.5/<2 ³
)2/11/02	125.89	117.31	8.58	<50	< 0.50	<0.30 83	21	99	29
05/13/02	125.89	115.76	10.13	1,100	17		<0.50	<1.5	<2.5
08/09/02	125.89	116.76	9.13	<50	< 0.50	<0.50	<0.50	<1.3	\2.3

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Service Station #9-0338

5500 Telegraph Avenue
Oakland, California

WELL ID/	TOC	GWE	DTW	TPH-G	В	T	Ē	X	MTBE
DATE	(ft.)	(msl)	(ft.) ·	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
_							<u> </u>	(PPU)	(рро).
C-4									
05/27/99	125.40	115.34	10.06	<50	<0.5	<0.5	<0.5	<0.5	44
09/02/99	125.40	114.89	10.51	<50	<0.5	<0.5	<0.5	<0.5	3.1
10/27/99	125.40	115.03	10.37	<50	<0.5	<0.5	<0.5	<0.5	<5.0/<2.0 ²
02/11/00	125.40	114.48	10.92	<50	<0.5	<0.5	<0.5	<0.5	2.79
05/10/00	125.40	116.28	9.12	<50	< 0.50	<0.50	<0.50	<0.50	
07/27/00	125.40	113.50	11.90	<50	<0.50	<0.50	<0.50	<0.50	<2.5
11/21/00	125.40	113.76	11.64	<50	<0.50	<0.50	<0.50	<0.50	<2.5
02/05/01	125.40	115.21	10.19	<50.0	<0.500	<0.500	<0.500	<0.500	<2.5
05/07/01	125.40	114.45	10.95	<50	<0.50	<0.50	< 0.50	< 0.50	<2.50
08/06/01	125.40	113.75	11.65	<50	<0.50	0.52	< 0.50	1.1	<2.5
11/12/01	125.40	113.69	11.71	<50	<0.50	< 0.50	< 0.50		3.2
)2/11/02 ⁴	125.40	114.45	10.95	<50	<0.50	<0.50	<0.50	<1.5	<2.5
05/13/02	125.40	113.64	11.76	<50 _	<0.50	< 0.50	<0.50	<1.5	72/62 ³
08/09/02	125.40	114.50	10.90	<50	<0.50	<0.50		<1.5	21
						V0.50	<0.50	<1.5	4.9
~ =	-							_	
C-5	10415				-				
05/27/99	124.15	117.54	6.61	2,800	350	73	32	280	2,200/2,500
99/02/99	124.15	116.27	7.88	570	9.0	<2.5	<2.5	<2.5	890
0/27/99	124.15	116.90	7.25	543	4.22	< 0.5	3.28	< 0.5	845/1,080 ²
02/11/00	124.15	117.41	6.74	488	0.56	<0.5	1.45	<0.5	565
5/10/00	124.15	118.36	5.79	1401	3.6	1.2	0.53	2.0	380
07/27/00	124.15	116.92	7.23	260^{1}	1.4	1.2	0.93	2.8	460
1/21/00	124.15	117.47	6.68	130 ¹	0.74	0.73	< 0.50	< 0.50	350
2/05/01	124.15	117.74	6.41	111	<1.00	<1.00	<1.00	<1.00	197
5/07/01	124.15	117.91	6.24	100 ¹	2.1	1.0	< 0.50	0.80	210
8/06/01	124.15	116.74	7.41	941	0.84 -	1.2	0.54	1.5	360
1/1 2/ 01	124.15	116.82	7.33	58	< 0.50	<0.50	<0.50	<1.5	280
2/11/02	124.15	117.90	6.25	<50	< 0.50	< 0.50	< 0.50	<1.5	150/140 ³
5/13/02	124.15	116.13	8.02	79	7.7	1.2	2.6	5.5	180
8/09/02	124.15	113.13	11.02	<50	<0.50	< 0.50	<0.50	<1.5	220

Table 1
Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-0338 5500 Telegraph Avenue Oakland, California

WELL ID/	TOC	GWE	DTW	TPH-G	В	T	E	X	MTBE
DATE	(ft.)	(msl)	(ft.)	(ppb)	(pph)	(ppb)	(ppb)	(ppb)	(ppb)
RIP BLANK									
)5/27/99				50					
				<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/02/99				<50	< 0.5	< 0.5	< 0.5	< 0.5	<2.5
0/27/99				<50	< 0.5	< 0.5	< 0.5	<0.5	<5.0
02/11/00				<50	< 0.5	<0.5	<0.5	<0.5	<2.5
05/10/00				<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
7/27/00				<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
1/21/00				<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
02/05/01				<50.0	< 0.500	< 0.500	< 0.500	< 0.500	<2.50
05/07/01				<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
8/06/01				<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
QA									
11/12/01				<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5
02/11/02				<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5
05/13/02				<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5
08/09/02		**	••	<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron Service Station #9-0338 5500 Telegraph Avenue Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to May 10, 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

- 2 Confirmation run.
- MTBE by EPA Method 8260.
- Total Petroleum Hydrocarbons as Diesel (TPH-D) was less than the reporting limit.

Laboratory report indicates gasoline C6-C12,

Table 2
Groundwater Analytical Results - Oxygenate Compounds

Chevron Service Station #9-0338 5500 Telegraph Avenue Oakland, California

WELL ID	DATE	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)
C-1A	02/11/02	<100	4	<2	<2	<2
C-2A	02/11/02	<100	<2	<2	<2	<2
C-4	02/11/02	<100	62	<2	<2	<2
C-5	02/11/02	<100	140	<2	<2	<2

EXPLANATIONS:

TBA = Tertiary butyl alcohol

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

(ppb) = Parts per billion

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

Table 3 Groundwater Analytical Results

Chevron Service Station #9-0338 5500 Telegraph Avenue

Oakland, California

WELL ID	DATE	Cadmium (ppb)	Chromium (ppb)	Lead (ppb)	Nickel (ppb)	Zinc (ppb)	TOG (ppb)	HVOCs (ppb)
C-4	02/11/02	<10.0	80.5	16.7	126	143	<320	<0.20-<0.50

EXPLANATIONS:

TOG = Total Oil and Grease

HVOCs = Halogenated Volatile Oraganic Compounds

(ppb) = Parts per billion

Note: All HVOCs were not detected (ND) unless otherwise noted.

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 #:	ChevronTexaco #9-0		-	386456	
Site Address: City:	5500 Telegraph Ave Oakland, CA	nue	Event Date: _ Sampler: _	08/09/02 DM.	,
Well ID Well Diameter Total Depth Depth to Water Purge Equipment:	2 in. /A. 45 ft. B. 42 ft. Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Other:	Well Condition: Hydrocarbon Thickness: Volume Factor (Vi	ft. 3/4"= 0.02 4"= 0.66 x3 (case volume) = Es Sampling Equipment:	Amount Bailed (product/water): 1"= 0.04 (2"= 0.17 5"= 1.02 6"= 1.50 timated Purge Volume: Disposable Bailer Pressure Bailer Discrete Bailer Other:	12"= 5.80 : <u>5.5</u> gal.
	ate: <u>/ 2 40 los/oq/oz</u> ate: <u> — gpm.</u> Sedi	eather Conditions: Water Color: ment Description	clear	Odor:	yes
Time (2400 hr.) 1224 1230 1432	Volume (gal.) pH 2 7.91 4 7.79 5.5 7.70	Conductivity (u mhos/cm) 423 428 431	Temperature (C/F) 22./ 21.5 21.2	D.O. (mg/L)	ORP (mV)
		ABORATORY INF	ORMATION		
SAMPLE ID	(#) CONTAINER REFRIG.			/ ANA	ALYSES
C-/14	3 x voa vial YES	HCL	LANCASTER	TPH-G (8015)/BTE	X/MTBE (8021)
COMMENTS:					
Add/Repla	ced Lock:		Add/Replaced P	lug: S	size:



	ChevronTexa	асо #9-(0338	Job Number:	386456	
Site Address:	5500 Telegra	ph Ave	nue	Event Date:	08/09/02	
City:	Oakland, CA			Sampler:	DM.	
Well ID	C- Z M		Well Condition:	O.K.		
Well Diameter	2 in.		Hydrocarbon		Amount Bailed	
Total Depth	ZO.25 ft.		Thickness:	ft.	(product/water):	gal.
Depth to Water	9.13 ft.		Volume Factor (V	3/4"= 0.02 F) 4"= 0.66	1"= 0.04	3"= 0.38 12"= 5.80
	11. 12 x1	/F <u>·12</u>	= 1.89	<u></u>	stimated Purge Volume:	
Purge	Disposable Baile	er _		Sampling	Disposable Bailer	1
Equipment:	Stainless Steel B	Bailer _		Equipment:	Pressure Bailer	
	Stack Pump				Discrete Bailer	T
	Suction Pump	_		I	Other:	
	Grundfos	_				
	Other:	<u> </u>				
Purging Flow Ra Did well de-wate	er? wə		ment Description: ime:			NO
	Volume (gal.)		nent Description: ime: Conductivity (umhos/cm) 904 900 399	Volume: Temperature (OF) ZZ. S ZZ. 4 ZZ. /		ORP (mV)
Time (2400 hr.) ————————————————————————————————————	Volume (gal.)	If yes, Ti pH <u>タzo</u> タノ4	Conductivity (umhos/cm) 904	Volume: Temperature (0#) 22.8 22.4	gal.	ORP
Time (2400 hr.) /653 /656	Volume (gal.) 2 4 5:5	If yes, Ti pH 220 214 2.08	Conductivity (umhos/cm) 904 900 399	Volume: Temperature (CF) ZZ. 8 ZZ.4 ZZ.1	gal. D.O. (mg/L)	ORP (mV)
Time (2400 hr.) /653 /658 SAMPLE ID	Volume (gal.) Z 4 5:5	If yes, Ti pH 220 214 2.08 LA REFRIG.	Conductivity (umhos/cm) 904 900 399 ABORATORY INFO	Volume: Temperature (OF) 22.8 22.4 22./ ORMATION LABORATORY	gal. D.O. (mg/L)	ORP (mV)
Time (2400 hr.) /653 /656	Volume (gal.) 2 4 5:5	If yes, Ti pH 220 214 2.08	Conductivity (umhos/cm) 904 900 399	Volume: Temperature (CF) ZZ. 8 ZZ.4 ZZ.1	gal. D.O. (mg/L)	ORP (mV)



Client/Facility #: Site Address: City:	ChevronTexa 5500 Telegra Oakland, CA			Job Number: Event Date: Sampler:	386456 <u>DS/09/02</u> DM-	
Well ID Well Diameter Total Depth Depth to Water	C- 4 2 in. 19,49 ft. 10,90 ft. 4,59 x	/F <u>.J.7</u>	Well Condition: Hydrocarbon Thickness: Volume Factor (V	ft. 3/4"= 0.02 F) 4"= 0.66	Amount Bailed (product/water): 1"= 0.04 (2") 0.17 5"= 1.02 6"= 1.50	12"= 5.80
Purge Equipment:	Disposable Baile Stainless Steel E Stack Pump Suction Pump Grundfos Other:			F	Disposable Bailer , Pressure Bailer Discrete Bailer Other:	
	ate: 116 0 7 10 8 ate: gpm.	<i>logfoz</i> Sedin	ather Conditions Water Color nent Description me:	The co	<i>leudy/Breur</i> Pdor: gal.	
Time (2400 hr.) 1553 1556 1559		pH <u>\$.08</u> <u>\$.80</u> \$.44	Conductivity (umhos/cm) 633 621	Temperature (CF) ~ 21.5 ~ 20.9 ~ 20.8	D.O. (mg/L)	ORP (mV)
		L.#	ABORATORY INF	ORMATION		
SAMPLE ID C- 4	(#) CONTAINER 3 x voa vial	REFRIG. YES	PRESERV. TYPE	LABORATOR) LANCASTER	TPH-G (8015)/BTE	LYSES K/MTBE (8021)
COMMENTS:			1	1		· · · · · · · · · · · · · · · · · · ·
Add/Replac	ed Lock:		,	\dd/Replaced P	lug: S	ize:



Client/Facility #	ChevronTexa	co #9-0	338	Job Number:	386456	
Site Address:	5500 Telegra	ph Avei	nue	Event Date:	OSInglaz	
City:	Oakland, CA			Sampler:	Duy.	
Well ID	C- 5	1.00	Well Condition	O.K.		· · · · · · · · · · · · · · · · · · ·
Well Diameter	2 in.		Hydrocarbon	•	Amount Bailed	
Total Depth	20.24 ft.		Thickness:	ft.	(product/water):	gal.
Depth to Water	11.02 ft.		Volume	3/4"= 0.02	1"= 0.04 (2"=0.17	3"= 0.38
· (2		Factor (\	,	5"= 1.02 6"= 1.50	12"= 5.80
	<u>9.22</u> xV	F . / /	= 1.56	x3 (case volume) = Es	stimated Purge Volume: _	gal.
Purge	Disposable Bailer	-		Sampling	D	
Equipment:	Stainless Steel B			E	Disposable Bailer	
	Stack Pump		· · · · · · · · · · · · · · · · · · ·	_4	Pressure Bailer	
	Suction Pump	_	· · · · · · · · · · · · · · · · · · ·		Discrete Bailer	
:	Grundfos	_	, <u> </u>	·	Other:	
	Other:					
				v		
Purging Flow R Did well de-water	e):	Sedin	nent Description me:	5,14		
Time	Volume			_		
(2400 hr.)	Volume (gal.)	рН	Conductivity (u mhos/cm)	Temperature	D.O. (mg/L)	ORP (mV)
1622	<u> </u>	7.88	615	20.3	_	(
1125		7.69	629	19.5		
1626	_ <u> </u>	7 <u>.58</u>	127	19.3		
F						
•					·	·····
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SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE		ANALY	'SES
C- 5	3 x voa vial	YES	HCL	LANCASTER	TPH-G (8015)/BTEX/N	
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COMMENTS:	<u> </u>					
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Chevron California Region Analysis Requesi/Criain or Costoay

Acct. #: 10903 Sample #: 303854-8

LIN I ancaster Laboratories			Acct.#:	<u>2</u>	ļ_	ror∟aji Sample#:`	300	# 3.9.18554-B	SCR#:	2022	
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	90-792180	200-		<u>L</u> .		Analys	Analyses Requested	uested	5		_
	0000	1,000	Matrix			Prese	Preservation Codes	Codes	Preserva	Preservative Codes	
Facility #9-0338 Job #386456 G	Globel IL# I U6UU1 UU34/	100347	¥ 110 M	Ė	7					T = Thiosulfate	_
Site Addres \$500 TELEGRAPH AVE., OAKLAND, CA	AKLAND, CA			<u> </u>						B = NaOH O - Other	
Chevron PorKaren Streich Lead C	Lead Consultant: Delta	Delta/G-R		s	nsələ				- [
) cracio 77/20 cm o	ildiga fusc	04568	E2 pje		Gel (☐ J value reporting needed	ng needed	_
Consultant/Onice: G-K, IIIC., 0/4/ Signa Coult, Dubill, Ca 3	Count, Dubini, Co	00000	ota Oql	-	ilica		-		Must meet lov	☐ Must meet lowest detection #mits possible for 8260 compounds	
Consultant Prj. MgDeanna L. Harding	(Deanna@grinc.com)	rinc.com)	<u> </u>						TO HOLD TO SECOND	Semostica Semostica	
Consultant Phone #25-551-7555	Fax #: 925-551-7899	-7899				s] 124		8021 M 1 BE Confirm highest hit by 8260	inmation st hit by 8260	
Sampler: David Maxwn		Đ1i	i	.BE 8	MOD I	elenet	<u> </u>		Confirm all hits by 8260	s by 8260	
Service Order #:	□ Non SAR:					Οχλ	02470	_	Run ox	oxy s on highest hit	•
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WIP (RWQCB) Disk	<u> </u> F	Temperature Upon Receipt	Receipt 3		ູ່			Custody Seals Intact?	tact? (Tyes) No		
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Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300 Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

3460 Rev. 7/30/01



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 818820. Samples arrived at the laboratory on Wednesday, August 14, 2002. The PO# for this group is 99011184 and the release number is STREICH.

Client Description				Lancaster Labs Number
QA-T-020809	NA	Water	,	3878554
C-1A-W-020809	Grab	Water		3878555
C-2A-W-020809	Grab	Water		3878556
C-4-W-020809	Grab	Water	į.	3878557
C-5-W-020809	Grab	Water		3878558

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,

Steve Stabinger Group Leader



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



Lancaster Laboratories Sample No. 3878554

Collected:08/09/2002 00:00

Account Number: 10905

Submitted: 08/14/2002 09:20

ChevronTexaco

Reported: 08/20/2002 at 19:09

6001 Bollinger Canyon Rd L4310

Discard: 09/20/2002

San Ramon CA 94583

OA-T-020809

GRD

Water

Facility# 90338 Job# 386456 5500 TELEGRAPH AVE T0600100347 QA

44				As Received		
CAT			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
08214	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- for the project.	GRO range A LCS/LCSD		
00776	Benzene	71-43-2	N.D.	0.50	ug/l	1
00777	Toluene	108-88-3	N.D.	0.50	ug/l	1
00777	Ethylbenzene	100-41-4	N.D.	0.50	ug/l	1
00778	Total Xylenes	1330-20-7	N.D.	1.5	ug/1	1
00779	Methyl tert-Butyl Ether	1634-04-4	N.D.	2.5	ug/l	1
20,00	A site-specific MSD sample was was performed to demonstrate pr					

State of California Lab Certification No. 2116

Laboratory	Chronicle
LACCIAL CIV	CHICHICIE

CAT					Dilution	
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	08/15/2002 09:55	Anastasia Papadoplos	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	08/15/2002 09:55	Anastasia Papadoplos	1
01146	GC VOA Water Prep	SW-846 5030B	1	08/15/2002 09:55	Anastasia Papadoplos	n.a.

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



Lancaster Laboratories Sample No. 3878555

Collected: 08/09/2002 17:40

Account Number: 10905

Submitted: 08/14/2002 09:20

Reported: 08/20/2002 at 19:09

ChevronTexaco

6001 Bollinger Canyon Rd L4310

Discard: 09/20/2002

C-1A-W-020809 Grab Water

San Ramon CA 94583

Facility# 90338 Job# 386456

GRD

5500 TELEGRAPH AVE T0600100347 C-1A

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection	Units	Dilution Factor
NO.	Midlysis Name	CAS NUMBER	Kesuic	Limit	Onics	ractor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters	n.a.	2,100.	50.	ug/l	1
	The reported concentration of Tigasoline constituents eluting pastert time. A site-specific MSD sample was was performed to demonstrate pro-	rior to the C6	(n-hexane) TPH-G for the project.	RO range A LCS/LCSD		
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	1.7	1.0	ug/l	5
00777	Toluene	108-88-3	N.D. #	5.0	ug/l '	5
00778	Ethylbenzene	100-41-4	29.	1.0	ug/l	5
00779	Total Xylenes	1330-20-7	N.D. #	20.	ug/l	5
00780	Methyl tert-Butyl Ether	1634-04-4	N.D.	2.5	ug/l	5
	A site-specific MSD sample was was performed to demonstrate pr			•		

Due to the nature of the sample matrix, normal reporting limits were not attained.

State of California Lab Certification No. 2116

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	08/15/2002 16:54	Melissa D Mann	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	08/16/2002 02:43	Anastasia Papadoplos	5
01146	GC VOA Water Prep	SW-846 5030B	1	08/15/2002 16:54	Melissa D Mann	n.a.



Lancaster Laboratories Sample No. 3878556

Collected:08/09/2002 17:09

by DM

Account Number: 10905

Submitted: 08/14/2002 09:20

Reported: 08/20/2002 at 19:10

ChevronTexaco

Water Grab

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583 Discard: 09/20/2002 C-2A-W-020809

Facility# 90338 Job# 386456 5500 TELEGRAPH AVE

T0600100347 C-2A

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters			1	1	,
01730	TPH-GRO - Waters 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-G	A LCS/LCSD	ug/l	1
08214	BTEX, MTBE (8021)					I
00776 00777 00778 00779 00780	Benzene Toluene Ethylbenzene Total Xylenes Methyl tert-Butyl Ether A site-specific MSD sample was was performed to demonstrate pr	71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 not submitted ecision and ac	N.D. N.D. N.D. N.D. N.D. for the project.	0.50 0.50 0.50 1.5 2.5 A LCS/LCSD	ug/1 ug/1 ug/1 ug/1 ug/1	1 1 1 1

GRD

State of California Lab Certification No. 2116

		Laboratory	Chro	nicie		
CAT				Analysis		Dilutio
	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
No. 01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	08/15/2002 17:28	Melissa D Mann	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	08/15/2002 17:28	Melissa D Mann	1
01146	GC VOA Water Prep	SW-846 5030B	1	08/15/2002 17:28	Melissa D Mann	n.a.

#=Laboratory MethodDetection Limit N.D.=Not defect the first poye line 12425 New Holland Pike. Lancaster, PA 17605-2425 717-656-2300 Fax: 717-656-2681



Lancaster Laboratories Sample No. 3878557

Collected: 08/09/2002 16:07

by DM

Account Number: 10905

San Ramon CA 94583

Submitted: 08/14/2002 09:20

ChevronTexaco

Reported: 08/20/2002 at 19:10

6001 Bollinger Canyon Rd L4310

Discard: 09/20/2002

Water

C-4-W-020809 Facility# 90338 Job# 386456

Grab

GRD

5500 TELEGRAPH AVE

T0600100347 C-4

				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
08214	The reported concentration of gasoline constituents elution start time. A site-specific MSD sample was performed to demonstrate BTEX, MTBE (8021)	ng prior to the C6 was not submitted	(n-hexane) TPH- for the project.	GRO range A LCS/LCSD		
0022.	212A,22 (0022)					
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	4.9	2.5	ug/l	1
	A site-specific MSD sample w was performed to demonstrate			· · · · · · · · · · · · · · · · · · ·		

State of California Lab Certification No. 2116

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CAT		_		Analysis		Dilutio
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	08/15/2002 18:03	Melissa D Mann	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	08/15/2002 18:03	Melissa D Mann	1
01146	GC VOA Water Prep	SW-846 5030B	1	08/15/2002 18:03	Melissa D Mann	n.a.



Lancaster Laboratories Sample No. WW 3878558

Collected:08/09/2002 16:55

by DM

Account Number: 10905

Submitted: 08/14/2002 09:20

Reported: 08/20/2002 at 19:10

ChevronTexaco 6001 Bollinger Canyon Rd L4310

Discard: 09/20/2002

San Ramon CA 94583

C-5-W-020809

Grab

Water

Facility# 90338 Job# 386456

GRD

5500 TELEGRAPH AVE

T0600100347 C-5

, CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters				1	
01730	TPH-GRO - Waters The reported concentration of T gasoline constituents eluting p start time. A site-specific MSD sample was was performed to demonstrate pro-	rior to the Co	for the project.	A LCS/LCSD	ug/1	1
08214	BTEX, MTBE (8021)					1
00776 00777 00778 00779 00780	Benzene Toluene Ethylbenzene Total Xylenes Methyl tert-Butyl Ether A site-specific MSD sample was was performed to demonstrate pr	71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 not submitted ecision and ac	N.D. N.D. N.D. 220. for the project. curacy at a batch	0.50 0.50 0.50 1.5 2.5 A LCS/LCSD	ug/1 ug/1 ug/1 ug/1 ug/1	1 1 1 1

State of California Lab Certification No. 2116

		Laboratory	Chro	nicle Analysis		Dilutic
CAT No. 01729	Analysis Name TPH-GRO - Waters	Method N. CA LUFT Gasoline Method	Trial# 1	Date and Time 08/15/2002 18:37	Analyst Melissa D Mann	Factor
08214 01146	BTEX, MTBE (8021) GC VOA Water Prep	Method SW-846 8021B SW-846 5030B	1 1	08/15/2002 18:37 08/15/2002 18:37	Melissa D Mann Melissa D Mann	1 n.a.

#=Laboratory MethodDetection Eminipexetwided target detection limit
N.D.=Not defect a first poye filt 12425 limit
Lancaster, PA 17605-2425

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



Client Name: ChevronTexaco

Group Number: 818820

Reported: 08/20/02 at 07:10 PM

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD <u>%REC</u>	LCS/LCSD <u>Limits</u>	RPD	RPD_Max
Batch number: 02227A53A	Sample n	umber(s):	3878554-38	78558				
Benzene	N.D.	. 2	ug/1	97	96	80-118	3	30
Toluene	N.D.	. 2	ug/1	99	98	82-119	ī	30
Ethylbenzene	N.D.	. 2	ug/1	99	98	81-119	ī	30
Total Xylenes	N.D.	.6	ug/l	101	99	82-120	ī	30
Methyl tert-Butyl Ether	N.D.	. 3	ug/l	94	93	79-127	ī	30
TPH-GRO - Waters	N.D.	50.	ug/l	103	101	74-116	2	30
Batch number: 02227A53B	Sample n	umber(s):	3878555					
Benzene	N.D.	.2	ug/l	97	96	80-118	1	30
Toluene	N.D.	. 2	ug/l	99	98	82-119	ī	30
Ethylbenzene	N.D.	. 2	ug/l	99	98	81-119	1	30
Total Xylenes	N.D.	.6	ug/l	101	99	82-120	1	30
Methyl tert-Butyl Ether	N.D.	. 3	ug/l	94	93	79-127	1	30

Sample Matrix Quality Control

	MS	msd	ms/msd		RPD	BKG	DUP	DUP	Dup
Analysis Name	%REC	%REC	<u>Limits</u>	RPD	MAX	Conc	Conc	RPD	RPD <u>Max</u>
Batch number: 02227A53A	Sample	number	(s): 387855	4-38785	58				
Benzene	104		83-130						
Toluene	105		87-129						
Ethylbenzene	109		86-133						
Total Xylenes	110		86-132						
Methyl tert-Butyl Ether	94		66-140						
TPH-GRO - Waters	104		74-132						,
Batch number: 02227A53B	Sample	number	(s): 387855	5					
Benzene	104		83-130						
Toluene	105		87-129						
Ethylbenzene	109		86-133						
Total Xylenes	110		86-132						
Methyl tert-Butyl Ether	94		66-140						

Surrogate Quality Control

Analysis Name: TPH-GRO - Waters

Batch number: 02227A53A

	Trifluorotoluene-F	Trifluorotoluene-P	
3878554	80	87	
3878555	90		
3878556	82	87	
3878557	81	87	
3878558	80	87	
Blank	82	90	
LCS	86	90	
LCSD	86	89	
MS	87	89	
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.



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 Reported: 08/20/02 at 07:10 PM

Group Number: 818820

Surrogate Quality Control

Analysis Name: TPH-GRO - Waters Batch number: 02227A53B Trifluorotoluene-F

Baten num	Trifluorotoluene-F	Trifluorotoluene-P
3878555 Blank LCS LCSD MS	79 86 86 87	84 86 90 89 89
Timits:	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.

