M2438 W

Environmental Management Company 6001 Bollinger Canyon Rd, K2256 P.O. Box 6012 San Ramon, CA 94583-2324 Tel 925-842-1589 Fax 925-842-8370

Karen Streich Project Manager

November 22, 2004

ChevronTexaco

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

Re:

Chevron Service Station # 9-2029

riconmental Health Address: 890 West MacArthur Blvd., Oakland, CA

I have reviewed the attached routine groundwater monitoring report dated November 1, 2004

I agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by Gettler-Ryan, Inc., upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

Karen Streich Project Manager

Karen Freit

Enclosure: Report



GETTLER-RYAN INC.

TRANSMITTAL

November 1, 2004 G-R #386911

100 0 2 2004

Mr. Robert Foss

Cambria Environmental Technology, Inc.

5900 Hollis Street, Suite A Emeryville, California 94608 CC: Mork aren Streich

Chevron Person Company P.O. Box 6012, Room K2256 San Ramon, California 94583

FROM:

TO:

Deanna L. Harding

Project Coordinator Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568 **RE:** Former Chevron Service Station

#9-2029

890 West MacArthur Blvd.

Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
. 1	October 29, 2004	Groundwater Monitoring and Sampling Report Third Quarter - Event of September 30, 2004

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 *November 19, 2004*, at which time the final report will be distributed to the following:

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

Enclosures

trans/9-2029-ks



October 29, 2004 G-R Job #386911

Ms. Karen Streich ChevronTexaco Company P.O. Box 6012, Room K2256 San Ramon, CA 94583

RE: Third Quarter Event of September 30, 2004

Groundwater Monitoring & Sampling Report Former Chevron Service Station #9-2029 890 West MacArthur Boulevard

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

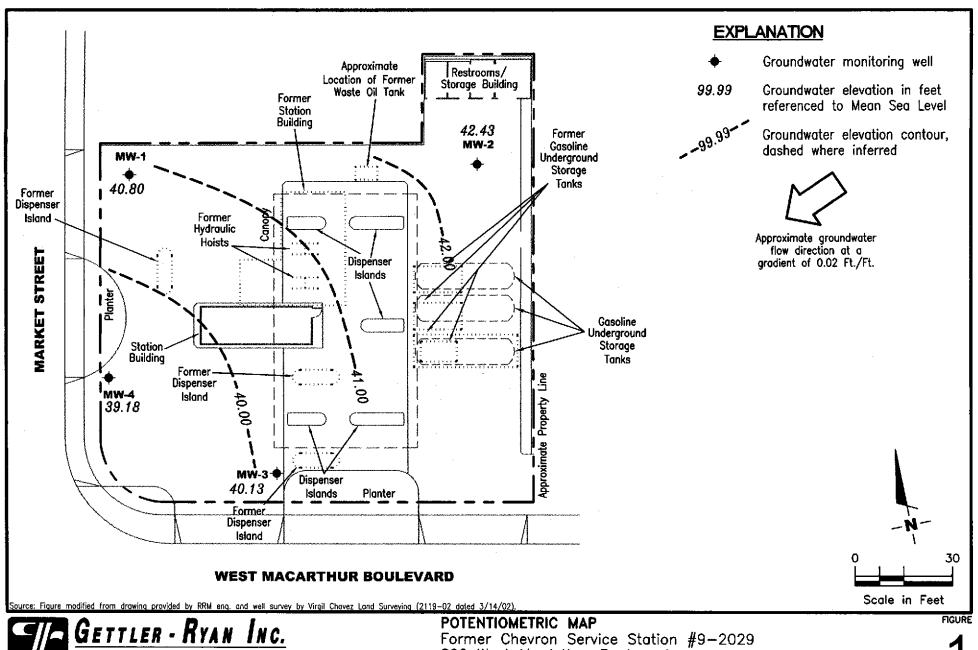
Figure 1: Potentiometric Map

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

Attachments: Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports



6747 Sierra Ct., Suite J Dublin, CA 94568 (925) 551-7555

890 West MacArthur Boulevard Oakland, California

REVISED DATE

PROJECT NUMBER 386911

REVIEWED BY

September 30, 2004

DATE

FILE NAME: P:\Envira\Chevron\9-2029\Q04-9-2029.DWG | Layout Tab: Pot3

Table 1
Groundwater Monitoring Data and Analytical Results
Former Chevron Service Station #9-2029

ormer Chevron Service Station #9-2029 890 West MacArthur Blvd. Oakland, California

WELL ID/	TOC*	DTW	GWE	TPH-G	В	T	Ł	X	MTBE
DATE	(ft.)	(ft.)	(msl)	(pph)	(ppb)	(ppb)	(ppb)	(pph)	(pph)
MW-I						•			
03/12/021	50.71	6.50	44.21	<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5/<2 ²
06/07/02	50.71	8.69	42.02	<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5/<2 ²
09/13/02	50.71	9.28	41.43	<50	< 0.50	<0.50	<0.50	<1.5	<2.5/<2 ²
12/13/02	50.71	8.48	42.23	<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5/<2 ²
03/01/03	50.71	7.34	43.37	<50	< 0.50	₹0.50	<0.50	<1.5	<2.5/<0.5 ²
06/27/03 ³	50.71	9.29	41.42	<50	< 0.5	0.6	< 0.5	<0.5	< 0.5
09/30/03 ³	50.71	10.17	40.54	<50	< 0.5	0.6	< 0.5	< 0.5	<0.5
12/03/03	50.71	7.82	42.89	<50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
03/10/04 ³	50.71	6.57	44.14	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
06/30/04 ³	50.71	9.78	40.93	<50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
09/30/04 ³	50.71	9.91	40.80	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-2						A		,	?
03/12/02 ¹	52.57	6.09	46.48	<50	< 0.50	<0.50	<0.50	<1.5	<2.5/3 ²
06/07/02	52,57	8.65	43.92	<50	< 0.50	<0.50	<0.50	<1.5	<2.5/<2 ²
09/13/02	52.57	9.58	42.99	<50	< 0.50	<0.50	<0.50	<1.5	<2.5/<2²
12/13/02	52.57	8.50	44.07	<50	< 0.50	<0.50	<0.50	<1.5	<2.5/<22
03/01/03	52.57	7.00	45.57	<50	< 0.50	< 0.50	<0.50	<1.5	<2.5/<0.5 ²
06/27/033	52.57	9.59	42.98	<50	< 0.5	< 0.5	< 0.5	<0.5	<0.5
09/30/03 ³	52.57	10.64	41.93	<50	< 0.5	<0.5	< 0.5	< 0.5	0.7
12/03/03 ³	52.57	7.54	45.03	<50	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
03/10/043	52.57	6.05	46.52	<50	<0.5	< 0.5	<0.5	<0.5	<0.5
06/30/043	52.57	10.15	42.42	<50	<0.5	< 0.5	< 0.5	< 0.5	<0.5
09/30/043	52.57	10.14	42.43	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-3						-			
03/12/02 ¹	50.31	6.50	43.81	12,000	600	8.5	1,100	370	700/650 ²
06/07/02	50.31	7.74	42.57	14,000	630	8.8	1,200	160	520/490 ²
09/13/02	50.31	9.73	40.58	3,000	270	3.2	200	11	600/640 ²
12/13/02	50.31	8.60	41.71	24,000	1,100	14	2,400	220	650/540 ²
03/01/03	50.31	6.75	43.56	16,000	500	9.0	1,200	130	460/330 ²

Table 1 Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #9-2029 890 West MacArthur Blvd. Oakland, California

X (ppb)	MTBE (pph)
	(pph)
30	
30	
	470
3	710
- 85	420
95	220
3	660
4	690
150	170/170 ²
21	200/120 ²
14	190/160 ²
19	170/200 ²
110	160/100 ²
58	130
7	520
52	73
	55
	110
10	400
<1.5	<2.5
<1.5	<2.5
<1.5	<2.5
<1.5	<2.5
	<2.5
	<0.5
	<0.5
	<0.5
	71 17 10 <1.5 <1.5 <1.5

Table 1 Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #9-2029 890 West MacArthur Blvd. Oakland, California

ATE	(#)	(ft.)	(msl)	(ppb)	(pph)	(ppb)	(ppb)	(ppb)	(ppb)
(cont)									
3/10/04 ³				<50	< 0.5	< 0.5	< 0.5	<0.5	<0.5
6/30/04 ³				<50	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
2/30/04 ³				<50	<0.5	<0.7	<0.8	<0.8	<0.5

Table 1

Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #9-2029 890 West MacArthur Blvd. Oakland, California

EXPLANATIONS:

TOC = Top of Casing

TPH-G = Total Petroleum Hydrocarbons as Gasoline

MTBE = Methyl tertiary butyl ether

(ft.) = Feet

B = Benzene

(ppb) = Parts per billion

DTW = Depth to Water

T = Toluene

-- = Not Measured/Not Analyzed

GWE = Groundwater Elevation

E = Ethylbenzene

QA = Quality Assurance/Trip Blank

(msl) = Mean sea level

X = Xylenes

* TOC elevations were surveyed on March 14, 2002, by Virgil Chavez Land Surveying. The benchmark for this survey was a USGS bronze disk located near the north end of the curb return at the Northwest corner of 38th Street and Broadway, (Benchmark Elevation = 85.41 feet, NGVD29).

- Well development performed.
- ² MTBE by EPA method 8260.
- 3 BTEX and MTBE by EPA Method 8260.

Table 2 Groundwater Analytical Results - Oxygenate Compounds Former Chevron Service Station #9-2029

Former Chevron Service Station #9-20 890 West MacArthur Blvd. Oakland, California

WELL ID	DATE	ETHANOL	ТВА	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB
		(ppb)	(ppb)	(ррв)	(ppb)	(pph)	(pph)	(ррь)	(ppb)
MW-1	03/12/02		<100	<2	<2	<2	<2	<2	<2
	06/07/02		<100	<2	<2	<2	<2	<2	<2
	09/13/02		<100	<2	<2	<2	<2	<2	<2
	12/13/02		<100	<2	<2	<2	<2	<2	<2
	03/01/03	44	< <u>5</u>	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
	06/27/03		<5	< 0.5	< 0.5	- <0.5	<0.5	<0.5	< 0.5
	09/30/03	<50	<5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
	12/03/03	<50	<5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	03/10/04	<50	<5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	06/30/04	<50	<5	< 0.5	<0.5	<0.5	< 0.5	< 0.5	< 0.5
	09/30/04	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-2	03/12/02		<100	3	<2	<2	<2	<2	<2
141 44 -2	06/07/02		<100	<2	<2	<2	<2	<2	<2
	09/13/02		<100	<2	<2	<2	<2	<2	<2
	12/13/02		<100	<2	<2	<2	<2	<2	<2
	03/01/03		<5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5
	06/27/03		<5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5
	09/30/03	<50	<5	0.7	< 0.5	<0.5	<0.5	< 0.5	<0.5
	12/03/03	<50	<5	<0.5	< 0.5	<0.5	<0.5	< 0.5	< 0.5
	03/10/04	<50	<5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	06/30/04	<50	<5	<0.5	< 0.5	<0.5	< 0.5	< 0.5	< 0.5
	09/30/04	<50	<5	<0.5	<0.5	<0.5	<0.5	<0,5	<0.5
MW-3	03/12/02		<100	650	<2	<2	18	<2	<2
1.1 ** -0	06/07/02	. 	230	490	<5.0	_ <5.0	11	<5.0	<5.0
	09/13/02		170	640	<2	<2	8	<2	<2
٠	12/13/02		240	540	<2	<2	29	- 31	<2
	03/01/03	••	160	330	<0.5	<0.5.	10	<0.5	<0.5
	06/27/03		200	470	<0.5	<0.5	11	<0.5	<0.5
	09/30/03	<50	120	710	<0.5	<0.5	6	0.7	<0.5
	12/03/03	<250	200	420	<3	<3	14 .	<3	<3
		200		, 20	-5	-5		-5	-5

Table 2
Groundwater Analytical Results - Oxygenate Compounds

Former Chevron Service Station #9-2029 890 West MacArthur Blvd. Oakland, California

WELL ID	DATE	ETHANOL	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB
		(ppb)	(ppb)	(ppb)	(pph)	(pph)	(ppb)	(ppb)	(ppb)
MW-3	03/10/04	<50	140	220	<0.5	< 0.5	5	<0.5	<0.5
(cont)	06/30/04	<50	100	660	< 0.5	< 0.5	5	< 0.5	< 0.5
(vem)	09/30/04	<50	72	690	<0.5	<0.5	4	0.5	< 0.5
MW-4	03/12/02		<100	170	<2	<2	13	<2	<2
	06/07/02		<100	120	<2	<2	14	. <2	<2
	09/13/02		<100	160	<2	<2	14	<2	<2
	12/13/02		<100	200	<2	<2	17	<2	<2
	03/01/03		19	100	< 0.5	<0.5	8	<0.5	< 0.5
	06/27/03		22	130	< 0.5	< 0.5	11	< 0.5	< 0.5
	09/30/03	<100	<10	520	<1	<1	9	</td <td><1</td>	<1
	12/03/03	<50	18	73	< 0.5	< 0.5	5	<0.5	< 0.5
	03/10/04	<50	11	55	< 0.5	< 0.5	4	<0.5	< 0.5
	06/30/04	<100	<10	110	<1	<1	6	<1	</td
	09/30/04	<50	17	400	<0.5	<0.5	7	< 0.5	< 0.5

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Former Chevron Service Station #9-2029 890 West MacArthur Blvd. Oakland, California

EXPLANATIONS:

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

TBA = tertiary-Butyl alcohol

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = tertiary-Amyl methyl ether

I,2-DCA = 1,2-Dichloroethane

EDB = 1,2-Dibromoethane

(ppb) = Parts per billion

-- = Not Analyzed

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, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or disposable 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 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 ChevronTexaco Company, the purge water and decontamination water generated during sampling activities is transported by IWM to McKittrick Waste Management located in McKittrick, California.



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

te Address: 89	evronTexac 0 West Mac akland, CA			Event Date:	9.30.04	(inclusive
ell ID	kland, CA			Campler		
				Sampler:	FT	
'ell Diameter	MW- 1	Date	e Monitored:	9.30.04	Well Condition:	٥١٤
	2 in. 24.65 ft.,		Volume Factor (V	3/4"= 0.02 F) 4"= 0.66	1 - 0.0	= 0.38 == 5.80
epth to Water	9.41 ft.	/F <u>.1</u> 7	= 2.50	x3 case volume= (Estimated Purge Volume: 1	. 5 (gal.
urge Equipment:		San	npling Equipmen	t:	Time Started: Time Completed:	
isposable Bailer		Dis	posable Bailer	/	Depth to Product:	ft
tainless Steel Bailer			ssure Bailer		Depth to Water:	
tack Pump uction Pump			crete Bailer ner:		Hydrocarbon Thickness: Visual Confirmation/Descr	
rundfos					Skimmer / Absorbant Soci	
ther:					Amt Removed from Skimn Amt Removed from Well:_	
					Water Removed:	
					Product Transferred to:	
Time (2400 hr.) 1037 1038	Volume (gal.) 2.5 5.0 7.0	pH 6.82 6.68 6.39	Conductivity (umhos/cm) 403 406	Temperature OF) 20.3 19.4	gal. D.O. (mg/L)	ORP (mV)
			ABORATORY IN		Y ANALYSI	5
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYP	E LABORATOR LANCASTER	··-	
MW-		YES	HCL	LANCASTER	8 OXYS(8260)	
COMMENTS:						
•						

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: (ChevronTexac	o #9-202	29	Job Number:	386911			
Site Address: 8	890 West Mac	arthur B	lvd.	Event Date:	9.	30.04		(inclusive
City:	Oakland, CA			Sampler:		FT		 ·
Well 1D	MW- 2	Date	e Monitored:	9.30. ay	. Well Co	ondition:	ρίć	
Well Diameter	2 in.		Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38	_
otal Depth	24.38 ft.		Factor (V		5"= 1.02	6"= 1.50	12"= 5.80	
Depth to Water	10.14 ft.	_				7		
_	14.24 ×	vf <u>.17</u>	<u> </u>	x3 case volume= (Estimated Purg	ge Volume:_	1.24	gal.
Purge Equipment:		San	npling Equipmen	4.	Time Start			_(2400 hrs)
Disposable Bailer			posable Bailer	". <i>[</i>	Time Com			
Stainless Steel Bailer			ssure Bailer					
Stack Pump			crete Bailer		Hydrocarb	on Thicknes	is:	ft
Suction Pump		•	er:		Visual Cor	nfirmation/D	escription:	
Grundfos					Skimmer /	Absorbant	Sock (circle o	one)
Other:							dmmer:	
					Amt Remo		'ell:	gal
						ransferred to):	
Purging Flow Rate Did well de-water Time (2400 hr.) 1054	7 Volume (gal.) 2.5 5.0		Conductivity (umhos/cm) 481	Temperature (CF)	gal. D.C (mg/),	ORP (mV)	-
	11.		BORATORY INI	FORMATION				
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPI				YSES	
MW- 2	x voa vial	YES	HCL	LANCASTER	TPH-G(80 8 OXYS(8		MTBE(8260)/	ļ
<u>.</u>	 				3,113(0			
	<u> </u>							
							····	
COMMENTS:								
Add/Replace	ed Lock:			Add/Replaced F	Plug:	Siz	e:	<u></u>

WELL MONITORING/SAMPLING FIELD DATA SHEET

lient/Facility#: C	hevronTexac	o #9-2029	9	Job Number:	300911		_
	90 West Mac			Event Date:	4.20.04		(inclusiv
_	akland, CA	ı		Sampler:	<u>FT</u>		
Vell ID	MW- 3	Date	Monitored:	9.30.04	Well Condition:	οκ	
Vell Diameter	2 in.		<u>-</u>	3/4"= 0.02	1"= 0.04 2"= 0.17	3*= 0.38	\neg
otal Depth	24.62 ft.		Volume Factor (V		5"= 1.02 6"= 1.50	12"= 5.80	
epth to Water	10.18 ft.	_	\			¬ 4/	
		vf <u>. 17</u>	<u>= 2.45</u>	x3 case volume≃ i	Estimated Purge Volume:	<u> </u>	gal.
·				•	Time Started:		(2400 hrs)
urge Equipment:			pling Equipmen	· /	Time Completed: Depth to Product:		_(2400 hrs)
isposable Bailer		- •	osable Bailer		Depth to Water:		
Stainless Steel Bailer			sure Bailer		Hydrocarbon Thickne		ft
Stack Pump	V	•	rete Bailer		Visual Confirmation/E	Description:	
Suction Pump		Otne	er		Skimmer / Absorbant	Sock (circle o	ne)
Grundfos					Amt Removed from S	Skimmer:	gal
Other:	_				Amt Removed from V	Veli:	gal
					Water Removed: Product Transferred		
					Floodor Hansieries		
Start Time (purge) Sample Time/Date Purging Flow Rate Did well de-water	e: 1202 /9 e: 2.5 gpm.	.30 - 04 Sedime	ner Conditions Water Colo ent Description e:	r: (.) (.) n: (.)	LTY	yes	
Sample Time/Date Purging Flow Rate	e: 1202 /9 e: 2.5 gpm.	.30 - 04 Sedime	Water Colo ent Description	r: (.) (.) n: (.)	ey Odor:	ORP (mV)	
Sample Time/Date Purging Flow Rate Did well de-water Time (2400 hr.) 1148 1150 1151	e: 1202 / 9 e: 2.5 gpm. Volume (gal.) 2.5 5.0	9H 6.40 6.27	Water Colorent Description e: Conductivity (umhos/cm) 733	Temperature OF) 22.4 21.7 20.9	gal. D.O. (mg/L)	ORP (mV)	
Sample Time/Date Purging Flow Rate Did well de-water Time (2400 hr.)	e: 1202 / 9 e: 2.5 gpm. Volume (gal.) 2.5 5.0 7.0	.30.04 Sedime If yes, Time pH 6.40 6.36 6.27 LAI REFRIG.	Water Colorent Description e: Conductivity (umhos/cm) 731 824 864	Temperature OF) 21.7 20.9	Qdor: C Gal. D.O. (mg/L) C C C C C C C C C	ORP (mV)	
Sample Time/Date Purging Flow Rate Did well de-water Time (2400 hr.) 11 50 11 51	e: 1202 / 9 e: 2.5 gpm. Volume (gal.) 2.5 5.0 7.0 (#) CONTAINER	.30.04 Sedime If yes, Time pH 6.40 6.36 6.27 LAI REFRIG.	Water Colorent Description e: Conductivity (umhos/cm) 731 824 864 BORATORY IN	Temperature OF) 22.4 21.7 20.9	gal. D.O. (mg/L)	ORP (mV)	
Sample Time/Date Purging Flow Rate Did well de-water Time (2400 hr.) 11 50 11 51	e: 1202 / 9 e: 2.5 gpm. Volume (gal.) 2.5 5.0 7.0 (#) CONTAINER	.30.04 Sedime If yes, Time pH 6.40 6.36 6.27 LAI REFRIG.	Water Colorent Description e: Conductivity (umhos/cm) 731 824 864 BORATORY IN	Temperature OF) 22.4 21.7 20.9	Qdor: C Gal. D.O. (mg/L) C C C C C C C C C	ORP (mV)	
Sample Time/Date Purging Flow Rate Did well de-water Time (2400 hr.) 11 50 11 51	e: 1202 / 9 e: 2.5 gpm. Volume (gal.) 2.5 5.0 7.0 (#) CONTAINER	.30.04 Sedime If yes, Time pH 6.40 6.36 6.27 LAI REFRIG.	Water Colorent Description e: Conductivity (umhos/cm) 731 824 864 BORATORY IN	Temperature OF) 22.4 21.7 20.9	Qdor: C Gal. D.O. (mg/L) C C C C C C C C C	ORP (mV)	
Sample Time/Date Purging Flow Rate Did well de-water Time (2400 hr.) 11 50 11 51	e: 1202 / 9 e: 2.5 gpm. Volume (gal.) 2.5 5.0 7.0 (#) CONTAINER	.30.04 Sedime If yes, Time pH 6.40 6.36 6.27 LAI REFRIG.	Water Colorent Description e: Conductivity (umhos/cm) 731 824 864 BORATORY IN	Temperature OF) 22.4 21.7 20.9	Qdor: C Gal. D.O. (mg/L) C C C C C C C C C	ORP (mV)	
Sample Time/Date Purging Flow Rate Did well de-water Time (2400 hr.) 11 50 11 51	e: 1202 / 9 e: 2.5 gpm. Volume (gal.) 2.5 5.0 7.0 (#) CONTAINER	.30.04 Sedime If yes, Time pH 6.40 6.36 6.27 LAI REFRIG.	Water Colorent Description e: Conductivity (umhos/cm) 731 824 864 BORATORY IN	Temperature OF) 22.4 21.7 20.9	Qdor: C Gal. D.O. (mg/L) C C C C C C C C C	ORP (mV)	



Add/Replaced Lock:

WELL MONITORING/SAMPLING

FIELD DATA SHEET

Job Number: 386911 ChevronTexaco #9-2029 Client/Facility #: (inclusive) 890 West Magarthur Blvd. **Event Date:** 9.30.04 Site Address: Oakland, CA Sampler: FT City: Well Condition: Well ID MW- 4 Date Monitored: 9.30.04 Well Diameter 1"= 0.04 2"= 0.17 3=0.383/47= 0.02 Volume Total Depth ft. 4"= 0.66 5"= 1.02 6 = 1.5012"= 5.80 Factor (VF) Depth to Water 2.3 2 x3 case volume= Estimated Purge Volume: Time Started: (2400 hrs) Sampling Equipment: **Purge Equipment:** Time Completed: (2400 hrs) Depth to Product: ft Disposable Bailer Disposable Bailer Depth to Water:_ Stainless Steel Bailer Pressure Bailer Hydrocarbon Thickness: Stack Pump Discrete Bailer Visual Confirmation/Description: Suction Pump Other:_ Grundfos Skimmer / Absorbant Sock (circle one) Other:_ Amt Removed from Skimmer: Amt Removed from Well: gal Water Removed: Product Transferred to: Start Time (purge): Weather Conditions: Odor: Sample Time/Date: / C1.30.04 Water Color: Sediment Description: Purging Flow Rate: Did well de-water? If yes, Time: _____ Volume: _ ND D.O. ORP Conductivity Temperature Time Volume pΗ (mg/L) (mV) (2400 hr.) (u mhos/cm) (gal.) .5 5.0 LABORATORY INFORMATION ANALYSES PRESERV. TYPE LABORATORY SAMPLE ID (#) CONTAINER REFRIG. LANCASTER TPH-G(8015)/BTEX+MTBE(8260)/ MW-🗸 x voa vial YES HCL 8 OXYS(8260) COMMENTS: Size: 2

Add/Replaced Plug:

Chevron California Region Analysis Request/Chain of Custody

All ancactor Laboratories						cct.#:	10	. an	ı		F	or L	anca:	ster	Labo	orator	ries :	150 (only	SCR#			
Lancaster Laboratories Where quality is a science.						cct.#:	10			_ s 						<u>'</u>	915	2	27	00/0/		·	
	1	0050) Y-	-0	-						_	\nai	y s es	Re	ques	ted							
Facility #: SS#9-2029 G-R#386911 Glob				Т	Matr	ix								tior	Co	jes						tive Code	
Site Address: MACARTHUR BLV	OAKI AN	ID. CA		1				II.	T	Ŀ	├	H	\square		┞╌┤			-	\vdash	H = HCI N = HNO		T = Thios B = NaOl	
Site Address.	CA	ARRIA		\vdash		\dashv				d d										8 = H ₂ SC	Š4	O = Other	<i>t</i>
Chevron PMS Lead Consultant/Office: G-R, Inc., 6747 Sierra Court	Consultant:	ublia Ca 94	ISER	1	<u>e</u>	,	ers.	<u> </u> _		Č T											-	ing needed	
Consultant/Office: G-R, Inc., 6/4/ Sierra Cou	t, Suite J, D	COMM, Ce. 5			18 g		fain	뭁		9		3	1 1							Must me	et lov	vest detecti 260 compo	on limits unds
Consultant Pri. Mg (des	nna@gnnc.	com)		ŀ	□ Potable		Ş			Ö		(0778								8021 MTB			
Consultant Phone 925-551-7555	Fax #925-	51-7899	<u> </u>		-		ē	8	&-	280			421			=						est hit by 82	60
Sampler: FRAJK TEN	14041			2		6	Ę	l w	डि	Ş	ត្រ	Oxygenates								Confirm			
Service Order #:	ion SAR:		8	3	 	₹.	Z	Į	15	9151	S	}	7420			ŀ				☐Run_	oxy	s on highe	st hit
	Date	Time	Grad g	Soil Poster	Water	Oil Cl Air Cl	물	BTEX + MTBE 8260 XR 8021 □	TPH 8015 MOD GRO	TPH 8015 MOD DRO Silica Gel Cleanup	8260 full scan	Op	Lead 7420 🖂 7421 🖂							□Run	ox)	s on all hit	s
Sample Identification	Collected	Collected		+	W		12	区		Ť	٣	 	 -		T					Commer	nts / F	Remarks	
Q _A	1 70.04	- 1	╂┼	╅	 •	1				†	1]			
MW-I	11	1048	X	1	11	1	6	X	X			X							<u> </u>				
. NW-2		1108	X		\prod		Ce	X	14			X	↓_		┞.				<u> </u>				
MW - 3		1202	X		$\bot \downarrow$		6		14		↓ _	X	┞.		 		<u> </u>	ļ	<u> </u>	}			
MW-4	<u> </u>	1136	X	4	11	1	6	>	1	4-	-	X	 	-	\vdash	ŀ		ļ	├				
			-	+	 -	- -	╁	1	+-	╀	+	╂	-	 	┢			-	╁	1.			
			1	+	+	+	ŀ÷	╁╌	╁	╁		+-	+-	╁╌		-	├-	 	╁╴	i			
	 	- 	╂┼┼	+		+	-	+-		╁	+	╁╌	╁	╁╌	\dagger	-	 	 	T	,			
			+	+		+-	†	+	╁-	+-	+-	T	1	† ·-	1	1	1		†	†			
		 	1	\top		\top	†	1	1	Ť	1	1	1						Ī.,] .			
									1	I		Ι		L,	Ι.	Ι_		L	L.	<u> </u>			
- LTL Committee WATVelous	-\	Relingu	ished b	λ:()		- 1				٨	Dat 30		Tim	1e	Rec	eived	i_by:					Date	Time
Turnaround Time Requested (TAT) (please of STD, TAT) 72 hour 48 no		72-1	ished b	<u>-</u> K		مامف		<u></u>	·	-1		_	Tim		Ren	a Po	i hv:			7		Daje	Time
24 hour 4 day 5 day		Relinqu	JISNEC O	y:	سنك	λ_{l}	m	a		j	5 25	4	137		(. در. مرسد	Le	06	ino	19	10/5/09	1320
		Relind	uished b)	/	7)*					70	e /	Tim		Rec	eived	i by:	\ 1	1.1	 ^^	-	Date	Time
Data Package Options (please circle if required) OC Summery Type I — Full			nd	L	26	مار	بجم	2	4	/	10/5	64	153	0		۹	<u>_L</u>	15	<u> </u>	 		10/5/0	1
QC Summary Type I — Full Type VI (Raw Data) □ Coelt Deliverable not ne	bebe		uished b	•		cial Ca	arrier:	:	U						\delta \	yei∨ed /})	d by:			\ ,		Date 7-04	Time / ()&5
WIP (RWQCB)		1				.17	70.00	-			_	_			- *		مم		<u> </u>	AV-	<u></u>	111-1-0-	4 0 80
Disk		Tempe	rature U	Jpon	Recei	Pt Let		<u>~</u>							Cus	stody	Seal	s inti	act?	(Yes)	No		<u> </u>

3460 Rev. 7/30/01



425, Lancaster, PA 17605-2425 •717-656-2300 Fex 717-656-2661 • www.lancasterlabs.com

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 915227. Samples arrived at the laboratory on Thursday, October 07, 2004. The PO# for this group is 99011184 and the release number is STREICH.

Client Description	Lancaster Labs Number
QA Water Sample	4370757
MW-1 Grab Water Sample	4370758
MW-2 Grab Water Sample	4370759
MW-3 Grab Water Sample	4370760
MW-4 Grab Water Sample	4370761

1 COPY TO **ELECTRONIC** COPY TO

Cambria C/O Gettler-Ryan

Gettler-Ryan

Attn: Deanna L. Harding Attn: Cheryl Hansen



2425 New Holland Pike, PC Box 12425, Lancaster, PA 17605-2425 *717-656-2300 Fax:717-656-2661* www.lancasterlabs.com

Questions? Contact your Client Services Representative Megan A Moeller at (717) 656-2300.

Respectfully Submitted,

Senior Chemist



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4370757

QA Water Sample

Facility# 92029 Job# 386911

890 West MacArthur Blvd. - Oakland, CA

Collected: 09/30/2004

Submitted: 10/07/2004 08:50

Reported: 10/14/2004 at 14:17

Discard: 11/14/2004

Account Number: 10904

ChevronTexaco , ,

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

WMBQA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/1	1 .
	The reported concentration of T gasoline constituents eluting p start time.	PH-GRO does not prior to the C6	include MTBE or (n-hexane) TPH-0	other GRO range		
06054	BTEX+MTBE by 8260B				,	
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0 - 8	ug/l	1

	Laboratory Chronicle									
CAT	Analysis									
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor				
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	10/09/2004 23:55	Victoria M Martell	1				
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	10/13/2004 19:53	Anita M Dale	1				
01146	GC VOA Water Prep	SW-846 5030B	1	10/09/2004 23:55	Victoria M Martell	1				
01163	GC/MS VOA Water Prep	SW-846 5030B	1	10/13/2004 19:53	Anita M Dale	n.a.				



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4370758

MW-1 Grab Water Sample Facility# 92029 Job# 386911 890 West MacArthur Blvd. - Oakland, CA Collected:09/30/2004 10:48 by FT

Submitted: 10/07/2004 08:50 Reported: 10/14/2004 at 14:17

Discard: 11/14/2004

Account Number: 10904

ChevronTexaco, 6001 Bollinger Canyon'Rd L4310

San Ramon CA 94583

WMB01

				As Received		Dilution
CAT			As Received	Method		_
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01728	TPH-GRO - Waters The reported concentration of TP gasoline constituents eluting pr start time.	n.a. PH-GRO does not rior to the C6	N.D. include MTBE of (n-hexane) TPH-0	50. r other	ug/l	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
02010		108-20-3	N.D.	0.5	ug/l	1
02011	di-Isopropyl ether	637-92-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	994-05-8	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	75-65-0	N.D.	5.	ug/l	1
02015	t-Butyl alcohol	71-43-2	N.D.	0.5	ug/l	1
05401	Benzene		N.D.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2		0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.		ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	~ ~ / +	-

	Laboratory Chronicle Analysis								
CAT No. 01728	Analysis Name TPH-GRO - Waters	Method N. CA LUFT Gasoline	Trial# 1	Date and Time 10/10/2004 01:21	Analyst Victoria M Martell	Factor 1			
01594	BTEX+5	Method SW-846 B260B	1	10/14/2004 00:51	Anita M Dale	1			
01146 01163	Oxygenates+EDC+EDB+ETOH GC VOA Water Prep GC/MS VOA Water Prep	SW-846 5030E SW-846 5030B	1 1	10/10/2004 01:21 10/14/2004 00:51	Victoria M Martell Anita M Dale	l n.a.			



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4370759

MW-2 Grab Water Sample Pacility# 92029 Job# 386911 890 West MacArthur Blvd. - Oakland, CA

Collected:09/30/2004 11:08 by FT

Submitted: 10/07/2004 08:50 Reported: 10/14/2004 at 14:17

Discard: 11/14/2004

Account Number: 10904

ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

WMB02

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of TR gasoline constituents eluting prestart time.	PH-GRO does not rior to the C6	include MTBE or (n-hexane) TPH-G	other RO range	, t	
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH				•	
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1
	Matrix QC was performed on this Please see the attached QC summar					

CAT	Laboratory Chronicle Analysis								
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor			
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	10/10/2004 01:50	Victoria M Martell	1			
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	10/13/2004 22:22	Anita M Dale	1			
01146	GC VOA Water Prep	SW-846 5030B	1	10/10/2004 01:50	Victoria M Martell	1			
01163	GC/MS VOA Water Prep	SW-846 5030E	1	10/13/2004 22:22	Anita M Dale	n.ā.			



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4370760

MW-3 Grab Water Sample
Facility# 92029 Job# 386911
890 West MacArthur Blvd. - Oakland, CA
Collected:09/30/2004 12:02 by FT

Submitted: 10/07/2004 08:50 Reported: 10/14/2004 at 14:17

Discard: 11/14/2004

Account Number: 10904

ChevronTexaco,

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

WMB03

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01728	TPH-GRO - Waters	n.a.	1,900.	250.	ug/l	5
	The reported concentration of T gasoline constituents eluting p start time.	PH-GRO does no rior to the C6	t include,MTBE o (n-hexane) TPH-	r other GRO range		•
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH				ı	
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
		1634-04-4	690.	5.	ug/l	10
02010	Methyl Tertiary Butyl Ether	108-20-3	N.D.	0.5	ug/l	1
02011	di-Isopropyl ether	637-92-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether			0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	4.	5.	ug/1	1
02015	t-Butyl alcohol	75-65-0	72.	= -	ug/1	1
05401	Benzene	71-43-2	66.	0.5		1
05402	1,2-Dichloroethane	107-06-2	0.5	0.5	ug/1	
05407	Toluene	108-88-3	0.8	0.5	ug/1	. 1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	84.	0.5	ug/1	1
06310	Xylene (Total)	1330-20-7	4 -	0.5	ug/l	1

CAT	Laboratory Chronicle								
No. 01728	Analysis Name TPH-GRO - Waters	Method N. CA LUFT Gascline	Trial# 1	Date and Time 10/10/2004 02:19	Analyst Victoria M Martell	Factor 5			
01594	BTEX+5	Method SW-846 8260B	1	10/14/2004 01:12	Anita M Dale	1			
01594	Oxygenates+EDC+EDB+ETOH BTEX+5	SW-846 8260B	1	10/14/2004 01:33	Anita M Dale	10			
01146 01163	Oxygenates+EDC+EDB+ETOH GC VOA Water Prep GC/MS VOA Water Frep	SW-846 5030B SW-846 5030B	1 1	10/10/2004 02:19 10/14/2004 01:12	Victoria M Martell Anita M Dale	5 n.a.			



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 4370761

MW-4 Grab Water Sample

Facility# 92029 Job# 386911

890 West MacArthur Blvd. - Oakland, CA

Collected:09/30/2004 11:36

Submitted: 10/07/2004 08:50

Reported: 10/14/2004 at 14:17

by FT

Account Number: 10904

ChevronTexaco ' '

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Discard: 11/14/2004

WMB04

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01728	TPH-GRO - Waters	n.a.	4.800.	500.	ug/l	10 .
	The reported concentration of TP gasoline constituents eluting pr start time.	H-GRO does not ior to the C6	include MTBE or (n-hexane) TPH-G	other RO range	t	
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	400.	5.	ug/l	10
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	7.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	17.	5.	ug/l	1
05401	Benzene	71-43-2	100.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	1.	0.5	ug/l	1
05412	1.2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	33.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	10.	0.5	ug/l	1

		Laboratory	Chro	N1C18 Analysis		Dilution
CAT No. 01728	Analysis Name TPH-GRO - Waters	Method N. CA LUFT Gasoline	Trial#	Date and Time 10/10/2004 02:48	Analyst Victoria M Martell	Factor 10
01594	BTEX+5	Method SW-846 8260B	1	10/14/2004 01:55	Anita M Dale	1
01594	Oxygenates+EDC+EDB+ETOH BTEX+5	SW-846 8260E	1	10/14/2004 02:16	Anita M Dale	10
01146 01163	Oxygenates+EDC+EDB+ETOH GC VOA Water Prep GC/MS VOA Water Prep	SW-846 5030E SW-846 5030E	ב נ	10/10/2004 02:48 10/14/2004 01:55	Victoria M Martell Anita M Dale	10 n.a.



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681• www.lancasterlabs.com

Page 1 of 3

Quality Control Summary

Client Name: ChevronTexaco

Reported: 10/14/04 at 02:17 PM

Group Number: 915227

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

	2020-			_	-			
Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS %REC	LCSD %REC	LCS/LCSD <u>Limits</u>	RPD	RPD Max
			4370757	1 .			•	
Batch number: 04283A08B TPH-GRO - Waters	N.D.	umber(s):	ug/l	106	103	70-130	2	30
			4320250 42	70761				
Batch number: 04283A08C		umber(s):	43/0/30-92	100	103	70-130	2 1	30
TPH-GRO - Waters	N.D.	50.	ug/l	106	103	70-150	-	
Batch number: Z042872AA	Sample n	umber(s):	4370757					
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	94		77-127		
Benzene	N.D.	0.5	ug/1	99		85-117		
Toluene	N.D.	0.5	ug/l	99		85-115		
	N.D.	0.5		100		82-119		
Ethylbenzene	N.D.	0.5	ug/1	100		83-113		
Xylene (Total)	и.р.	0.5	45) 1					
Batch number: Z042873AA	Sample n	umber(s):	4370758-43	370761				
Ethanol	N.D.	50.	ug/l	77		46-145		
Methyl Tertiary Butyl Ether	N.D.	D.5	ug/l	93		77-127		
di-Isopropyl ether	N.D.	0.5	ug/1	93		67-130		
Ethyl t-butyl ether	N.D.	0.5	ug/l	92		74-120		
t-Amyl methyl ether	N.D.	0.5	ug/1	92		79-113		
t-Butyl alcohol	N.D.	5.	ug/l	91		57-141		
Benzene	N.D.	0.5	ug/1	94		85-117		
1,2-Dichloroethane	N.D.	0.5	ug/l	94		77-132		
Toluene	N.D.	0.5	ug/l	93		85-115		
	N.D.	0.5	ug/l	95		81-114		
1,2-Dibromoethane	N.D.	0.5	ug/1	95		82-119		
Ethylbenzene		0.5	ug/î	96		83-113		
Xylene (Total)	N.D.	V.5	49/ I					

Sample Matrix Quality Control

Analysis Name	MS <u>%REC</u>	MSD %REC	MS/MSD Limits	RPD	RPD <u>MAX</u>	BKG Conc	DUP <u>Conc</u>	DUP RPD	Dup RPD Max
Batch number: 04283A08E TPH-GRO - Waters	Sample 150	number	(s): 4370757 63-154						
Batch number: 04283A08C TPH-GRO - Waters	Sample 150	number	(s): 4370758 63-154	-43707	61				
Batch number: Z04287ZAA Methyl Tertiary Butyl Ether Benzene Toluene	Sample 102 109 110	number 102 108 109	(s): 4370757 69-134 83-128 83-127	0 1 1	30 30 30				

*- 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.



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 3

Quality Control Summary

Client Name: ChevronTexaco

Group Number: 915227

Reported: 10/14/04 at 02:17 PM

Sample Matrix Quality Control

	MS	MSD	MS/MSD		RPD	PKG	DUP '	DUP	Dup RPD
Analysis Name	%REC	*REC	<u>Limits</u>	RPD	<u>max</u>	Conc	<u>Conc</u>	<u>rpd</u>	Max
Ethylbenzene	111	109	82-129	1	30				
Xylene (Total)	110	108	82-130	2	30				
Batch number: Z042873AA	Sampl	e number	(s): 43707	58-43707	761	•			
Ethanol	43	81	33-153	60*	30				
Methyl Tertiary Butyl Ether	93	94	69-134	1	30				
di-Isopropyl ether	96	. 96	75-130	0	30				
Ethyl t-butyl ether	94	94	78-119	0	30				
t-Amyl methyl ether	92	93	77-117	1	30				
t-Butyl alcohol	90	99	51-147	9 ,	30				*
Benzene	101	101	83-128	O	30				
1,2-Dichloroethane	97	99	73-136	2	30				
Toluene	(101	102	83-127	1	30				
1,2-Dibromoethane	96	95	78-120	0	30			į.	
Ethylbenzene	101	102	82-129	1	30				
Xylene (Total)	101	102	82-130	1	30				

Surrogate Quality Control

Analysis Name: TPH-GRO - Waters Batch number: 04283A08B

Trifluorotoluene-F

4370757	106
Blank	105
LCS	106
LCSD	105
MS	108

Limits: 67-146

Analysis Name: TPH-GRO - Waters Batch number: 04283A08C Trifluorotoluene-F

4370758	106
4370759	103
4370760	105
4370761	108
Blank	105
LCS	106
LCSD	105
MS	108

Limits: 57-146

	per: Z042872AA Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4370757	105	100	105	102
Blank	105	102	104	104

*- 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.



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 3

Quality Control Summary

Client N	lame: ChevronTexaco	Group Number: 915227				
	1: 10/14/04 at 02:17	PM Surrogate Qu	ality Control			
LCS MS MSD	106 106 .107	102 102 103	106 106 105	104 106 106		
Limits:	B1-120	82-112	85-112	83-113		
Batch num	Name: BTEX+5 Oxygenates+ED ber: Z042873AA Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene		
4370758	96	91 92	93 93	92 93		
4370759	96	92	92	94		
4370760 4370761	96 97	94	92	96		
Blank	94	91	94	92		
LCS	94	92	94	93		
MS	96	93	94	93		
MSD	96	92	94	93		
Limits:	81-120	82-112	85-112	83-113		

*- 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.



Explanation of Symbols and Abbreviations

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

N.D. TNTC IU umhos/cm C meq	none detected Too Numerous To Count International Units micromhos/cm degrees Celsius milliequivalents gram(s)	, 1	BMQL MPN CP Units NTU F Ib. kg	Below Minimum Quantitation Level Most Probable Number cobalt-chloroplatinate units nephelometric turbidity units degrees Fahrenheit pound(s) kilogram(s)
g µg ml m3	gram(s) microgram(s) milliliter(s) cubic meter(s)	, 1		1 7 7

- < less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- J estimated value The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).</p>
- ppm parts per million One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.
- ppb parts per billion

Dry weight basis

Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Inorganic Qualifiers

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" ≥idl<br="">Estimated due to interference</crdl,>	
В	Analyte was also detected in the blank	E		
С	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met	
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits	
Ε	Concentration exceeds the calibration range of	S	Method of standard additions (MSA) used	
	the instrument		for calculation	
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected	
Р	Concentration difference between primary and	W	Post digestion spike out of control limits	
	confirmation columns >25%	. *	Duplicate analysis not within control limits	
U	Compound was not detected	+	Correlation coefficient for MSA < 0.995	
Z.Z	Defined in case parrative			

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

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.