

November 22, 2004 G-R #386521

TO:

Mr. Bob Foss

Cambria Environmental Technology, Inc.

5900 Hollis Street, Suite A Emeryville, CA 94608

CC: Ms. Karen Streich

ChevronTexaco Company

P.O. Box 6012, Room K2256

San Ramon, California 94583

FROM:

Deanna L. Harding

**Project Coordinator** Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568

**Former Chevron Service Station** 

#209339

Alameda County940 College Avenue

DEC X 0 2004

Oakland, California

RO 0000466

Environmental Health

#### WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	November 22, 2004	Groundwater Monitoring and Sampling Report Second Semi Annual - Event of October 22, 2004

### **COMMENTS:**

Please provide any comments/changes and propose any groundwater monitoring modifications for the next event prior to December 10, 2004, at which time the final report will be distributed to the following:

Mr. Barney Chan, Alameda County Health Care Services, Dept. of Environmental Health, 1131 Harbor Bay cc: Parkway, Suite 250, Alameda, CA 94502-6577

Mr. Donald Sweet, San Francisco Property Management Co., 1375 Sutter St., Suite 308, San Francisco, CA 94109

**Enclosures** 

trans/209339-KS



November 22, 2004 G-R Job #386521

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

RE: Second Semi Annual Event of October 22, 2004

Groundwater Monitoring & Sampling Report Former Chevron Service Station #209339

5940 College 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). A joint monitoring event was conducted with Sheaff's Garage located at 5930 College Avenue, Oakland, California.

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

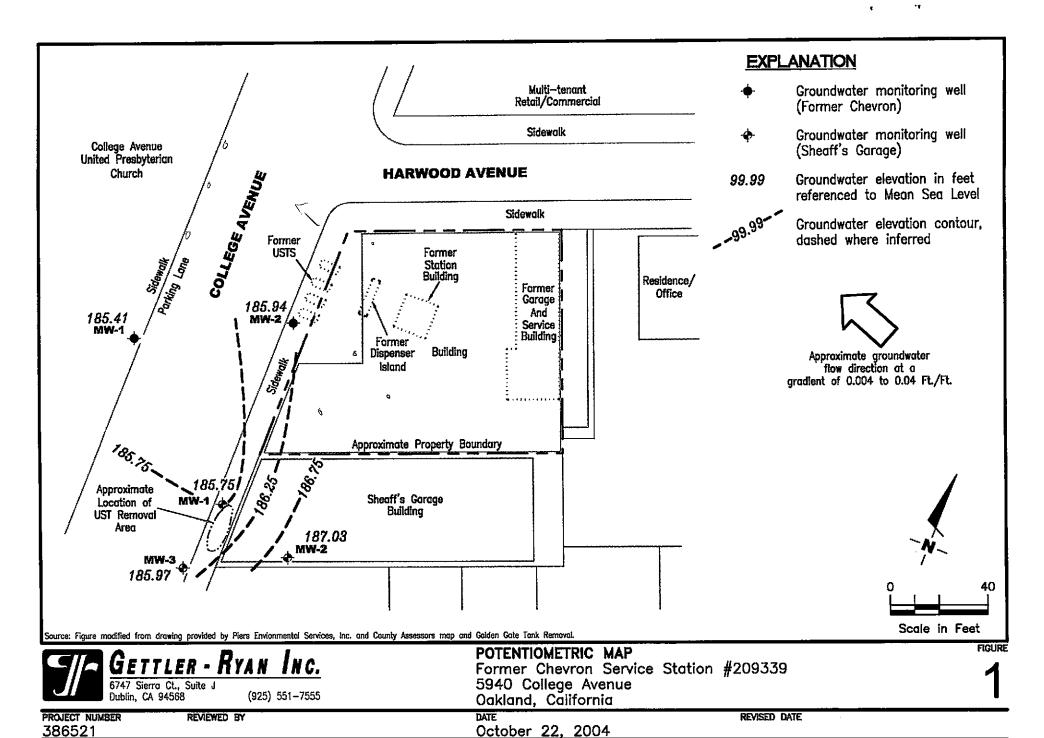
Table 3: Groundwater Analytical Results

Table 4: Field Measurements

Table 5: Joint Groundwater Monitoring Data and Analytical Results
Attachments: Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports



FILE NAME: P:\Enviro\Chemon\209339\Q04-20-9339.DWG | Layout Tab: Pot4

Table 1
Groundwater Monitoring Data and Analytical Results
Former Chevron Service Station #209339

5940 College Avenue Oakland, California

WELL ID/	тос*	DTW	GWE	TPH-G	В	<b>T</b>	<b>t</b>	X	MTBE
DATE	(ft.)	(ft.)	(msl)	(ppb)	(ppb)	(pph)	(ppb)	(ppb)	(ppb)
DA.TU	<u></u>					<del></del>			
MW-1				1			2.7	7.6	14/<2.0 <sup>3</sup>
01/03/01	196.91	12.75	184.16	930¹	2.9	6.9		3.3	$5.3/<2.0^3$
04/25/01	196,91	9.23	187.68	210 <sup>4</sup>	2.0	1.5	2.0		<2.5
07/09/01	196.91	11.86	185.05	290 <sup>5</sup>	1.8	2.0	2.5	0.96	<2.5
10/08/01	196.91	13.49	183.42	200	< 0.50	<0.50	<0.50	<1.5	<2.5
01/13/02	196.91	7.33	189.58	<50	< 0.50	< 0.50	<0.50	<0.50	
04/08/02	196.91	7.45	189.46	670	< 0.50	<2.0	<1.0	5.6	<2.5
10/15/02	196.91	13.68	183.23	260	0.62	0.82	< 0.50	<1.5	
04/15/03	196.91	6.82	190.09	1,700	1.3	<5.0	<2.0	<5.0	
10/31/03	196.91	13.72	183.19	150	<2.0	0.7	<2.0	<5.0	
04/23/04	196.91	9.02	187.89	<50	< 0.5	<0.5	< 0.5	<1.5	
10/22/04	196,91	11.50	185,41	63	<0.5	<0.5	< 0.5	<1.5	
MW-2				2.1002	110	П	63	25	83/2.23
01/03/01	197.35	12.48	184.87	2,100 <sup>2</sup>	110		30	15	$150/<2.0^3$
04/25/01	197.35	8.90	188.45	1,7004	150	12		26	<50
07/09/01	197.35	11.44	185.91	$2,500^5$	200	21	55	9,8	<2.5
10/08/01	197.35	13.37	183.98	4,200	87	2.8	29		27/<2.0 <sup>3</sup>
01/13/02	197.35	6.55	190.80	410	20	2.9	<2.5	4.4	
04/08/02	197.35	8.37	188.98	4,000	70	1.7	17	17	<2.5
10/15/02	197.35	13.00	184.35	3,100	41	2.2	16	<6.0	
04/15/03	197.35	7.58	189.77	2,400	37	<2.5	12	<7.5	
10/31/03	197.35	13.02	184.33	2,300	12	3.4	4.8	<7.5	
04/23/04	197.35	8.38	188.97	960	8.9	1.0	2.4	<1.5	
10/22/04	197.35	11.41	185.94	2,200	24	<2.5	4.1	<10	=4

Table 1
Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #209339 5940 College Avenue Oakland, California

ÆLL ID/ ATE	TOC*	DTW (ft.)	GWE (msl)	TPH-G (ppb)	(ppb)	(pph)	(ррв)	(ppb)	(pph)
RIP BLANK									
B-LB									25
/03/01				< 50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
/25/01				< 50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
7/09/01			<b></b>	<50	< 0.50	< 0.50	< 0.50	<0.50	<2.5
A									- 4 - 4
/08/01				<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5
/13/02				<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
713702 1/08/02				<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5
0/15/02				<50	< 0.50	< 0.50	< 0.50	<1.5	
7/15/02 4/15/03				<50	< 0.5	< 0.5	<0.5	<1.5	
0/31/03	<del></del>	<del></del>		<50	< 0.5	< 0.5	< 0.5	<1.5	
4/23/04				<50	< 0.5	< 0.5	< 0.5	<1.5	
0/22/04	_			<50	<0.5	< 0.5	< 0.5	<1.5	

### Table 1

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

Former Chevron Service Station #209339
5940 College Avenue
Oakland, California

#### **EXPLANATIONS:**

TOC = Top of Casing

(ft.) = Feet

B = Benzene

T = Toluene

GWE = Groundwater Elevation

(msl) = Mcan sea level

T = Total Petroleum Hydrocarbons as Gasoline

MTBE = Methyl tertiary butyl ether

(ppb) = Parts per billion

-- = Not Measured/Not Analyzed

QA = Quality Assurance/Trip Blank

X = Xylenes

- \* TOC elevations were surveyed on December 27, 2000, by Virgil Chavez Land Surveying. The benchmark used for the survey was a City of Oakland benchmark being a cut square in the top of curb, at the curb return at the northeast corner of College Avenue and Miles Avenue, (Benchmark Elev. = 179,075 feet, msl).
- Laboratory report indicates unidentified hydrocarbons C6-C12.
- <sup>2</sup> Laboratory report indicates gasoline C6-C12.
- 3 MTBE by EPA Method 8260.
- <sup>4</sup> Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons <C6.
- Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons C6-C12.

Table 2

### Groundwater Analytical Results - Oxygenate Compounds

Former Chevron Service Station #209339 5940 College Avenue

Oakland, California

WELL ID	DATE	ETHANOL	ТВА		DIPE		TAME	1,2-DCA
		(ppb)	(ppb)	(ppb)	(pph)	(ppb)	(ppb)	(ppb)
MW-1	01/03/01	<500	<50	<2.0	<2.0	<2.0	<2.0	<2.0
	04/25/01		<20	<2.0	<2.0	<2.0	<2.0	
MW-2	01/03/01	<500	<50	2.2	<2.0	<2.0	<2.0	<2.0
-	.04/25/01		. <20	<2.0	<2.0	<2.0	<2.0	
	01/13/02	<b></b>	<20	<2.0	<2.0	<2.0	<2.0	

### **EXPLANATIONS:**

TBA = Tertiary butyl alcohol

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

1,2-DCA = 1,2-Dichloroethane

(ppb) = Parts per billion

-- = Not Analyzed

### ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

# Table 3 Groundwater Analytical Results

Former Chevron Service Station #209339 5940 College Avenue Oakland, California

WELL ID	DATE	FERROUS IRON (ppm)	TOTAL ALKALINITY (ppm)	SULFATE AS SO <sub>4</sub> (ppm)
MW-1	04/25/01	0.15	380	11
	07/09/01	< 0.050	410	6.8
	10/08/01	1	414	5.4
	01/13/02	< 0.10 <sup>2</sup>	390	10
MW-2	04/25/01	0.093	680	21
	07/09/01	0.44	600	9.3
	10/08/01	1	683	3.8
	01/13/02	< 0.10 <sup>2</sup>	630	7.0

### **EXPLANATIONS:**

(ppm) = Parts per million

### **ANALYTICAL METHODS:**

EPA Method SM 3500 Fe for Ferrous Iron EPA Method 310.1 for Total Alkalinity EPA Method 300.0 for Sulfate as  $SO_4$ 

<sup>-- =</sup> Not Analyzed

Analysis was not performed by the Laboratory as requested on the Chain of Custody.

Due to sample transfer by the lab from laboratory to another, the sample was received beyond the EPA recommended holding time.

# Table 4 Field Measurements

Former Chevron Service Station #209339 5940 College Avenue Oakland, California

WELL ID	DATE	D.O. Before Parging	ORP Before Purging
		(mg/L)	(mV)
MW-1	07/09/01	1.25	111
	10/08/01	1.20	64
	01/13/021		-
MW-2	07/09/01	1.89	16
	10/08/01	1.04	58
	01/13/02 <sup>1</sup>		••

### **EXPLANATIONS:**

D.O. = Dissolved Oxygen Concentration

(mg/L) = Milligrams per liter

ORP = Oxygen Reduction Potential

(mV) = Millivolt

-- = Not Measured

<sup>&</sup>lt;sup>1</sup> D.O. and ORP meter erratic; measurments not taken.

Table 5
Joint Groundwater Monitoring Data and Analytical Results
Sheaff's Garage

Sheaff's Garage 5930 College Avenue Oakland, California

WELL ID/ TOC*(fl.)	DATE	DTW	GWE	TPH-G	В				
<u>ang panahahahata pang a anahahaha</u>		(ft.)	(msl)	(ppb)	(ppb)	(ppb)	(pph)	(ppb)	(ppb)
	, , , , , , , , , , , , , , , , , , ,								
MW-1									
04/25/011	195.90	7.39	188.51						
07/09/01	195.90	9.72	186.18	79,000	15,000	7,800	3,000	15,000	660
10/08/01	195.90	10.88	185.02	112,000	25,300	11,800	4,280	20,600	374
01/07/023	195.90	4.34	191.56	96,100	21,100	13,500	4,160	21,900	596/330 <sup>2</sup>
04/08/02	195.90	6.84	189.06	111,000	21,200	13,400	4,230	21,000	814
10/23/02 <sup>3,4</sup>	195.90		<b></b>						
04/15/035	195.90	·							
10/31/035	195.90								
04/23/044	195.90		-						
10/22/04	195.90	10.15	185.75	80,700	13,900	1,670	3,550	15,200	493
MW-2									
04/25/01 <sup>1</sup>	197.28	8.52	188.76						
07/09/01	197.28	11.05	186.23	39,000	6,200	730	2,300	6,100	180
10/08/01	197.28	12.79	184.49	40,700	6,310	399	2,100	5,320	6,460
01/07/023	197.28	4.92	192.36	59,600	10,300	3,250	4,180	14,400	366/170 <sup>2</sup>
04/08/02	197.28	8.40	188.88	66,700	10,200	2,670	3,840	13,200	583
10/23/023,4	197.28								
04/15/035	197.28		<del>-</del> -						
10/31/03 <sup>5</sup>	197.28								
04/23/044	197.28								
10/22/04	197.28	10.25	187.03	13,500	1,790	54	892	915	273
MW-3									
04/25/01 <sup>1</sup>	195.22	6.61	188.61						
07/09/01	195.22	8.85	186.37	12,000	39	10	690	1,600	35
10/08/01	195.22	9.75	185.47	4,912.5	107.7	3.9	99.0	132.5	52.2
01/07/023	195.22	4.25	190.97	7,260	723	138	492	887	81.7/16.7 <sup>2</sup>
04/08/02	195.22	6.33	188.89	11,700	540	108	706	1,710	< 0.5

Table 5
Joint Groundwater Monitoring Data and Analytical Results

Sheaff's Garage 5930 College Avenue Oakland, California

DATE	DTW	GWE	TPH-G					MTBE
	(ft.)	(msl)	(pph)	(ppb)	(ppb)	(ppb)	(pph)	(ppb)
195.22								**
195.22				**				
195.22								
195.22			<del></del>					
195.22	9.25	185.97	7,420	152	12.8	267	480	96
	195.22 195.22 195.22 195.22	195.22 195.22 195.22 195.22	195.22 195.22 195.22 195.22 195.22	(fi.) (msl) (pph)  195.22 195.22 195.22 195.22	195.22 195.22 195.22 195.22 195.22 195.22 195.22 195.22 195.22	195.22	195.22 195.22	PATE DIW GWE (PPb)

### Table 5

### Joint Groundwater Monitoring and Analytical Results

Sheaff's Garage 5930 College Avenue Oakland, California

#### **EXPLANATIONS:**

Joint groundwater monitoring data and laboratory analytical results were provided by Golden Gate Tank Removal, 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

DTW = Depth to Water

T = Toluene

-- = Not Measured/Not Analyzed

GWE = Groundwater Elevation

E = Ethylbenzene

(msl) = Mean sea level

X = Xylenes

\* TOC elevations were surveyed on April 26, 2001, by Virgil Chavez Land Surveying. The benchmark for the survey was a City of Oakland benchmark being a cut square in the top of curb, at the curb return at the northeast corner of College Avenue and Miles Avenue, (Benchmark Elevation = 179.075 feet, msl).

- Joint monitoring laboratory analytical results were not provided.
- MTBE by EPA Method 8260
- Joint monitoring was conducted on different day than Chevron.
- Joint monitoring data was not provided.
- 5 Joint monitoring and sampling was scheduled but not conducted.

# 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

Client/Facility #:	ChevronTexac	o #209339		Job Number:	386521	
	5940 College A	<del></del>	<del></del>	Event Date:	10-22-09	(inclusive
-	Oakland, CA			Sampler:	50 C	
Well ID	MW-	Date Mo	onitored:	10-22-00	√ Well Condition: _	0. <
Well Diameter	2 in.		Volume	3/4"= 0.02	1"= 0.04 2"= 0.17	3"= 0.38
Total Depth	20.15 th		Factor (VF		5"= 1.02 6"= 1.50	12"= 5.80
Depth to Water	11.50 ft.		L			
Dop.ii to trate.		/F 0.11 =	. <u>1.47</u>	x3 case volume= E	Estimated Purge Volume:_	<b>4.</b> ∫ gal.
	X		<del></del>		Time Started:	(2400 hrs)
Purge Equipment:		Samplin	ig Equipment	" ~	Time Completed:	
Disposable Bailer	~_	Disposa	ble Bailer		Depth to Product:	
Stainless Steel Bailer		Pressure	e Bailer		Depth to Water:  Hydrocarbon Thickness	
Stack Pump		Discrete			Visual Confirmation/D	escription:
Suction Pump		Other:			Skimmer / Absorbant	Cook (circle one)
Grundfos					Skimmer / Absorbant	kimmer: gal
Other:	<u> </u>				Amt Removed from W	/ell:gal
					Water Removed:	
					Product Transferred to	D:
<u> </u>						
Start Time (purge				: Fogge	Odor:	
Sample Time/Da	ate: <u>0640 110</u>	9.22-04 V		_	<u>∞√ 0001.</u>	1000
Purging Flow Ra	ate: e gpm.	Sediment	Description			<del></del>
Did well de-water	er?	If yes, Time:		Volume:	gal.	
	-	_		1607	D.O.	ORP
Time	Volume		anductivity /	(C/F)	(mg/L)	(mV)
(2400 hr.)	(Jal.)			63.7		·
0622	<u> </u>		2.11	64.7		
0625			2.26	64.5		
0629	<u> 4.5</u>	<u> 7.16                                    </u>	L. 16			
				FORMATION	ANA	LYSES
SAMPLE ID	(#) CONTAINER	REFRIG. PF	RESERV. TYP			
MW-	2 x voa via	YES	HCL_	LANCASTER	1111-0(0010)101214	
		<del>                                     </del>		<del></del>		
		<del> </del>				
	<del>-  </del>	<del>                                     </del>				
		<del>                                     </del>				
				_ <del></del>		<u> </u>
COMMENTS:						
Add/Rent	aced Lock:			Add/Replaced	Plug: Si	ze:



# WELL MONITORING/SAMPLING FIELD DATA SHEET

Site Address:					
Site Address.	5940 College	Avenue	Event Date:	10-22-09	(inclusiv
City:	Oakland, CA		Sampler:	50c	<del></del>
Well ID Well Diameter Total Depth Depth to Water	MW-2 2 in. 20:10 ft. 11:41 ft. 8-69 x	Date Monitored:  Volume Factor (V		. 2.0	3°≃ 0.38 2°= 5.80
Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Other:		Sampling Equipment Disposable Bailer Pressure Bailer Discrete Bailer Other:	nt:	Time Started: Time Completed: Depth to Product: Depth to Water: Hydrocarbon Thickness: Visual Confirmation/Desc Skimmer / Absorbant Soc Amt Removed from Skim Amt Removed from Well Water Removed: Product Transferred to:	(2400 hrs)ftftft cription: ck (circle one) amer:gal
Start Time (purge	): 0647	Weather Conditions	s: F099	у	
Sample Time/Da Purging Flow Ra Did well de-wate  Time (2400 hr.)  6655  6703	te: <u>07/3//6</u> te: <u>0.5gpm.</u>	Sediment Description  If yes, Time:  PH Conductivity (umhos/cm) × 6.72 0.69 6.71 0.62	n: Volume:		ORP (mV)
Sample Time/Da Purging Flow Ra Did well de-wate  Time (2400 hr.)  0 6 55	te: 07/3/16 te: 6.5gpm. r?  Volume (gal.) 1.5	Sediment Description  If yes, Time:  PH  Conductivity (umhos/cm)  6.72  0.69  0.69	150 Temperature (C/10) 65.0 64.7 64.8	gal.  D.O. (mg/L)	ORP (mV)

# Chevron California Region Analysis Request/Chain of Custody



102504-13

For Languager Laboratories use only

Acct. #: 10904 Sample #: 4387504-06

Group# 917892

												Anal	yses	Re	que	sted	}						
CC#200220 C D#206521 Cint	al ID#			Т	Matr	ix		t				Pres	erva	tlo	n Co	des				F	reser	ative Code	)\$
Facility #: SS#209339 G-R#386521 Glob Site Address940 COLLEGE AVENUE, OAI	(LAND, CA	45514			· · · · · ·			H	Ħ	dnue										H = H N = H S = H	NO <sub>3</sub>	T = Thios B = NaOl O = Othe	Н
Chevron PMS Lead Consultant/Office P.R. Inc., 6747 Sierra Cour Consultant Prj. MgPeanna L. Harding (dea Consultant Phone \$25-551-7555 Sampler: JOE ASE Service Order #:	t, Suite J, Du nne <b>@grinc.</b> c Fax <b>9</b> 25-5	om)		Composite	Water Detable	]_	Number of	BTEX	TPH 8015 MOD GRO	TPH 8015 MOD DRO Silica Gel Cleanup	8260 full scan	Oxygenates	Lead 7420 🔲 7421 🗀							Must poss 8021 M Conf	t meet lo ible for ITBE Co Irm high Irm all h	rting needed owest detect 8260 compoi onfirmation nest hit by 82 hits by 8260 ky s on higher	on limits unds 60 est hit
Q A	-	-	u	1	17	Т	2	<b> </b>	~											Comn	ients /	Remarks	
mw-I	10-22-04	0640	1	T	17	1	3	~	7	1										l			
MW-2	11	0713	1		1/		3	~	7							Ī							
				1	1		1	Г	1														
					1															]			
																				j			
																				J			
	-																			<u> </u>			
				$\perp$		1		<u> </u>		<u> </u>									Ĺ	j			
		<u></u>		$\perp$		_		_	<u> </u>		_	L.		<u> </u>						]			
·		. <u></u>	<u> </u>	$\perp$	<u> </u>	↓.	<u> </u>	1_	1_			<u> </u>	$oxed{oxed}$	<u> </u>		<u> </u>				]			
			ĻĻ				<u> </u>		[	<u> </u>		<u>L,</u>		Ļ	<u> </u>	上	<u> </u>	<u> </u>	<u> </u>	<u> </u>		,	
Turnaround Time Requested (TAT) (please cir	•	<b>*</b>	d bedgi	<u>m</u>	<u>u_</u>	· 	•			74	Date -22.	1	112		Rece						··-	Date	Time
STD. N 72 hour 48 hou 24 hour 4 day 5 day		<u> </u>	ished b		<u>, i</u>	_	<u>&gt;</u>	a	<u>^@</u>	. 80	Date 2/2C		Tim-	- 1	Reco				1	1 m	44	Date /	Time /4/0
Data Package Options (please circle if required)  QC Summary Type I — Full		3	ished b	re	la co	1	100	24	سر	هر.	Date 25/2		Time 60	e	Rece	9 14	by:					Date 25	Time
Type VI (Raw Data) Coelt Deliverable not nee	ded	Relinqu	ished b	y Cor	nmerci	ed Ca	rrier							$\neg$	Rec	ivec	by:	$\overline{}$	J			Date	Time
WIP (RWQCB)	•	UP9-	F	edE)	<u>, , , , , , , , , , , , , , , , , , , </u>	C	iner_							-	$\bigcirc$	$\sqrt{k}$	. Ox.		بلار	بر		26-01	1845
Disk		Tempe	rature U	pon f	Receipt	I.C	<u>-Z</u>	<u>.5</u>	C°						Cust	lody	Seal	s Inte	ct?	Yes	<del></del>	, , , , , , , , , , , , , , , , , , ,	



2425 New Holland File, PC Box 12425, Langaster, PA 17605-2425 \*717-656-2300 Fax 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 917892. Samples arrived at the laboratory on Tuesday, October 26, 2004. The PO# for this group is 99011184 and the release number is STREICH.

Client Description		Lancaster Labs Number
OA-T-041022	NA Water	4387504
MW-1-W-041022	Grab Water	4387505
MW-2-W-041022	Grab Water	4387506

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 Fex: 717-656-2661 • www.lancasterlabs.com

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

Respectfully Submitted,

Hana M Xanffman Dana M. Kauffman

Group Leader



ug/1

1

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 4387504

QA-T-041022

NA

Water

1330-20-7

QA '

Facility# 209339 Job# 386521

GRD

5940 College-Oakland

209339

Collected: 10/22/2004

Discard: 11/28/2004

02171 Total Xylenes

Account Number: 10904

Submitted: 10/26/2004 08:45 Reported: 10/28/2004 at 17:15

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

1.5

ChevronTexaco

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters The reported concentration of The gasoline constituents eluting prostart time.				ug/l	1
05879	BTEX					
02161 02164 02166	Benzene Toluene Ethylbenzene	71-43-2 108-88-3 100-41-4	N.D. N.D. N.D.	0.5 0.5 0.5	ug/l ug/l ug/l	1 1 1

State of California Lab Certification No. 2116

CAT		Laboratory	Chro	nicle Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	10/28/2004 01:00	Linda C Pape	1
05879	BTEX	SW-846 8021E	1	10/28/2004 01:00	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030E	1	10/28/2004 01:00	Linda C Pape	1

N.D.



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. 4387505

MW-1-W-041022

Grab

Water

Facility# 209339 Job# 386521

GRD

5940 College-Oakland

209339

MW-1

Collected:10/22/2004 06:40

by JA

Submitted: 10/26/2004 08:45 Reported: 10/28/2004 at 17:16

Discard: 11/28/2004

Account Number: 10904

ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters The reported concentration of TI gasoline constituents eluting pr start time.	n.a. PH-GRO does not rior to the C6	63. include MTBE or (n-hexane) TPH-G	50. other RO range	ug/l	1
05879	BTEX					
02161	Benzene	71-43-2	N.D.	0.5	ug/l	1
02164	Toluene	108-88-3	N.D.	0.5	ug/l	ב
02166	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
02171	Total Xylenes	1330-20-7	N.D.	1.5	ug/1	1

State of California Lab Certification No. 2116

		Laboratory	Chro:			Dilutian
CAT				Analysis	_	Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	10/28/2004 02:06	Linda C Pape	1
05879	BTEX	SW-846 8021B	1	10/28/2004 02:06	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	10/28/2004 02:06	Linda C Pape	1



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. 4387506

MW-2-W-041022

Grab

Facility# 209339 Job# 386521

GRD

5940 College-Oakland

209339

MW - 2

Collected:10/22/2004 07:13

by JA

Account Number: 10904

Submitted: 10/26/2004 08:45

Reported: 10/28/2004 at 17:16 Discard: 11/28/2004

ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01729	TPH-GRO - Waters					
01730	TPH-GRO - Waters The reported concentration of TP gasoline constituents eluting pr start time.				ug/l	1
05879	BTEX		<b>V</b>			
02161 02164	Benzene Toluene	71-43-2 108-88-3	24. N.D.	2.5	ug/l ug/l	5 5
02166 02171	Ethylbenzene Total Xylenes	100-41-4 1330-20-7	4.1 N.D.	2.5 10.	ug/l ug/l	5
*****	The reporting limits were raised				-5/-	ū

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

bring the internal standard peak area into the calibration range of the system.

State of California Lab Certification No. 2116

<b>-</b> -	
Laboratory	Chropicie

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
01729	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	10/28/2004 02:38	Linda C Pape	1
05879	BTEX	SW-846 8021B	1	10/28/2004 05:36	Linda C Pape	5
01146	GC VOA Water Prep	SW-846 5030B	1	10/28/2004 02:38	Linda C Pape	1



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

### Quality Control Summary

Client Name: ChevronTexaco

Reported: 10/28/04 at 05:16 PM

Group Number: 917892

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

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
Batch number: 04300A51B TPH-GRO - Waters Benzene Toluene Ethylbenzene Total Xylenes	Sample n N.D. N.D. N.D. N.D. N.D.	umber(s): 50. 0.5 0.5 0.5	4367504-43 ug/l ug/l ug/l ug/l ug/l ug/l	87506 109 103 103 105 107	108 103 102 104 107	70-130 79-123 82-119 81-119 82-120	1 0 1 1	30 30 30 30 30

### Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG Conc	DUP <u>Conc</u>	DUP RPD	Dup RPD <u>Max</u>
Batch number: 04300A51B	Sample	number	(s): 438750	04-43879	506				
TPH-GRO - Waters	119		63-154						
Benzene	117		78-131						
Toluene	114		78-129						
Ethylbenzene	112		75-133						
Total Xylenes	113		86-132						

### Surrogate Quality Control

Analysis Name: BTEX
Batch number: 04300A51B

Bacch Homa	Trifluorotoluene-F	Trifluorotoluene-P	•
4387504	102	102	
4387505	103	103	
438750€	117	98	
Blank	99	103	
LCS	104	101	
LCSD	103	101	
MS	104	107	
Limits:	57-146	72-128	

#### \*- 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.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
С	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
9	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	Ì	liter(s)
m3	cubic meter(s)	ul	microliter(s)

- less than The number following the sign is the limit of quantitation, 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).
- parts per million One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For ppm 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
- Dry weight 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 basis on an as-received basis.

#### U.S. EPA CLP Data Qualifiers:

	Organic Qualifiers		Inorganic Qualifiers
Α	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
В	Analyte was also detected in the blank	E	Estimated due to interference
С	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	υ	Compound was not detected
₽	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
X,Y,Z	Defined in case narrative		

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

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.