

October 19, 2005 Job #386794

Mr. Dana Thurman ChevronTexaco Company P.O. Box 6012, Room K2236 San Ramon, CA 94583

RE: Event of September 16, 2005

Groundwater Monitoring & Sampling Report

Chevron Service Station #9-8795

16010 Redmond Way Redmond, Washington

#### Dear Mr. Thurman:

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. Separate-phase hydrocarbons were not present in the wells. Static water level data and groundwater elevations are presented in 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. Purge water was treated by filtration through granular activated carbon and was subsequently discharged. The chain of custody document and laboratory analytical reports are attached.

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

Sincerely,

Deanna L. Harding

**Project Coordinator** 

Potentiometric Map Figure 1:

Senior Geologist, L.C. No. 829

Groundwater Monitoring Data and Analytical Results

Table 1: Field Measurements Table 2:

Groundwater Analytical Results - PAH Table 3:

Groundwater Analytical Results Table 4:

Standard Operating Procedure - Groundwater Sampling Attachments:

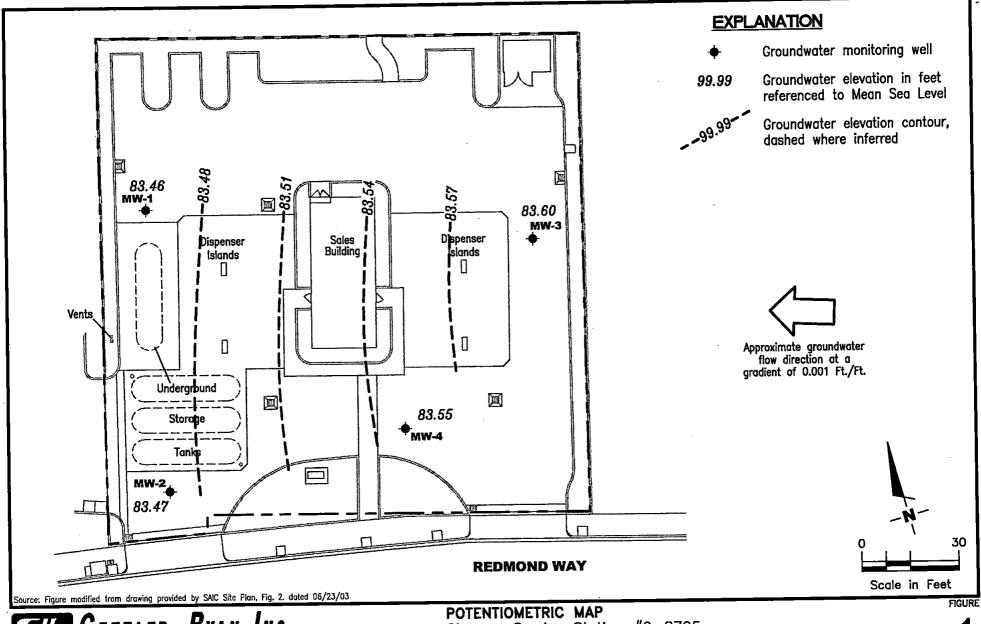
Field Data Sheets

Chain of Custody Document and Laboratory Analytical Report

Hydrogeologist

Robert A. Lauritzen

Censed Geolo





REVISED DATE

PROJECT NUMBER
386794

September 16, 2005

REVIEWED BY

Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID/	TOC*	DTW	GWE	TPH-D	ТРН-О	TPH-G	В	T	E	X	MTBE	T. LEAD
DATE	(ft.)	(ft.)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
	· · · · · · · · · · · · · · · · · · ·											
MW-1												
08/13/031	99.39	16.67	82.72	<76 <sup>2</sup>	<95 <sup>2</sup>	< 50	1.3	< 0.5	< 0.5	<1.5	<2.5	
12/19/03	99.39	12.69	86.70				4.1	< 0.5	< 0.5	<1.5		
03/27/04	99.39	14.19	85.20	$<250^{2}$	440 <sup>2</sup>	< 50	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
06/14/04	99.39	15.61	83.78	$< 800^{2}$	$<1,000^2$	< 50	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
09/04/04	99.39	14.86	84.53	<250 <sup>2</sup>	$<250^{2}$	< 50	5.2	< 0.5	< 0.5	<1.5	<2.5	
11/23/04	99.39	14.88	84.51	<250 <sup>2</sup>	<250 <sup>2</sup>	< 50	4.1	< 0.5	< 0.5	<1.5	<2.5	
03/05/05	99.39	14.86	84.53	<79 <sup>2</sup>	<98 <sup>2</sup>	<48	< 2.0	< 0.5	< 0.5	<1.5	<2.5	
$07/13/05^3$	99.39	14.84	84.55	<82 <sup>2</sup>	$<100^{2}$	<48	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	13.5
09/16/05 <sup>3</sup>	99.39	15.93	83.46	<80 <sup>2</sup>	<100 <sup>2</sup>	<48	<0.5	<0.5	< 0.5	< 0.5	< 0.5	20.8
MW-2				2	2						-2.5	
08/13/031	98.60	15.88	82.72	$<160^{2}$	$<200^{2}$	< 50	0.8	< 0.5	< 0.5	<1.5	<2.5	
12/19/03	98.60	11.89	86.71				18	2.6	< 0.5	7.8		
03/27/04	98.60	13.37	85.23	$<250^{2}$	<250 <sup>2</sup>	< 50	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
06/14/04	98.60	14.82	83.78	$<250^{2}$	$<250^{2}$	< 50	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
09/04/04	98.60	15.68	82.92	$<250^{2}$	$<250^{2}$	< 50	15	< 0.5	< 0.5	<1.5	<2.5	
11/23/04	98.60	14.07	84.53	$<250^{2}$	$<250^{2}$	< 50	31	1.5	< 0.5	<1.5	<2.5	
03/05/05	98.60	14.04	84.56	$< 79^{2}$	$<99^{2}$	<48	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
07/13/05 <sup>3</sup>	98.60	14.04	84.56	$< 80^{2}$	$<100^{2}$	<48	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	6.5
09/16/05 <sup>3</sup>	98.60	15.13	83.47	<80 <sup>2</sup>	<100 <sup>2</sup>	<48	40	<0.5	<0.5	<0.5	< 0.5	41.2
MW-3												
08/13/03 <sup>1</sup>	99.99	17.15	82.84	<76 <sup>2</sup>	<95 <sup>2</sup>	<50	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
12/19/03	99.99	13.06	86.93									
03/27/04	99.99	14.56	85.43			<50	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
06/14/04	99.99	16.08	83.91			<50	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
09/04/04	99.99	16.15	83.84			<50	<0.5	< 0.5	< 0.5	<1.5	<2.5	
	99.99	15.32	84.67			<50	<0.5	<0.5	< 0.5	<1.5	<2.5	
11/23/04			84.77			<48	<0.5	<0.5	<0.5	<1.5	<2.5	
03/05/05	99.99	15.22		<80 <sup>2</sup>	<100 <sup>2</sup>	<48	<0.5	<0.5	<0.5	<0.5	<0.5	4
07/13/05 <sup>3</sup>	99.99	15.23	84.76	<80°	<100°						<0.5	46.4
09/16/05 <sup>3</sup>	99.99	16.39	83.60	<80	<100	<48	< 0.5	< 0.5	< 0.5	< 0.5	~0.5	40.4

Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID/	TOC*	DTW	GWE	TPH-D	ТРН-О	TPH-G	В	T	E	<b>x</b>	MTBE	T. LEAD
DATE	(fi.)	(ft.)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-4												
08/13/031	99.68	16.88	82.80	$< 76^{2}$	<95 <sup>2</sup>	< 50	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
12/19/03	99.68	12.79	86.89									
03/27/04	99.68	14.31	85.37			< 50	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
06/14/04	99.68	15.78	83.90			< 50	< 0.5	< 0.5	< 0.5	<1.5	<2.5	( <del></del> )
09/04/04	99.68	15.86	83.82			< 50	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
11/23/04	99.68	15.02	84.66			< 50	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
03/05/05	99.68	14.98	84.70			<48	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
$07/13/05^3$	99.68	15.00	84.68	$< 80^{2}$	$<100^{2}$	<48	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	14.2
09/16/05 <sup>3</sup>	99.68	16.13	83.55	<400 <sup>2</sup>	<500 <sup>2</sup>	<48	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	23.1
TRIP BLANK												
QA								2.07	- 2 2			
12/19/03							< 0.5	< 0.5	< 0.5	<1.5		
03/27/04						< 50	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
06/14/04						< 50	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
09/04/04						< 50	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
11/23/04						< 50	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
03/05/05						<48	< 0.5	< 0.5	< 0.5	<1.5	<2.5	
07/13/05 <sup>3</sup>						<48	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
09/16/05 <sup>3</sup>						<48	< 0.5	<0.5	< 0.5	< 0.5	< 0.5	

	TPH-D	ТРН-О	TPH-G	В	T	E	X	MTBE	T. LEAD
Standard Laboratory Reporting Limits:	250	250	50	0.5	0.5	0.5	1.5	2.5	1.0
MTCA Method A Cleanup Levels:	500	500	800/1,000	5	1,000	700	1,000	20	15
Current Method:	NWTPH-D	+ Extended			NWTPH-G	and EPA 802	1B		EPA 7421

#### Table 1

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

Chevron Service Station #9-8795 16010 Redmond Way Redmond, Washington

#### **EXPLANATIONS:**

TOC = Top of Casing

TPH-G = Total Petroleum Hydrocarbons as Gasoline

(ft.) = Feet

B = Benzene

T. LEAD = Total Lead (ppb) = Parts per billion

DTW = Depth to Water

T = Toluene

-- = Not Measured/Not Analyzed

GWE = Groundwater Elevation

E = Ethylbenzene

QA = Quality Assurance/Trip Blank

TPH-D = Total Petroleum Hydrocarbons as Diesel

X = Xylenes

MTCA = Model Toxics Control Act Cleanup Regulations

TPH-O = Total Petroleum Hydrocarbons as Oil

MTBE = Methyl tertiary butyl ether

[WAC 173-340-720(2)(a)(I), as amended 02/01].

- TOC elevation are expressed in feet relative to an arbitrary datum.
- Data provided by SAIC.
- 2 TPH-D and TPH-O with silica gel cleanup.
- 3 BTEX and MTBE by EPA Method 8260B.
- Laboratory report indicates due to a laboratory error, the lead analysis was not performed on this sample.

#### Table 2

#### Field Measurements

Chevron Service Station #9-8795 16010 Redmond Way Redmond, Washington

WELLID	DATE	DO	ORP
		(mg/L)	(mV)
MW-1	07/13/05	2.9	58
	09/16/05	2.6	57
MW-2	07/13/05	3.6	72
1/1 // -2	09/16/05	3.3	79
MW-3	07/13/05	3.8	78
	09/16/05	3.7	86
MW-4	07/13/05	4.0	98
	09/16/05	3.8	102

#### **EXPLANATIONS:**

DO = Dissolved Oxygen

(mg/L) = Milligrams per liter

ORP = Oxidation Reduction Potential

(mV) = Millivolts

#### Table 3

#### Groundwater Analytical Results - PAH

Chevron Service Station #9-8795 16010 Redmond Way Redmond, Washington

WELL ID/ DATE	(1d) Naphthalene	dd Acenaphthylene og Acenaphthylene	(qdd) (qdd)	(qd) Fluorene	(qdd) Phenanthrene	(qdd) (qd Anfhracene	(qdd)	(gdd).	d. Benzo (u) anthracene (q. Benzo (u)	(dực)	d Benzo (b) fluoranthene	(q. Benzo (k.) fluoranthene	dd) (g Benzo (a) pyrene	d Indeno (1,2,3-cd) pyrene	ર્વી Dibenz (a,h) anthracene	(d. Benzo (g.h.i) perylene
<b>MW-1</b> 07/13/05	<0.01	<0.02	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02
<b>MW-2</b> 07/13/05	<0.01	<0.02	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02
<b>MW-3</b> 07/13/05	<0.01	<0.02	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02
<b>MW-4</b> 07/13/05	<0.01	<0.02	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02

#### **EXPLANATIONS:**

PAH = Polynuclear Aromatic Compounds

(ppb) = Parts per billion

#### **ANALYTICAL METHOD:**

Selected PAH by 8270 SIM

Table 4
Groundwater Analytical Results

WELLID	DATE	Zalki	ETHANOL (ppb)	ETBE (ppb)	TAME (ppb)	TBA (ppb)	1,2-DCA (ppb)	EDB (ppb)	BOD (ppb)	COD (ppb)
MW-1	07/13/05	<200	<50	<0.5	<0.5	<5	<0.5	<0.5	<2,000	77,100
MW-2	07/13/05	<200	<50	<0.5	<0.5	<5	<0.5	<0.5	<1,500	72,100
MW-3	07/13/05	<200	<50	<0.5	<0.5	<5	<0.5	<0.5	<del></del>	
MW-4	07/13/05	<200	<50	<0.5	<0.5	<5	<0.5	<0.5		

#### **EXPLANATIONS:**

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

TBA = Tertiary butyl alcohol

1,2-DCA = 1,2 Dichloroethane

EDB = 1,2-Dibromoethane

BOD = Biochemical Oxygen Demand

COD = Chemical Oxygen Demand

(ppb) = Parts per billion

-- = Not Analyzed

#### **ANALYTICAL METHOD:**

EPA Method SW-846 8015B Modified for Methanol and Ethanol

EPA Method 8260 for Oxygenate Compounds

EPA Method 405.1 for BOD

EPA Method 410.4 for COD

#### 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, temperature, pH and electrical conductivity are measured. 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. The measurements are taken a minimum of three times during the purging. Purging continues until these parameters stabilize. Purge water is treated by filtering the water through granular activated carbon and is subsequently discharged to the ground surface at the site.

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 for all samples. 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.

	ChevronTexaco #9-8795 16010 Redmond Way			ob Number: 3 vent Date:	9-16-05	(in	clusive)
Site Address:		Way		_	BWN		
City:	Redmond, WA		S	ampler: 	D0410		
	MW - 1	Date	Monitored: へ。	16-05	Well Condition:	ok	
Well ID	<del>-+</del>	Dais			1"= 0.04 2"= 0.17	3"= 0.38	
Well Diameter	19.96 ft.		Volume Factor (VF)	3/4"= 0.02 4"= 0.66	5"= 1.02 6"= 1.50	12"= 5.80	
Total Depth	1000		Pactor (VI)			7-	
Depth to Water		- 17	_ ,6g x	3 (case volume) = E	stimated Purge Volum	e:gal.	
	<u>~~1,03</u> _xv	r <del>.</del>			Time Started:	(240	0 hrs)
Purge Equipmer	nt· /	Sam	pling Equipment:	f 1	Time Completed:	<del></del>	00 hrs) ft
Disposable Bailer	V	Dispo	osable Bailer	<u> </u>	Depth to Product:	/	_'\ ft
Stainless Steel B	<del>-</del>		sure Bailer		Hydrocarbon Thickn	ess.	_ft
Stack Pump		Disc	rete Bailer		Visual Confirmation/	Description:	
Suction Pump		Othe	er:	_ <del></del>	Skimmer / Absorbat	t Sock (dircle one)	
Grundfos					Amt Removed frøm	Skimmer: <u>"</u> _	gal
Other:					Amt Removed from	Well:	gal
					Water Removed:	l de l	_
					Product Transferred	110.	
Sample Time	NDate: 1030 192	110.05	Water Color:	cleas		_ <u></u>	
Purging Flov	v Rate:gpm.	Sedime	nt Description:		gal.		٠
	v Rate:gpm.	Sedime	nt Description:	Volume:	gal. p.o.	ORP	
Purging Flow Did well de-v	v Rate: gpm.  water? Nolume  Volume	Sedime	nt Description:	Volume:		ORP (mV)	
Purging Flow Did well de-v	v Rate: gpm.  water? Nolume	Sedime If yes, Ţim	nt Description:	Volume:	D.O. (mg/L)	(mV)	
Purging Flow Did well de-v Time (2400	v Rate: gpm.  water? NO  e Volume hr.) (gal.)	Sedime If yes, Tim	nt Description:  e:  Conductivity (umhos/cm)	Volume:	D.O.	<del>-</del>	
Purging Flow Did well de-v Time (2400 l	v Rate: gpm.  water? Nolume hr.) (gal.)	Sedime If yes, Tim pH	conductivity (umhos/cm)	Volume: Temperature (Cj <sup>#</sup> )	D.O. (mg/L)	(mV)	
Purging Flow Did well de-v Time (2400	v Rate: gpm.  water? Nolume hr.) (gal.)	Sedime If yes, Tim	nt Description:  e:  Conductivity (umhos/cm)	Volume: Temperature (CJF)	D.O. (mg/L)	(mV)	
Purging Flow Did well de-v Time (2400 l	v Rate: gpm.  water? Nolume hr.) (gal.)	Sedime If yes, Tim pH	conductivity (umhos/cm)	Volume: Temperature (CJF)	D.O. (mg/L)	(mV)	
Purging Flow Did well de-v Time (2400 l	v Rate: gpm.  water? Nolume hr.) (gal.)	Sedime If yes, Tim pH  6.70 6.68	Conductivity (umhos/cm)	Volume: Temperature (C/F)	D.O. (mg/L)	(mV) 	
Purging Flow Did well de-v  Time (2400)  [0]  [0]  [0]	v Rate: gpm.  vater? NO  e Volume (gal.)  8 1	Sedime If yes, Tim pH  \$\frac{1}{5.70}\$  \$6.68	Conductivity (umhos/cm)  398 395	Volume: Temperature (C)	D.O. (mg/L)	(mV)  57  ANALYSES	
Purging Flow Did well de-v  Time (2400)  [0]  0 22	v Rate: gpm.  vater? Volume hr.) (gal.)   ID (#) CONTAINER	Sedime If yes, Tim pH  6.70 6.68  LA REFRIG.	Conductivity (umhos/cm)  318 315  BORATORY INFO	Volume: Temperature (C)	D.O. (mg/L)  Z.,G  Y  TPH-G/BTEX/MTE	(mV)  57  ANALYSES	
Purging Flow Did well de-v  Time (2400)  [0]  0 22	v Rate: gpm.  vater? Volume (gal.)   ID (#) CONTAINER  3 x voa vial	Sedime If yes, Tim pH  1.70 6.68  LA REFRIG. YES	Conductivity (umhos/cm)  398 395	Volume: Temperature (C)F)  14.0 13.9  ORMATION LABORATOR LANCASTEF	D.O. (mg/L)  Z., G  Y  TPH-G/BTEX/MTE R NWTPH-Dx	(mV)  57  ANALYSES	
Purging Flow Did well de-v (2400)  [0]  [0]  SAMPLE  MW-1	v Rate: gpm.  vater? No volume (gal.)    1	Sedime If yes, Tim pH  L. 70 6.68  REFRIG. YES YES	Conductivity (umhos/cm)  318  315  BORATORY INFE PRESERV. TYPE HCL	Volume: Temperature (C)F)  14.0 13.9  ORMATION LABORATOR LANCASTER	D.O. (mg/L)  Z., G  Y  TPH-G/BTEX/MTE R NWTPH-Dx	(mV)  57  ANALYSES	
Purging Flow Did well de-v  Time (2400)  [0]  0 22	v Rate: gpm.  vater? Volume (gal.)   ID (#) CONTAINER  3 x voa vial	Sedime If yes, Tim pH  L. 70 6.68  REFRIG. YES YES	Conductivity (umhos/cm)  398 395  BORATORY INFO PRESERV. TYPE HCL HCL	Volume: Temperature (C)F)  14.0 13.9  ORMATION LABORATOR LANCASTEF	D.O. (mg/L)  Z., G  Y  TPH-G/BTEX/MTE R NWTPH-Dx	(mV)  57  ANALYSES	
Purging Flow Did well de-v (2400)  [0]  [0]  SAMPLE  MW-1	v Rate: gpm.  vater? No volume (gal.)    1	Sedime If yes, Tim pH  L. 70 6.68  REFRIG. YES YES	Conductivity (umhos/cm)  398 395  BORATORY INFO PRESERV. TYPE HCL HCL	Volume: Temperature (C)F)  14.0 13.9  ORMATION LABORATOR LANCASTEF	D.O. (mg/L)  Z., G  Y  TPH-G/BTEX/MTE R NWTPH-Dx	(mV)  57  ANALYSES	
Purging Flow Did well de-v (2400)  [0]  [0]  SAMPLE  MW-1	v Rate: gpm.  vater? No volume (gal.)    1	Sedime If yes, Tim pH  L. 70 6.68  REFRIG. YES YES	Conductivity (umhos/cm)  398 395  BORATORY INFO PRESERV. TYPE HCL HCL	Volume: Temperature (C)F)  14.0 13.9  ORMATION LABORATOR LANCASTEF	D.O. (mg/L)  Z., G  Y  TPH-G/BTEX/MTE R NWTPH-Dx	(mV)  57  ANALYSES	
Purging Flow Did well de-v  Time (2400)  [0]    0 22	v Rate: gpm.  vater? Volume (gal.)  ID (#) CONTAINER  3 x voa vial 2 x amber 1 x poly	Sedime If yes, Tim pH  L. 70 6.68  REFRIG. YES YES	Conductivity (umhos/cm)  398 395  BORATORY INFO PRESERV. TYPE HCL HCL	Volume: Temperature (C)F)  14.0 13.9  ORMATION LABORATOR LANCASTEF	D.O. (mg/L)  Z., G  Y  TPH-G/BTEX/MTE R NWTPH-Dx	(mV)  57  ANALYSES	
Purging Flow Did well de-v (2400)  [0]  [0]  SAMPLE  MW-1	v Rate: gpm.  vater? Volume (gal.)  ID (#) CONTAINER  3 x voa vial 2 x amber 1 x poly	Sedime If yes, Tim pH  L. 70 6.68  REFRIG. YES YES	Conductivity (umhos/cm)  398 395  BORATORY INFO PRESERV. TYPE HCL HCL	Volume: Temperature (C)F)  14.0 13.9  ORMATION LABORATOR LANCASTEF	D.O. (mg/L)  Z., G  Y  TPH-G/BTEX/MTE R NWTPH-Dx	(mV)  57  ANALYSES	
Purging Flow Did well de-v  Time (2400)  [0]  0 10  SAMPLE  MW - 1  MW - 1	v Rate: gpm.  vater? Volume (gal.)  ID (#) CONTAINER  3 x voa vial 2 x amber 1 x poly	Sedime If yes, Tim pH  L. 70 6.68  REFRIG. YES YES	Conductivity (umhos/cm)  398 395  BORATORY INFO PRESERV. TYPE HCL HCL	Volume: Temperature (C)F)  14.0 13.9  ORMATION LABORATOR LANCASTEF	D.O. (mg/L)  Z., G  Y  TPH-G/BTEX/MTE R NWTPH-Dx	(mV)  57  ANALYSES	



# GETTLER-RYAN INC.

Client/Facility #:	ChevronTexaco# 16010 Redmond \	9-8795 Nay	Ev	ob Number: 3	9-16-05 BWN	(inc	clusive)
	Redmond, WA		S	ampler: _			<del></del>
Well ID Well Diameter Total Depth Depth to Water	MW - 2 2 in. 19.97 ft. 15.13 ft. 4.84 xVF		Volume Factor (VF)	3/4"= 0.02 4"= 0.66	Well Condition:	3"= 0.38 12"= 5.80 2 · 5 gal.	) hrs) )0 hrs)
Purge Equipment: Disposable Bailer Stainless Steel Baile Stack Pump Suction Pump Grundfos Other:	er	Dispos Pressu Discre	ing Equipment: able Bailer ure Bailer te Bailer	<u> </u>	Time Completed: Depth to Product: Depth to Water: Hydrocarbon Thickne: Visual Confirmation/D Skimmer / Absorbant Amt Removed from V Water Removed: Product Transferred	ss: / escription: Sock (circle one) skimmer:	ft _ft _ft _ft  _ gal gal 
Start Time (pur Sample Time/l Purging Flow I Did well de-wa	Date: 1000 192 Rate:gpm.	<u>(U·O</u> ≤ Sedimer	e:	<u> 4ea</u>	gal.	Slight ORP	
Time (2400 hr 94 9	<del></del>	pH 6.80 6.73	Conductivity (u mhos/cm)	(cp)	(mg/L)	(mV)	
SAMPLE	D (#) CONTAINER		BORATORY IN	FORMATION E LABORATO		ANALYSES E(8015/8260)	
MW - 2 MW - 2 MW - 2	3 x voa via 2 x ambe	YES YES	HCL HCL HN03	LANCAST	ER NWTPH-Dx		
COMMENT	S:						
Add/R	eplaced Lock:			Add/Replace	ed Plug:	Size:	



# GETTLER-RYAN INC.

Client/Facility #:	ChevronTexac	o #9-8795			86794		(inclusive)
	16010 Redmor		Ev	vent Date: _	9-16-05		(1110100110)
Site Address:			Sa	ampler:	BWN		•
City:	Redmond, WA				Well Condition:	aV_	
Well ID	MW-3	Date M	ionitored: <u> </u>	16-05	Well Condition.		1
Well Diameter	<u>ت</u> in.		Volume	3/4"= 0.02	1"= 0.04 2"= 0.17		
Total Depth	70.12 ft.		Factor (VF)	4"= 0.66	5"= 1.02 6"= 1.50		١.
Depth to Wate	16.39 ft.	16	13		Volum	e. Z	al.
Deptil to wate	3.73	xVF	_=×:	3 (case volume) = I	Estimated Purge Volum	<u> </u>	2400 hrs)
		•		1	Time Started: Time Completed:		(2400 hrs)
Purge Equipment	t: {		ling Equipment:	1	Depth to Product:		ft
Disposable Bailer			sable Bailer		Denth to Water.	/	ft ft
Stainless Steel Ba	iller		ure Bailer ete Bailer _		Hydrocarbon Thicky Visual Confirmation	Description:	·
Stack Pump			:		11	/ \	
Suction Pump		-			Skimmer / Absorbe Amt Removed from	nt Sock (circle or Skimmer:	ne) gal
Grundfos		-			Amt Removed from	Well:	gal
Other:		-			I water Removed:		
					Product Transferre	d to:	
Sample Time	<del></del>		Water Color:	clea			_ _
	vater? Yourne hr.)	n. Sedimer	Water Color: Int Description: e: Conductivity (umhos/cm)	<u> </u>		ORP (mV)	- - - - -
Sample Time Purging Flow Did well de-v	vater? Yourne hr.)	n. Sedimer If yes, Time	Conductivity (umhos/cm)	Volume:	gal.  D.O. (mg/L)	ORP (mV)	
Sample Time Purging Flow Did well de-v  Time (2400 l	### Part	n. Sedimer If yes, Time pH 7.14 7.12	Conductivity (umhos/cm)	Volume:  Temperature (CJF)  14.2  14.1	gal.  D.O. (mg/L)  3.7	ORP (mV)	
Sample Time Purging Flow Did well de-v  Time (2400)  315	## Property of the property of	n. Sedimer If yes, Time pH  7.14  7.12  LA  ER REFRIG.	Conductivity (umhos/cm)  394  393  BORATORY INF	Volume:  Temperature (CJF)  14.7  14.1  CORMATION  LABORATO  LANCASTE	gal.  D.O. (mg/L)  3.7  RY  TPH-G/BTEX/MT	ORP (mV)	
Sample Time Purging Flow Did well de-v  Time (2400)  843  95	## Property of the control of the co	n. Sedimer If yes, Time pH  7.14 7.12  LAI ER REFRIG. ivial YES	Conductivity (umhos/cm)  394  393  BORATORY INF	Volume:	gal.  D.O. (mg/L)  3.7  RY  RY  TPH-G/BTEX/MT R NWTPH-Dx	ORP (mV)	
Sample Time Purging Flow Did well de-v  Time (2400)  347  35	## Property of the control of the co	n. Sedimer  If yes, Time  pH  7.14  7.12  LA  ER REFRIG.  vial YES	Conductivity (umhos/cm)  394  393  BORATORY INF PRESERV. TYPE HCL	Volume:  Temperature (CJF)  14.7  14.1  CORMATION  LABORATO  LANCASTE	gal.  D.O. (mg/L)  3.7  RY  RY  TPH-G/BTEX/MT R NWTPH-Dx	ORP (mV)	
Sample Time Purging Flow Did well de-v  Time (2400)  846  95	## Property of the control of the co	n. Sedimer If yes, Time pH  7.14 7.12  LA ER REFRIG. vial YES nber YES	Conductivity (umhos/cm)  394  393  BORATORY INF PRESERV. TYPE HCL HCL	Volume:	gal.  D.O. (mg/L)  3.7  RY  RY  TPH-G/BTEX/MT R NWTPH-Dx	ORP (mV)	
Sample Time Purging Flow Did well de-v  Time (2400)  347  35	# CONTAIN    CONTAIN   CON	n. Sedimer If yes, Time pH  7.14 7.12  LA ER REFRIG. vial YES nber YES	Conductivity (umhos/cm)  394  393  BORATORY INF PRESERV. TYPE HCL HCL	Volume:	gal.  D.O. (mg/L)  3.7  RY  RY  TPH-G/BTEX/MT R NWTPH-Dx	ORP (mV)	
Sample Time Purging Flow Did well de-v  Time (2400)  846  95	# CONTAIN    CONTAIN   CON	n. Sedimer If yes, Time pH  7.14 7.12  LA ER REFRIG. vial YES nber YES	Conductivity (umhos/cm)  394  393  BORATORY INF PRESERV. TYPE HCL HCL HN03	Volume:  Temperature (C)F)  14.7  14.1  CORMATION  LABORATO  LANCASTE  LANCASTE  LANCASTE	gal.  D.O. (mg/L)  3.7  RY  RY  TPH-G/BTEX/MT R NWTPH-Dx	ORP (mV)	



# GETTLER-RYAN INC.

		•	ELD DATA		_		
	ChevronTexac	<sub>CO</sub> #9-8795	Job	Number: 3	86794		(inclusive)
Client/Facility #:			Eve	ent Date:	9-16-05		(110100.1-7
Site Address:	16010 Redmo		 Sa	mpler: _	BWN		
City:	Redmond, WA	Α				<1/	
	MW - 4	Date N	Monitored: 9	16-05	Well Condition:	· <u> </u>	
Well ID	$\frac{1100-1}{2-1}$	-		3/4"= 0.02	1"= 0.04 2"= 0.17	3"= 0.38	
Well Diameter	20.06 ft	-	Volume Factor (VF)	4"= 0.66	5"= 1.02 6"= 1.50	12"= 5.80	]
Total Depth	-1/ 17 0	-				2 ga	1.
Depth to Water	16.13 ft 3.93	×VF	_ = <i>6</i>   _ x3	(case volume) = E	estimated Purge Volume:	90	2400 hrs)
	3.10_			,	Time Started: Time Completed:		_(2400 hrs)
Purge Equipment	. 1	-	oling Equipment:	V	Depth to Product:		ft ft
Disposable Bailer		-	osable Bailer sure Bailer		Depth to Water: Hydrocarbon Thickne	sa.	" ft
Stainless Steel Bai	er		ete Bailer		Visual Confirmation/D	escription:	
Stack Pump		— Othe	r:		Skimmer / Absorbant	/ \	ne)
Suction Pump		<del>_</del>			I Amt Removed from/S	skimmer:	gal gal
Grundfos Other:		_			Amt Removed from V	Veli:	gai
Outen					Water Removed Product Transferred	to:	
			Conditions:	Suni	·γ		
Start Time (pu	ırge):	<del></del> .	er Conditions: _ Water Color: _	Clea	Odor:	<u> </u>	
Sample Time		19-16-05	nt Description: _		·		<del></del>
Purging Flow			ie:	Volume:	gal.		
Did well de-w	rater?	If yes, Tim	ic		D.O.	ORP	
<b></b>	Volume	mLJ.	Conductivity	Temperature (CI <b>7</b> )	(mg/L)	(mV)	
Time (2400 h	4 -13	рН	(u mhos/cm)	(0,7)	·		
•			430	13.9	3.8	192	
918		6.59	- <del>130</del>	13.8			<del></del>
92	2 2	6.36					
			BORATORY INF	ORMATION LABORATO	RY	ANALYSES	
SAMPLE	D (#) CONTAIN		PRESERV. TYPE	LANCASTE	R TPH-G/BTEX/MTB	E(8015/8260)	
MW - 3	3 x vo	oa vial YES	HCL HCL	LANCASTE	R NWTPH-Dx		
MW -4		amber YES x poly YES	HN03	LANCAST	R TOTAL LEAD		
<u> </u>		A poly 120	1	<u> </u>			
MW-7				<u> </u>		<del>-</del>	
MW-7							
MW -4							
MW-4							
COMMEN.	rs:						
MW-4	ſS:				d Plug:	Sizo:	

# Chevron Northwest Region Analysis Request/Chain of Sustady

Lancaster Laboratories		÷	•	٠,		ct.	<b>i</b> nc	ነሱ	1	0	Fo	r Lar	(0D	er Li Se l	abor つ	ator		<b>\$8</b> 0		SCR	#:			
Where quality is a science.				:	A	oct. 👫	1 <u>//</u>	10		Sar			es R						(	Gra	Op#	9600	a.	57
	MTI Proje	ct # 61H-2	094			1					-	•						<u></u>	-			ative Cod	_	$\neg$
Enciliby# SS#9-8795 G-R#3867	794	·		1.	Matr	x ᢤ	•	11		$\neg \tau$		rese  {	rvati N	on y	COO	<u>es</u>	$\neg$		$\dashv$	H = HC		T = Thic		ate
raciny w			<del></del>			a diago	}	日	_	+	4		Ħ	┪		_				N = HN S = H2S	lO₃	B = Na(		
Olio Managar	ad Consultant:	CAMBRI	ABE	+		T	ູ	8021 🖂 8260 🛂 Naphth 🗀					1			- 1						rting needs		一
Chevron PM: M11 Le Consultant/Office: G-R, Inc., 6747 Sie		J. Dublin, C	.a. 94	568	Potable NPDES		iner	Ź		Ì	1	. g	호		ation	·	i			☐ Miest i	meet k	owest deter	ction	limits
Consultant/Office:	/deanna/inr	inc com)		}	90 Q		of Container	8260	İ		- 1	Extended Rng. Silica Gel Cleanup	<u> </u>	ŀ	□quantification			:		possil	ble för	8260 comp	ound	18
		925-551	_7800	. l:			οţο	N			1	Silca	ı,		图	. !						onfirmation BE + Naph		
Consultant Phone #: 925-551-7555	Fax #:	<u> 929-331</u>	$\overline{}$	$\dashv$		П	ber	_		Oxygenates	l l	שמ					ŀ			∐ Comii	um pja um win	hast hit by	<b>B260</b>	119 :
Sampler: Ben Newton		<del></del> -		Composite	;	2	Number	BTEX.+ MTBE	8260 full scan	1986x	1 1 E	TPHD		Ŧ	NWTPH H HCID		ļ :			☐ Confi	im all t	hks by 826	0,	
Service Order #:	Non SAR:	Time	اي	Ĕ  <u>=</u>	Water		Total	ង់	300		الح		Deed To	NEW PER	YED!		Ì	١		□ Rúh <u>.</u>   □ Run _		xy son hig xy son all		hit
Sample Identification	Collected ::	Collected		5 3	}   ≥	ō	_	_	8			X	3	<u>}</u>	₹.	├—	<del> </del>	⊢	╁╌		==-	/ Remarks		
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MW-1	1	1030	7	_	1¢		6	X		-	X	<u>X</u>	X	-	├	├	╁	-	$\vdash$	•		•		
MW-2		1000	ζ.	4	-14		6	钤	╁	├	X	悇	X	┢	┼	├	1	╁╴	+	1				
MW-3		900	<del> Ç </del>	-#	┼₹	<del>】</del>	6	₩	+	╂─	文	<del>以</del>	大	-	十一	$\vdash$	†	†	1	1			•	
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Data Package Options (please circle if requ	ired)	Relinq	uished	by:						Ŧ	Dat	<b>6</b> .	Time	в	Rec	evie	d by:					Date	, L	Time
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UF 9/23/05



12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

#### ANALYTICAL RESULTS

Prepared for:

ChevronTexaco c/o Cambria Suite 12 4111 Citrus Avenue Rocklin CA 95677 916-630-1855

Prepared by:

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

GETTLER-RYAN INC. GENERAL CONTRACTORS

#### SAMPLE GROUP

The sample group for this submittal is 960257. Samples arrived at the laboratory on Thursday, September 22, 2005. The PO# for this group is 99011184 and the release number is MTI.

Ollers Description	<u>Lancaster Labs Number</u>
Client Description	4608135
QA Water Sample	4608136
MW-1 Grab Water Sample	4608137
MW-2 Grab Water Sample	4608138
MW-3 Grab Water Sample	4608139
MW-4 Grab Water Sample	1000125

#### **METHODOLOGY**

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO **ELECTRONIC** COPY TO

Cambria C/O Gettler- Ryan

Gettler-Ryan

Attn: Deanna L. Harding

Attn: Michael Sharaeff



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

Questions? Contact your Client Services Representative Lynn M Frederiksen at (717) 656-2300

Respectfully Submitted,

Susan M. Goshert Group Leader

Sugar M Goshard



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Page 1 of 1

4608135 Lancaster Laboratories Sample No.

QA Water Sample

Facility# 98795 Job# 386794 MTI# 61H-2094

16010 Redmond Way - Redmond, WA

Collected: 09/16/2005

Submitted: 09/22/2005 09:05 Reported: 10/04/2005 at 21:34

Discard: 11/04/2005

QARED

SDG#: CVR96-01TB

Account Number: 10904

ChevronTexaco c/o Cambria

Suite 12

4111 Citrus Avenue. Rocklin CA 95677

QARED	SDG#: CVR90-0112			As Received		Dilution
CAT No.	Analysis Name	CAS Number	As Received Result	Method Detection Limit	Units	Factor
08273	TPH by NWTPH-Gx waters		•			
01645	TPH by NWTPH-Gx waters	n.a.	N.D.	48.	ug/l	1
06054	BTEX+MTBE by 8260B					
	noted Ethor	1634-04-4	N.D.	0.5	ug/l	1
02010	Methyl Tertiary Butyl Ether	71-43-2	N.D.	0.5	ug/l	1
05401	Benzene	108-88-3	N.D.	0.5	ug/l	1
05407	Toluene	100-41-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	1330-20-7	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	и.ы.			

		Laboratory	Chro	nicle Analysis		Dilution
CAT No. 08273 06054 01146 01163	Analysis Name TPH by NWTPH-Gx waters BTEX+MTBE by 8260B GC VOA Water Prep GC/MS VOA Water Prep	Method NWTPH-Gx - 8015B Mod. SW-846 8260B SW-846 5030B SW-846 5030B	1	Date and Time 09/26/2005 11:04 09/28/2005 02:51 09/26/2005 11:04 09/28/2005 02:51	Analyst Martha L Seidel Dawn M Harle Martha L Seidel Dawn M Harle	Factor  1  1  n.a.



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Page 1 of 1

Lancaster Laboratories Sample No. WW 4608136

MW-1 Grab Water Sample

Facility# 98795 Job# 386794 MTI# 61H-2094

16010 Redmond Way - Redmond, WA

Collected: 09/16/2005 10:30 by BN

Submitted: 09/22/2005 09:05 Reported: 10/04/2005 at 21:34

Discard: 11/04/2005

M1RED SDG#: CVR96-02

Account Number: 10904

ChevronTexaco c/o Cambria

Suite 12

4111 Citrus Avenue Rocklin CA 95677

CAT No. 01055	Analysis Name Lead (furnace method)	CAS Number 7439-92-1	As Received Result 20.8	As Received Method Detection Limit 0.87	Units ug/l	Dilution Factor
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095 02096	Diesel Range Organics Heavy Range Organics	n.a. n.a.	N.D. N.D.	80.	ug/l ug/l	1
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	N.D.	48.	ug/l	1
06054	BTEX+MTBE by 8260B					
02010 05401 05407 05415 06310	Methyl Tertiary Butyl Ether Benzene Toluene Ethylbenzene Xylene (Total)	1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7	N.D. N.D. N.D. N.D.	0.5 0.5 0.5 0.5 0.5	ug/l ug/l ug/l ug/l ug/l	1 1 1 1

		Laboratory	Chro	nicie		Dilution
CAT No. 01055 02211 08273 06054 01146 01163 02135	Analysis Name Lead (furnace method) TPH by NWTPH-Dx(water) w/SiGel TPH by NWTPH-Gx waters BTEX+MTBE by 8260B GC VOA Water Prep GC/MS VOA Water Prep Extraction - DRO Water Special WW/TL SW 846 GFAA Digest tot	Method SW-846 7421 NWTPH-Dx, ECY 97- 602 (modified) NWTPH-Gx - 8015B Mod. SW-846 8260B SW-846 5030B SW-846 5030B NWTPH-Dx, ECY 97-602, 6/97 SW-846 3020A	Trial# 1 1 1 1 1 1 1	Analysis Date and Time 09/30/2005 14:47 09/27/2005 19:36 09/26/2005 12:09 09/28/2005 03:14 09/26/2005 12:09 09/28/2005 03:14 09/23/2005 12:00 09/25/2005 17:25	Analyst Jessica L Boyd Matthew E Barton Martha L Seidel Dawn M Harle Martha L Seidel Dawn M Harle Olivia Arosemena Mirit S Shenouda	Factor  1  1  1  1  1  1  1  1  1  1  1  1  1



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Page 1 of 1

Dilution

Lancaster Laboratories Sample No. WW

MW-2 Grab Water Sample

Facility# 98795 Job# 386794 MTI# 61H-2094

16010 Redmond Way - Redmond, WA

Collected: 09/16/2005 10:00

by BN

Submitted: 09/22/2005 09:05 Reported: 10/04/2005 at 21:34

Discard: 11/04/2005

Account Number: 10904

ChevronTexaco c/o Cambria

Suite 12

4111 Citrus Avenue Rocklin CA 95677

M2RED	SDG#:	CVR96-03

				A Dogotstod		
			As Received	As Received Method		Dilution
CAT No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01055	Lead (furnace method)	7439-92-1	41.2	0.87	ug/l	1
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095 02096	Diesel Range Organics Heavy Range Organics	n.a. n.a.	N.D. N.D.	80. 100.	ug/l ug/l	1
08273 01645	TPH by NWTPH-Gx waters	n.a.	N.D.	48.	ug/l	1
06054	BTEX+MTBE by 8260B					
02010 05401 05407 05415 06310	Methyl Tertiary Butyl Ether Benzene Toluene Ethylbenzene Xylene (Total)	1634-04-4 71-43-2 108-88-3 100-41-4 1330-20-7	N.D. 40. N.D. N.D.	0.5 0.5 0.5 0.5	ug/l ug/l ug/l ug/l ug/l	1 1 1 1

Laboratory	Chro	nicle	
Laboratory	CILLO	112-22-	

		Haboracory	C111 0	Analysis		Dilution
OAT No. 01055 02211 08273 06054 01146 01163 02135	Analysis Name Lead (furnace method) TPH by NWTPH-Dx(water) w/sigel TPH by NWTPH-Gx waters BTEX+MTBE by 8260B GC VOA Water Prep GC/MS VOA Water Prep Extraction - DRO Water Special	Method SW-846 7421 NWTPH-Dx, ECY 97-602 (modified) NWTPH-Gx - 8015B Mod. SW-846 8260B SW-846 5030B SW-846 5030B NWTPH-Dx, ECY 97-602, 6/97	1 1 1	Date and Time 09/30/2005 14:51 09/27/2005 20:25 09/26/2005 12:42 09/28/2005 03:37 09/26/2005 12:42 09/28/2005 03:37 09/23/2005 12:00	Analyst Jessica L Boyd Matthew E Barton Martha L Seidel Dawn M Harle Martha L Seidel Dawn M Harle Olivia Arosemena Mirit S Shenouda	Factor 1 1 1 1 1 1 1 1 1 1 1 1 1
05704	ww/TL SW 846 GFAA Digest tot	SW-846 3020A	1	09/25/2005 17:25	Mirit S Shehouda	-



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Lancaster Laboratories Sample No. WW 4608138

MW-3 Grab Water Sample Facility# 98795 Job# 386794 MTI# 61H-2094 16010 Redmond Way - Redmond, WA Collected:09/16/2005 09:00 by BN

Submitted: 09/22/2005 09:05 Reported: 10/04/2005 at 21:34

Discard: 11/04/2005

M3RED SDG#: CVR96-04

Account 'Number: 10904

ChevronTexaco c/o Cambria

Suite 12

4111 Citrus Avenue Rocklin CA 95677

				As Received		
			As Received	Method		Dilution
CAT No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
01055	Lead (furnace method)	7439-92-1	46.4	0.87	ug/l	1
02211	TPH by NWTPH-Dx(water) w/SiGel					
	nt1 P Organias	n.a.	N.D.	80.	ug/l	1
02095	Diesel Range Organics	n.a.	N.D.	100.	ug/l	1
02096	Heavy Range Organics	11.4.	***-			
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	N.D.	48.	ug/l	1
01645	This sample was submitted with	headspace.				
06054	BTEX+MTBE by 8260B					
	and a second and Butter Ether	1634-04-4	N.D.	0.5	ug/l	1
02010	Methyl Tertiary Butyl Ether	71-43-2	N.D.	0.5	ug/l	1
05401	Benzene	108-88-3	N.D.	0.5	ug/l	1
05407	Toluene	100-41-4	N.D.	0.5	ug/1	1
05415	Ethylbenzene	_	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	н.р.	· · · · · · · · · · · · · · · · ·	- ,	

	,	Laboratory	Chro	nicle Analysis		Dilution
CAT No. 01055 02211 08273 06054 01146 01163 02135	Analysis Name Lead (furnace method) TPH by NWTPH-Dx(water) w/SiGel TPH by NWTPH-Gx waters BTEX+MTBE by 8260B GC VOA Water Prep GC/MS VOA Water Prep Extraction - DRO Water Special WW/TL SW 846 GFAA Digest	Method SW-846 7421 NWTPH-Dx, ECY 97-602 (modified) NWTPH-Gx - 8015B Mod. SW-846 8260B SW-846 5030B SW-846 5030B NWTPH-Dx, ECY 97-602, 6/97 SW-846 3020A	1 1 1	Date and Time 09/30/2005 14:54 09/27/2005 20:50 09/26/2005 13:15 09/28/2005 04:01 09/26/2005 13:15 09/28/2005 04:01 09/23/2005 12:00 09/25/2005 17:25	Analyst Jessica L Boyd Matthew E Barton  Martha L Seidel Dawn M Harle Martha L Seidel Dawn M Harle Olivia Arosemena  Mirit S Shenouda	Factor 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
05704	WW/TL SW 846 GFAA Digest	5W-040 3020A	_			



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Lancaster Laboratories Sample No. WW 4608139

MW-4 Grab Water Sample Facility# 98795 Job# 386794 MTI# 61H-2094 16010 Redmond Way - Redmond, WA

Collected:09/16/2005 09:30

by BN

Submitted: 09/22/2005 09:05 Reported: 10/04/2005 at 21:34 Discard: 11/04/2005

Account Number: 10904

ChevronTexaco c/o Cambria

Suite 12

4111 Citrus Avenue Rocklin CA 95677

M4RED SDG#: CVR96-05

tot

14 RED	SDG#: CVX90-03		As Received	As Received Method		Dilution Factor
CAT No.	Analysis Name	CAS Number	Result	Detection Limit	Units	1
01055	Lead (furnace method)	7439-92-1	23.1	0.87	ug/l	1
02211	TPH by NWTPH-Dx(water) w/SiGel					
		n.a.	N.D.	400.	ug/l	1
02095	Diesel Range Organics	n.a.	N.D.	500.	ug/l	1
02096	Heavy Range Organics Due to the nature of the sampl for analysis. The reporting 1	e matrix, a red imits were rai	duced aliquot was sed accordingly.	s used		
08273	TPH by NWTPH-Gx waters	•			/1	1
01645	TPH by NWTPH-Gx waters	n.a.	N.D.	48.	ug/l	1
06054	BTEX+MTBE by 8260B					_
	Pther	1634-04-4	N.D.	0.5	ug/l	1
02010	Methyl Tertiary Butyl Ether	71-43-2	N.D.	0.5	ug/l	1
05401	Benzene	108-88-3	N.D.	0.5	ug/l	1
05407	Toluene	100-41-4	N.D.	0.5	ug/l	1
05415 06310		1330-20-7	N.D.	0.5	ug/l	1

		Laboratory	Chro	nicle Analysis		Dilution
CAT No. 01055 02211	Analysis Name Lead (furnace method) TPH by NWTPH-Dx(water)	Method SW-846 7421 NWTPH-Dx, ECY 97- 602(modified)	Trial# 1 1	Date and Time 09/30/2005 14:58 09/28/2005 14:20	Analyst Jessica L Boyd Matthew E Barton	Factor 1 1
08273 06054 01146 01163	w/SiGel TPH by NWTPH-Gx waters BTEX+MTBE by 8260B GC VOA Water Prep GC/MS VOA Water Prep	NWTPH-Gx - 8015B Mod. SW-846 8260B SW-846 5030B SW-846 5030B NWTPH-Dx, ECY 97-602,	1 1 1	09/26/2005 13:48 09/28/2005 04:25 09/26/2005 13:48 09/28/2005 04:25 09/23/2005 14:40	Martha L Seidel Dawn M Harle Martha L Seidel Dawn M Harle Jason A Heisey	1 1 n.a. 1
02135 05704	Extraction - DRO Water Special WW/TL SW 846 GFAA Digest	6/97 SW-846 3020A	1	09/25/2005 17:25	Mirit S Shenouda	1



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### Quality Control Summary

Client Name: ChevronTexaco c/o Cambria

Reported: 10/04/05 at 09:34 PM

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.

Group Number: 960257

### Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS %REC	LCSD <u>%REC</u>	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: 052660003A Diesel Range Organics Heavy Range Organics	Sample num N.D. N.D.	nber(s): 4 0.080 0.10	608136-460 mg/l mg/l	08138 76		51-113		
Batch number: 052660010A Diesel Range Organics Heavy Range Organics	Sample num N.D. N.D.	nber(s): 4 0.080 0.10	608139 mg/l mg/l	83		51-113		
Batch number: 052685704001 Lead (furnace method)	Sample nur N.D.	mber(s): 4 0.00087	608136-460 mg/l	96 96		80-120		
Batch number: 05269A56A TPH by NWTPH-Gx waters	Sample num	mber(s): 4 48.	608135-460 ug/l	08139 84	85	70-130	1	30
Batch number: Z052704AA Methyl Tertiary Butyl Ether Benzene Toluene Ethylbenzene Xylene (Total)	Sample num N.D. N.D. N.D. N.D. N.D. N.D.	mber(s): 4 0.5 0.5 0.5 0.5 0.5	.608135-466 ug/l ug/l ug/l ug/l ug/l	90 90 92 97 96 97		77-127 85-117 85-115 82-119 83-113		

### Sample Matrix Quality Control

Analysis Name	MS %REC	MSD <u>%REC</u>	MS/MSD <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG Conc	DUP Conc	DUP RPD	Dup RPD
Batch number: 052660003A Diesel Range Organics Heavy Range Organics	Sample	number	(s): 4608136	-46081	38	N.D. N.D.	N.D. N.D.	0 (1) 0 (1)	20 20
Batch number: 052660010A Diesel Range Organics Heavy Range Organics	Sample	number	(s): 4608139	)		N.D.	N.D. N.D.	0 (1) 0 (1)	20 20
Batch number: 052685704001 Lead (furnace method)	Sample 83	number 84	(s): 4608136 80-120	3-46081 1	39 20	N.D.	N.D.	31* (1)	20
Batch number: 05269A56A TPH by NWTPH-Gx waters	Sample 83	number	(s): 4608135 63-154	5-46081	39				
Batch number: Z052704AA Methyl Tertiary Butyl Ether	Sample 96	number 94	(s): 4608135 69-134	5-46081 2	.39 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.



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### Quality Control Summary

Client Name: ChevronTexaco c/o Cambria

Group Number: 960257

Reported: 10/04/05 at 09:34 PM

#### Sample Matrix Quality Control

Analysis Name Benzene	MS <u>%REC</u> 101 106	%REC %REC	MS/MSD <u>Limits</u> 83-128 83-127		30	<u>MAX</u> <u>Conc</u> 30	DUP Conc	DÜP RPD	Dup RPD Max
Toluene	106	103		3					
Ethylbenzene	105	102	82-129	3	30				
Xvlene (Total)	105	103	82-130	2	30				

#### Surrogate Quality Control

Analysis Name: TPH by NWTPH-Dx(water) w/SiGel Batch number: 052660003A

Orthoterphenyl

4608136	110			
4608137	97			
4608138	111			
Blank	109			
DUP	100			
LCS	111			
·		 		
7 1 - 1	E2-141			

Analysis Name: TPH by NWTPH-Dx(water) w/SiGel

Batch number: 052660010A Orthoterphenyl

4608139	107	
Blank	105	
DUP	99	
LCS	109	

Analysis Name: TPH by NWTPH-Gx waters Batch number: 05269A56A

Trifluorotoluene-F

4608135	87	
4608136	85	
4608137	89	
4608138	88	·
4608139	89	
Blank	88	
LCS	87	
LCSD	87	
MS	93	

Limits: 63-135

Limits:

Analysis Name: BTEX+MTBE by 8260B Batch number: Z052704AA

	Z052704AA Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4608135	99	91	99	90

#### \*- 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.



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### Quality Control Summary

Client Na	me: ChevronTexaco	c/o Camb	ria		Group	Number: 960257	
Reported:	10/04/05 at 09:34	PM	Surrogate	Quality	Control		
4608136 4608137 4608138 4608139 Blank LCS MS	99 97 99 100 99 96 96	92 91 93 93 92 87 90 89	<b>.</b>	90 93 90 91 98 99 100		90 90 89 89 90 95 95	
Limits:	80-116	77-11:	3	80-113		78-113	

\*- 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**

Inorganic Qualifiers

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

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

- 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).
- 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.

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

Organic	Qua	lifiers
---------	-----	---------

	Organio Quannore,		_
A B C D E	TIC is a possible aldol-condensation product Analyte was also detected in the blank Pesticide result confirmed by GC/MS Compound quantitated on a diluted sample Concentration exceeds the calibration range of the instrument	B E N S	Value is <crdl, (msa)="" additions="" but="" calculation<="" control="" due="" duplicate="" estimated="" for="" injection="" interference="" limits="" met="" method="" not="" of="" precision="" sample="" spike="" standard="" th="" to="" used="" within="" ≥idl=""></crdl,>
N P U	Presumptive evidence of a compound (TICs only) Concentration difference between primary and confirmation columns >25% Compound was not detected Defined in case narrative	U W +	Compound was not detected Post digestion spike out of control limits Duplicate analysis not within control limits Correlation coefficient for MSA <0.995
X,Y,Z	Delilled III case Harrange		

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.

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