

January 20, 2004 Job #386681

Mr. Brett Hunter Chevron Products Company P.O. Box 6004 San Ramon, CA 94583

RE: Event of June 3, 2003

Event of December 11, 2003

Groundwater Monitoring & Sampling Report Former Chevron Service Station #9-6266

1554 NE 145<sup>th</sup> Street Seattle, Washington

#### Dear Mr. Hunter:

This report documents the groundwater monitoring and sampling events 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 any of the wells. Static water level data and groundwater elevations are presented in Table 1. A Vicinity Map is included as Figure 1 and Potentiometric Maps are included as Figures 2 and 3.

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 reports are attached.

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

Sincerely,

Deanna L. Harding

Project Coordinator

Hagop Kevork Professional Engineer

Figure 1:

Vicinity Map

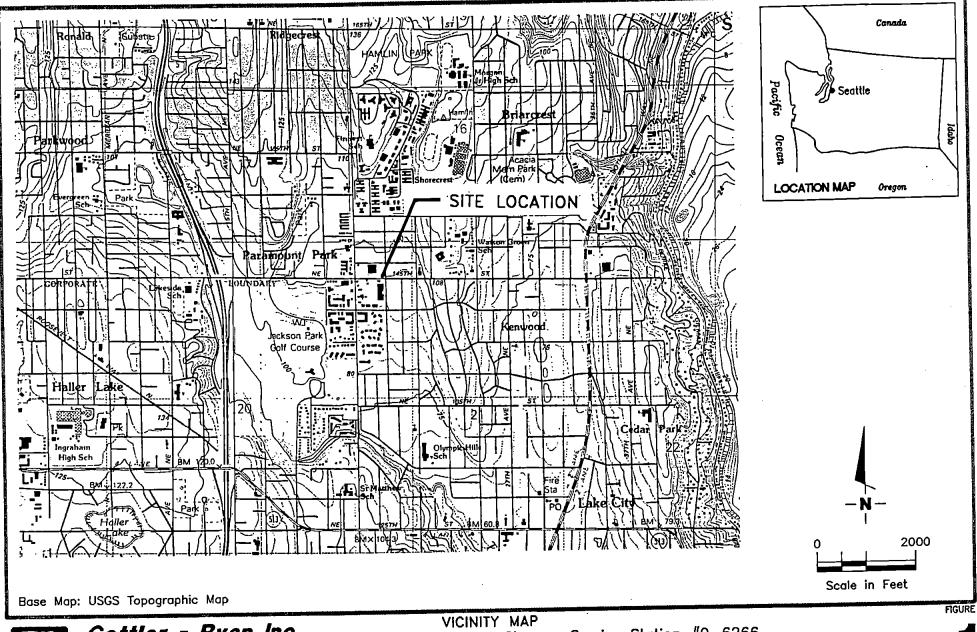
Potentiometric Map - June 3, 2003 Figure 2:

Potentiometric Map - December 11, 2003 Figure 3:

Groundwater Monitoring Data and Analytical Results Table 1: Groundwater Analytical Results - Oxygenate Compounds Table 2: Standard Operating Procedure - Groundwater Sampling Attachments:

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports





## Gettler - Ryan Inc.

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

Former Chevron Service Station #9-6266
1554 NE 145th Street
Seattle, Washington

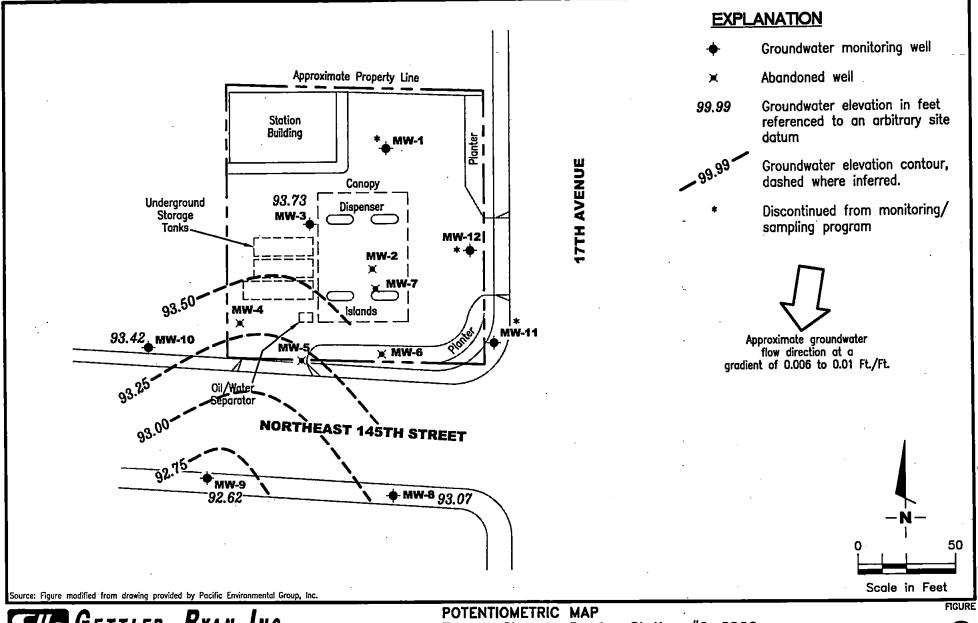
REVISED DATE

JOB NUMBER 386681 REVIEWED BY

DATE 04/00

REVISED

1





Former Chevron Service Station #9-6266 1554 NE 145th Street

Seattle, Washington

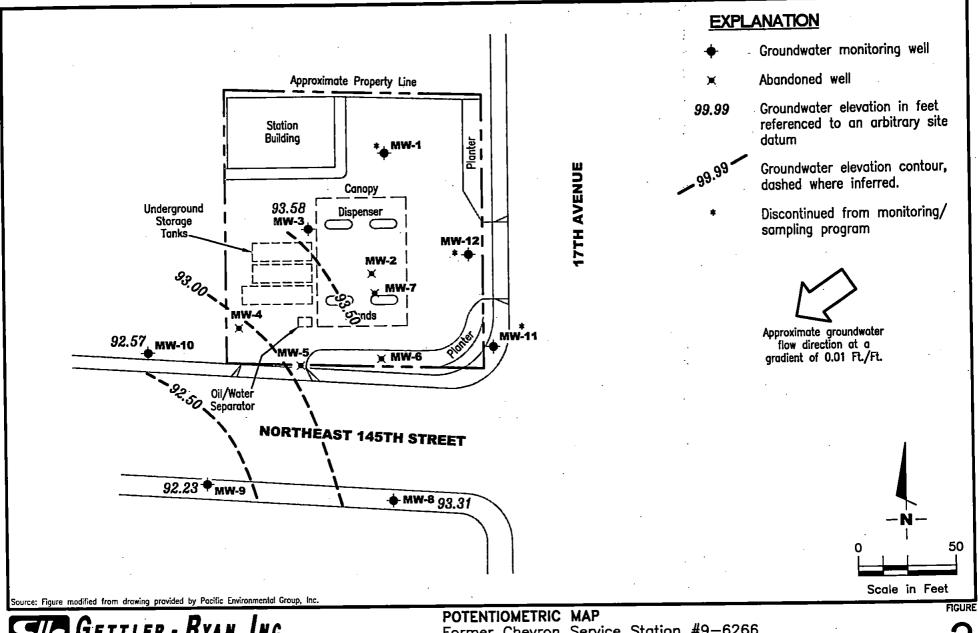
REVISED DATE

PROJECT NUMBER 386681

REVIEWED BY

DATE June 3, 2003

FILE NAME: P:\ENVIRO\CHEVRON\9-6266\Q03-6266.DWG | Layout Tab: Pot2



6747 Sierra Ct., Suite J (925) 551-7555 Former Chevron Service Station #9-6266 1554 NE 145th Street

Seattle, Washington

December 11, 2003

REVISED DATE

386681 FILE NAME: P:\ENVIRO\CHEVRON\9-6266\Q03-6266.DWG | Layout Tab: Pot4

REMEWED BY

PROJECT NUMBER

# Table 1 Groundwater Monitoring Data and Analytical Results

					Scatt	ie, washingto	11					
WELLID	DATE	DTW	GWE	SPHT	TPH-D	ТРН-О	TPH-G	В	Т	E	X	MTBE
TOC*(fi.)		(fi.)	(ft.)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
									•			
MW-1			•									
103.19	01/25/91	5.03	98.16				66	ND	0.8	ND	1	
	10/17/91	9.67	93.52				ND	ND	ND	ND	ND	
	04/13/92	7.50	95.69									
	07/30/92	9.20	93.99									
	11/25/92	9.40	93.79									
	02/18/93	8.45	94.74									
	05/13/93	6.91	96.28						- <b></b>	<del></del>	·	
	08/06/93											
	11/15/93	. <b></b>										
	01/27/94	· 7.70	95.49		ND	ND						
	04/26/94	6.75	96.44		ND	ND			- 			
	07/26/94	8.40	94.79		580	750						-
	10/25/94	10.20	92.99		<240	<710	ND	ND	ND	ND	ND	
	04/12/95											
	10/04/95											
	04/09/96	_										
	04/11/97					<u></u>						
	09/30/00	UNABLE TO	LOCATE									
		RED/SAMPLED										
									•			•
MW-2												
100.33	01/25/91	4.61	95.72				ND	0.47	1.3	ND	1.4	
	10/17/91	7.09	93.24				ND	ND	ND	ND	ND	
	04/13/92	5.18	95.15	-								
	07/30/92	6.34	93.99									
	11/25/92	7.24	93.09			· 						·
	02/18/93	6.34	93.99									
	05/13/93	5.29	95.04			·						<del></del> ,
	08/06/93											. <del></del>
	11/15/93											
	01/27/94											<del></del>
	04/26/94		,						·	· 		
	*			•								

Table 1
Groundwater Monitoring Data and Analytical Results

						, .					<del></del>	
WELLID	DATE	DTW	GWE	SPHT	TPH-D	трн-о	TPH-G	В	Т	E	X	MTBE
TOC*(ft.)		(fi.)	(ft.)	(fi.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(pph)	(ppb)	(ppb)
											. 0.7	
MW-2	07/26/94	6.85	93.48				200	ND	0.8	1.3	8.7	
(cont)	10/25/94	7.65	92.68				ND	ND	ND	ND	ŅD	
	04/12/95								·	·		
	10/04/95											
	04/09/96										'	
	04/11/97								-:			
	ABANDONED											
					ř							
MW-3					•							
100.06	01/25/91	4.48	95.58				44	1.4	5.6	1.30	7.80	
	10/17/91	7.19	92.87			·	ND	ND	ND	ND	ND	
	04/13/92	5.19	94.87									
	07/30/92	6.07	93.99									
	11/25/92	6.78	93.28									
	02/18/93	6.35	93.71						·,			· <del></del>
	05/13/93	2.77	97.29				<del></del> .					
	08/06/93								·	<u></u>		
	11/15/93											
	01/27/94	5.87	94.19				ND	ND	ND	ND	ND	
	04/26/94	5.05	95.01				ND	ND	ND	ND	ND	. <b></b>
	07/26/94	8.57	91.49				ND	ND	ND	ND	ND	
	10/25/94	·										
	04/12/95					·						
	10/04/95								·	·		
	04/09/96											
	04/11/97											
	03/23/00	4.88	95.18	0.00	ND	ND	76.7	65.8	9.60	0.772	8.01	7.25 <sup>4</sup>
	09/30/00 <sup>5</sup>	8.02	92.04	0.00	379	$ND^3$	1,410	343	185	$ND^3$	242	$ND^3$
	12/07/007	7.66	92.40	0.00	801	ND	171	254	31.8	0.636	6.84	39.2/12.8 <sup>2</sup>
	03/26/017	6.82	93.24	0.00	1,550 <sup>8</sup>	ND	698	787	101	$ND^3$	62.5	34.2/29.7 <sup>2</sup>
	06/09/017	7.04	93.02	0.00	1,780	<750	<50.0	306	1.48	0.962	2.84	12.9/10 <sup>6</sup>
	09/18/017	8.28	91.78	0.00	2,640°	<500	546	38.5	7.15	6.11	79.3	4.70/<5.00 <sup>2</sup>
	12/07/01	6.21	93.85	0.00	5,000°	8449	2,360	954	125	<10.0	41.6	26.1/<2.50 <sup>2</sup>
			,5.05	2,00	-,500	<del>-</del> , .	_,					

Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID		DATE	DTW	GWE	SPHT	TPH-D	ТРН-О	TPH-G	В	T	E	X	MTBE
TOC*(ft.)			(ft.)	(ft.)	(fl.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
	3.173	0./100/03	£ 70	04.24	0.00	300 <sup>10</sup>	<750 <sup>10</sup>	97	200	7.4	1.0	4.1	<2.5
MW-3	NP	06/09/02	5.72	94.34	0.00	4,300 <sup>10</sup>	2,900 <sup>10,11</sup>	350	<b>780</b>	82	2.3	21	<50
(cont)	NP	12/09/02	8.48	91.58		2,300 <sup>10</sup>	2,100 <sup>10</sup>	530	1,100	120	4.5	51	<10
	NP	06/03/03	6.33	93.73	0.00	<250 <sup>10</sup>	<250 <sup>10</sup>	1,400	1,400	250	6.9	83	<50
	NP	12/11/03	6.48	93.58	0.00	~250	. ~230	1,400	1,400	250			
MW-8													
98.44		10/17/91	7.15	91.29				65	ND	- ND	ND	0.51	
		04/13/92	4.96	93.48				ND	ND	ND	ND	ND	
		07/30/92	6.43	92.01				ND	ND	ND	ND	ND	
		11/25/92	6.92	91.52				ND -	ND	ND	ND	ND	
		02/18/93	5.85	92.59				200	29	" 1.4	1.8	27	
		05/13/93	4.71	93.73		<u> </u>		ND	0.9	ND	ND	ŊĎ	
		08/06/93	5.68	92.76		·	. <b></b>	ND	ND	ND	ND	ND	
		11/15/93	7.01	91.43		ND	ND	ND	ND	' ND	ND	ND	
		01/27/94	5.54	92,90				ND	ND	ND	ND	ND	
		04/26/94	4.87	93.57				ND	ND	ND	ND	ND	
		07/26/94	6.39	92.05				ND	ND	ND	ND	ND	
		10/25/94	7.50	90.94				ND	ND	ND	ND	ND	
		04/12/95 <sup>1</sup>	4.11	94.33				ND	ND	ND	ND	ND	
		10/04/95 <sup>1</sup>	6.41	92.03				ND	ND	ND	ND	ND	
		04/09/96	4.26	94.18		·		ND	· ND	· ND	ND	. ND	·
		04/11/97	3.95	94.49				ND	ND	ND	ND	ND	
	•	03/23/00	3.94	94.50	0.00	; <b></b>							
		09/30/00	6.96	91.48	0.00	ND	ND	ND	ND	ND	ND	ND	ND
		12/07/00	6.32	92.12	0.00	ND	ND	ND ·	ND	ND	ND	ND	ND
		03/26/01	5.37	93.07	0.00				·				
		06/09/01	5.90	92.54	0.00	<u> </u>	<b></b> .					<del></del> .	
		09/18/01	7.30	91.14	0.00		'						·
		12/07/01	4.91	93.53	0.00		·		· ·	<i>.</i>			
		06/09/02	4.84	93.60	0.00								. <b></b>
		12/09/02	7.44	91.00	0.00		. : <u></u>	·					, <del></del>
		06/03/03	5.37	93.07	0.00	_			_	_			
		12/11/03	5.13	93.31	0.00			·		_		_	

# Table 1 Groundwater Monitoring Data and Analytical Results

WELL ID		DATE	DTW	GWE	SPHT	TPH-D	TPH-O	TPH-G	В	Т	E	X	MTBE
WELL ID		DATE	(fi.)	(ft.)	(fi.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(pph)	(ppb)	(ppb)
10000000	<u> </u>		() to /	<u> </u>	<u>(10/</u>	· · · · · · · · · · · · · · · · · · ·	**************************************						
MW-9										•			
98.34		10/17/91	7.65	90.69				4,200	620	ND	69	380	
70.57		04/13/92	5.84	92.50				4,700	800	. 59	210	530	
		07/30/92	6.98	91.36				3,400	880	22	120	490	
		11/25/92	7.52	90.82				4,700	1,100	28	140	680	
		02/18/93	6.86	91.48				2,900	670	-: 37	180	390	
		05/13/93	5.84	92.50				1,900	390	14	96	260	
		08/06/93	6.30	92.04				2,300	520	8.9	89 ·	290	
		11/15/93	7.60	90.74		380	ND	2,900	780	13	. 63	440	
		01/27/94	6.48	91.86				2,700	480	26	100	340	
		04/26/94	5.73	92.61				4,400	330	12	65	230	
		07/26/94	6.89	91.45				2,000	500	9.3	46	380	
•		10/25/94	7.91	90.43				3,000	460	10	29	350	
		04/12/95	4.85	93.49	<del></del>			510	55	0.91	3.8	24	
		10/04/95	6.97	91.37		- <b>-</b>		4,900	670	15	87	840	
		04/09/96	5.00	93.34				ND	12	· ND	ND	ND	·
		04/11/97	4.40	93.94				ND	ND	ND	. ND	ND	
		03/23/00	4.74	93.60	0.00	ND	ND	198	$ND^3$	$ND^3$	ND	ND	15.6/10.8 <sup>2</sup>
		09/30/00	7.31	91.03	0.00	258	ND	1,550	42.7	4.05	3.04	122	14.4/14.4 <sup>6</sup>
		12/07/00	7.03	91.31	0.00	274	ND	532	28.9	2.27	ND	45.1	15.0/7.71 <sup>2</sup>
		03/26/01	6.36	91.98	0.00	ND	ND	214	ND	1.20	ND	ND	10.1/11.2 <sup>2</sup>
		06/09/01	6.71	91.63	0.00	<250	<750	100	0.887	<0.500	<0.500	<1.00	15.2/14 <sup>6</sup>
		09/18/01	7.75	90.59	0.00	396	<500	341	10.6	1.36	0.519	14.8	10.5/9.92 <sup>2</sup>
		12/07/01	5.99	92.35	0.00	<250	<500	<50.0	<0.500	<0.500	< 0.500	<1.00	<1.00/<2.50 <sup>2</sup>
	NP	06/09/02	5.61	92.73	0.00	<250 <sup>10</sup>	<750 <sup>10</sup>	51	< 0.50	<0.50	< 0.50	<1.5	25/25 <sup>2</sup>
	NP	12/09/02	7.96	90.38	0.00	300 <sup>10</sup>	<250 <sup>10</sup>	1,800	52	9.4	1.6	160	22/13 <sup>2</sup>
	NP	06/03/03	5.72	92.62	0.00	<250 <sup>10</sup>	<250 <sup>10</sup>	<50	<0.5	<0.5	<0.5	<1.5	14/12 <sup>2</sup>
	NP	12/11/03	6.11	92.23	0.00	<250 <sup>10</sup>	<250 <sup>10</sup>	<50	<0.5	<0.5	<0.5	<1.5	<2.5
	141	12/11/03	0.11	72.20	ÇÇ								
MW-10													
97.80		10/17/91	5.97	91.83				93	ND	ND	ND	ND	
		04/13/92	4.55	93.25				ND	ND	4.5	ND	ND	
		07/30/92	5.33	92.47				ND	ND	ND	ND	ND	<del></del>

Table 1
Groundwater Monitoring Data and Analytical Results

					24							concernante a series and concerns
WELLID	DATE	DTW	GWE	SPHT	TPH-D	TPH-O	TPH-G	В	Т	E	X	MTBE
TOC*(ft.)		(ft.)	(ft.)	(fi.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
						-					2.1	
MW-10	11/25/92	5.83	91.97				ND	ND	1.0	ND	2.1	
(cont)	02/18/93	5.40	92.40									
•	05/13/93	4.40	93.40									
	08/06/93											<del></del>
	11/15/93											
•	01/27/94	<u></u>										
	04/26/94		. <del></del>									
	07/26/94								<del>-</del>			
	10/25/94											
	04/12/95 <sup>1</sup>	3.92	93.88				ND	ND	ND	ND	ND	
	10/04/95 <sup>1</sup>	5.20	92.60	·			ND	ND	ND	ND	ND	
	04/09/96	3.86	93.94				ND	ND	ND	ND	ND	
	04/11/97	3.55	94.25				ND	ND	ND	ND	ND	
	03/23/00	4.78	93.02	0.00	ND	ND	ND	ND	ND	ND	ND	3.83 <sup>4</sup>
	12/07/00	5.75	92.05	0.00	ND	ND	ND	ND	ND	ND	ND	1.79/ND <sup>2</sup>
	03/26/01	5.35	92.45	0.00	ND	ND	ND	· ND	ND	ND	ND	ND
	06/09/01	5.40	92.40	0.00	<250	<750	<50.0	< 0.500	< 0.500	<0.500	<1.00	4.81
	09/18/01	6.23	91.57	0.00	410	<500	<50.0	< 0.500	< 0.500	< 0.500	<1.00	8.93/7.62 <sup>2</sup>
	12/07/01	5.12	92.68	0.00	356 <sup>8</sup>	<500	<50.0	< 0.500	< 0.500	< 0.500	<1.00	4.51/<5.00 <sup>2</sup>
	06/09/02	5.00	92.80	0.00							-	
	12/09/02	6.31	91.49	0.00								
	06/03/03	4.38	93.42	0.00				_	·			·
	12/11/03	5.23	92.57	0.00	_							
	12/21/00	2.20	,									
									-			
MW-11												
100.32	10/17/91	8.46	91.86				120	ND	ND	ND	0.67	
100.52	04/13/92	5.21	95.11				ND	ND	ND	ND	ND	
	07/30/92	7.06	93.26				ND	ND	. ND	ND	ND	
	11/25/92	7.28	93.04			<u></u> ·	ND	ND	. 1.3	ND	2	
	02/18/93	6.45	93.87									
	05/13/93	5.13	95.19									
	08/06/93	J.13 				-						<del>-,</del>
	11/15/93							<u></u>	. <u></u>			<u>.</u>
	11/13/93					<del></del>						

# Table 1 Groundwater Monitoring Data and Analytical Results

WELLID	DATE	DTW	GWE	SPHT	TPH-D	ТРН-О	TPH-G	В	Т	E	X	MTBE
TOC*(ft.)		(fi.)	(ft.)	(fi.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
						•					N.D.	
MW-11	01/27/94	5.91	94.41	- <b>-</b>			ND	ND	· ND	ND	ND	
(cont)	04/26/94	4.97	95.35				ND	ND	ND	ND	ND	
(•••••)	07/26/94	7.29	93.03				ND	ND	· ND	ND	ND	
	10/25/94	5.45	94.87				ND	ND	ND	ND	ND	
	04/12/95											
	10/04/95							<del>-</del>	·:			
•	04/09/96											
	04/11/97				, <del></del>							
	NOT MONITORE	D/SAMPLED										
MW-12												
103.19	10/17/91	10.44	92.75				120	ND	ND	0.65	0.66	
	04/13/92	7.50	95.69				ND	ND	ND	ND	ND	
	07/30/92	9.50	93.69				ND	ND	ND	ND	ND	
	11/25/92	10.20	92.99				ND	ND	7.3	ND	ND	<b></b> .
	02/18/93	9.12	94.07					. <del></del>				
	05/13/93	7.84	95.35									
	08/06/93											
	11/15/93											
	01/27/94								<u>-</u>			
	04/26/94											<b></b> .
	07/26/94											
	10/25/94											
	04/12/95											
	10/04/95											
	04/09/96								·			
	04/11/97										·	
	NOT MONITORI	ED/SAMPLED	)	•		,		•				

# Table 1 Groundwater Monitoring Data and Analytical Results

WELL ID	DATE	DTW	GWE	SPHT	TPH-D	ТРН-О	TPH-G	В	T	E	X	MTBE
TOC*(ft.)		(ft.)	(ft.)	(ft.)	(ppb)	(ppb)	(ррь)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
Trip Blank					•							
TB-LB	04/11/97						ND	ND	ND	ND	ND	
	03/23/00						ND	ND	ND	ND	ND	ND
	09/30/00				·							
	12/07/00						ND	ND	ND	ND	ND	ND
	03/26/01	<u></u>					ND	ND	ND	ND	ND	ND
	06/09/01						<50.0	<0.500	< 0.500	<0.500	<1.00	<1.00
	09/18/01						<50.0	< 0.500	<sup>-</sup> <0.500	<0.500	<1.00	<1.00
	12/07/01						<50.0	< 0.500	< 0.500	< 0.500	<1.00	<1.00
	06/09/02						<50	< 0.50	<0.50	< 0.50	<1.5	<2.5
	12/09/02						<50	<0.50	< 0.50	<0.50	<1.5	<2.5
	06/03/03	_	_	_			<50	<0.5	<0.5	<0.5	<1.5	<2.5
	12/11/03		_	_	_		<50	<0.5	<0.5	<0.5	<1.5	<2.5
					TPH-D	ТРН-О	ТРН-С	В	Т	E	Х	MTBE
• •		C4	L D		350	250	50	0.5	0.5	0.5	1.5	2.5

	TPH-D	ТРН-О	TPH-G	В	Т	E	X	MTBE
Standard Laboratory Reporting Limits:	250	250	50	0.5	0.5	0.5	1.5	2.5
MTCA Method A Cleanup Levels:	500	500	800/1,000	5	1,000	700	1,000	20
Current Method:	NWTPH-D	+ Extended			NWTPH-G	ind EPA 8021)	B	

#### Table 1

#### Groundwater Monitoring Data and Analytical Results

Former Chevron Service Station #9-6266 1554 NE 145th Street Seattle, Washington

#### **EXPLANATIONS:**

Groundwater monitoring data and laboratory analytical results prior to March 23, 2000, were compiled from reports prepared by Pacific Environmental Group, Inc.

TOC = Top of Casing

TPH-G = Total Petroleum Hydrocarbons as Gasoline

ND = Not Detected

(ft.) = Feet

B = Benzene

NP = No purge

DTW = Depth to Water

T = Toluene

-- = Not Measured/Not Analyzed

GWE = Groundwater Elevation

E = Ethylbenzene

MTCA = Model Toxics Control Act Cleanup Regulations

SPHT = Separate Phase Hydrocarbon Thickness

X = Xylenes

TPH-D = Total Petroleum Hydrocarbons as Diesel

MTBE = Methyl tertiary butyl ether

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

TPH-O = Total Petroleum Hydrocarbons as Oil

(ppb) = Parts per billion

- TOC elevations are in feet relative to an arbitrary datum.
- 1 Total Lead by EPA Method 7421 was ND.
- 2 MTBE by EPA Method 8260.
- 3 Detection limit raised. Refer to analytical reports.
- MTBE confirmed by EPA Method 8260.
- Replaced ORC in well.
- MTBE by EPA Method 8260 was analyzed outside of the recommended holding time.
- ORC present in well.
- Laboratory report indicates the sample chromatographic pattern does not resemble the fuel standard used for quantitation.
- Laboratory report indicates the hydrocarbon concentration result in this sample is partially due to one or more individule peaks eluting in the diesel/heavy oil range.
- TPH-D and TPH-O with silica gel cleanup.
- -11 Laboratory report indicates the observed sample pattern is not typical of diesel/#2 fuel oil.

Table 2
Groundwater Analytical Results - Oxygenate Compounds

Former Chevron Service Station #9-6266 1554 NE 145th Street Seattle, Washington

WELL ID	DATE	METHANOL	ETHANOL	TBA	MTBE	DIPE	ETBE	TAME
VILLE IN	Dixin	(ppm)	(ppb)	(ppb)	(ppb)	(pph)	(ppb)	(ррь)
				_		1	vol.	ND¹
MW-3	12/07/00	ND	ND <sup>1</sup>	ND <sup>1</sup>	12.8	ND <sup>1</sup>	ND <sup>1</sup>	
	03/26/01	<10.0	<2,500	<500	29.7	<25.0	<25.0	<25.0 <2.0 <sup>2</sup>
	06/09/01	<10.0	<500 <sup>2</sup>	150 <sup>2</sup>	10 <sup>2</sup>	$<2.0^2$	<2.0 <sup>2</sup>	
	09/18/01	<10.0	<1,000	250	<5.00	<2.00	<2.00	<2.00
	12/07/01	<50.0	<2,500	1,290	<2.50	<5.00	<5.00	<5.00
								ND
MW-8	12/07/00	ND	ND	ND	ND	ND -	ND	ND
				•		<b></b>	ND	ND
MW-9	12/07/00	ND	ND	ND	7.71	ND		<2.00
	03/26/01	<10.0	<200	<40.0	11.2	<2.00	<2.00 <2.0 <sup>2</sup>	$<2.0^{\circ}$
	06/09/01	<10.0	<500 <sup>2</sup>	<20 <sup>2</sup>	14 <sup>2</sup>	<2.0 <sup>2</sup>		
	09/18/01	<10.0	<1,000	<250	9.92	<2.00	<2.00	<2.00
	12/07/01	<10.0	<2,500	<250	<2.50	<5.00	<5.00	<5.00
	06/09/02				25			
	12/09/02				13			
	06/03/03				12			
				_			ND	ND
MW-10	12/07/00	ND	ND	ND	ND	ND	ND	, ,
	09/18/01				7.62			
	12/07/00				<5.00			

#### **EXPLANATIONS:**

TBA = Tertiary butyl alcohol

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

 $ETBE = Ethyl \ tertiary \ butyl \ ether$ 

TAME = Tertiary amyl methyl ether

(ppm) = Parts per million

(ppb) = Parts per billion

ND = Not Detected

-- = Not Analyzed

#### **ANALYTICAL METHODS:**

EPA Method 8015 for Methanol EPA Method 8260 for Oxygenate Compounds

Detection limit raised. Refer to analytical reports.

Laboratory report indicates sample was analyzed outside the EPA recommended holding time.

# 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.

## FORMER CHEVRON SERVICE STATION #9-6266 Seattle, Washington

MONITORING & SAMPLING EVENT OF JUNE 3, 2003



Client/Facility #:	Chevron SS #9	-6266		Job Number:	386681		
Site Address:	1554 N.E. 145t	h Street	•	Event Date:	6-3	3-03	
City:	Seattle, Washi	ngton		Sampler:	Bu	NN	
Well ID	MW-3		/ell Condition:		0. K		
Well Diameter	2/4 in.	н	ydrocarbon		Amount Bail	led	
Total Depth	(0.// ft.		hickness:	€ ft.	(product/wate	er): <u>Ø g</u>	jal <u>.</u>
Depth to Water	<del></del>	1	Volume Factor (V			"= 0.17 3"= 0.38 = 1.50 12"= 5.8	. 1 '
	xVF		_=	x3 (case volume) = E	stimated Purge Vo	olume: !	gal.
Purge	Disposable Bailer	^	\ . )	Sampling	Disposable Ba	ailer 🗸	
Equipment:	Stainless Steel Ba	ailer		Equipment:	Pressure Baile		
	Stack Pump		1		Discrete Baile	<u></u>	_
	Suction Pump		<del>\</del>		Other:		
	Grundfos		/				_
	Other:	/	<del></del>				
		Weath	ner Conditions	• ~ )15	nav		
Start Time (pur Sample Time/D	ge): 900 Date: 15 /		Water Color	: Clear	<i>nny</i> c	odor: YES	<u> </u>
•	Pate: 115 / gpm.	 Sedime		: <u> </u>		odor: YES	<u>-</u>
Sample Time/D Purging Flow F Did well de-wa	Pate:         15 /           Rate:         gpm.           ter?         NO           Volume	 Sedime	Water Color ent Description e:	C\EAT  Volume:  Temperature		Odor: YES ORP (mV)	<del>-</del>
Sample Time/D Purging Flow F Did well de-wa	Date:       15 /         Rate:       gpm.         ter?       NO         Volume	Sedime	Water Color ent Description e:	:C\&A(	gal.	ORP	
Sample Time/D Purging Flow F Did well de-wa	Pate:         15 /           Rate:         gpm.           ter?         NO           Volume	Sedime	Water Color ent Description e:	C\EAT  Volume:  Temperature	gal.	ORP	
Sample Time/D Purging Flow F Did well de-wa	Pate:         15 /           Rate:         gpm.           ter?         NO           Volume	Sedime	Water Color ent Description e:	C\EAT  Volume:  Temperature	gal.	ORP	——————————————————————————————————————
Sample Time/D Purging Flow F Did well de-wa	Pate:         15 /           Rate:         gpm.           ter?         NO           Volume	Sedime	Water Color ent Description e:	C\EAT  Volume:  Temperature	gal.	ORP	——————————————————————————————————————
Sample Time/D Purging Flow F Did well de-wa	Pate:         15 /           Rate:         gpm.           ter?         NO           Volume	Sedime If yes, Tim	Water Color ent Description e: Conductivity (umhos/cm)	Temperature (C/F)	gal.	ORP	
Sample Time/D Purging Flow F Did well de-wa Time (2400 hr.	Date: 715 / Rate: gpm. ter? // O  Volume (gal.)	Sedime If yes, Tim	Water Color ent Description e:  Conductivity (umhos/cm)	Temperature (C/F)	gal.  D.O. (mg/L)	ORP	
Sample Time/D Purging Flow F Did well de-wa Time (2400 hr.	Oate: 715 / Rate: gpm. ter? // 0  Volume (gal.)  (#) CONTAINER	Sedime If yes, Tim	Water Color ent Description e: Conductivity (umhos/cm)	Temperature (C/F)  FORMATION  E LABORATOR	gal.  D.O. (mg/L)	ORP (mV)	
Sample Time/D Purging Flow F Did well de-wa Time (2400 hr.	Oate: 715 / Rate: gpm. ter? // 0  Volume (gal.)  (#) CONTAINER	Sedime If yes, Tim pH  LAI REFRIG.	Water Color ent Description ee: Conductivity (umhos/cm)  Z  BORATORY IN PRESERV. TYP	Temperature (C/F)  FORMATION  E LABORATOR	gal.  D.O. (mg/L)  Y  TPH-G/BTEX	ORP (mV)  ANALYSES  MTBE 826	
Sample Time/D Purging Flow F Did well de-wa Time (2400 hr.	Oate: 715 / Rate: gpm. ter? // 0  Volume (gal.)  (#) CONTAINER	Sedime If yes, Tim pH  LAI REFRIG. YES	Water Color ent Description e:  Conductivity (umhos/cm)  ORATORY IN PRESERV. TYP HCL	Temperature (C/F)  FORMATION  LABORATOR	gal.  D.O. (mg/L)  Y  TPH-G/BTEX	ORP (mV)  ANALYSES  MTBE 826	
Sample Time/D Purging Flow F Did well de-wa Time (2400 hr.	Oate: 715 / Rate: gpm. ter? // 0  Volume (gal.)  (#) CONTAINER  Exvoa vial 3 2 XOMbur	Sedime If yes, Tim pH  LAI REFRIG. YES	Water Color ent Description e:  Conductivity (umhos/cm)  ORATORY IN PRESERV. TYP HCL	Temperature (C/F)  FORMATION  LABORATOR	gal.  D.O. (mg/L)  Y  TPH-G/BTEX	ORP (mV)  ANALYSES  MTBE 826	.0



Client/Facility #:	Chevron SS #9-6266	Job Number:	386681	_
Site Address:	1554 N.E. 145th Street	Event Date:	6-3-03	_
City:	Seattle, Washington	Sampler:	BWN	-
Well ID	MW- 8 Well Condition	: 0F	· · · · · · · · · · · · · · · · · · ·	
Well Diameter	2/4 in. Hydrocarbon	· · · · · · · · · · · · · · · · · · ·	Amount Bailed	•
Total Depth	14.28 ft. Thickness:	Ø ft		_
Depth to Water	5.37 ft. Volume	3/4"= 0.02	2 1"= 0.04 2"= 0.17 3"= 0.38	1
	Factor (	VF) 4*= 0.66	5"= 1.02 6"= 1.50 12"= 5.80	
	×VF=	x3 (case volume) =	Estimated Purge Volume: gal.	•
_		0		
Purge	Disposable Bailer	Sampling Equipment:	Disposable Bailer	-
Equipment:	Stainless Steel Bailer	Equipment.	Pressure Bailer	-
	Stack Pump		Discrete Bailer	-
	Suction Pump		Other:	-
	Grundios			
	Other:			
Start Time (pure			<del></del>	-
Sample Time/D	<del></del>		Odor:	-
Purging Flow R				-
Did well de-wat	er? If yes, Time:	Volume: /	gal.	
Time	Volume Conductivity	Temperature	to.o. ORP	
(2400 hr.)	nH \	j(c/F)	(mg/L) . (mV)	
	_ /			-
•	/		<del> </del>	-
	<u> </u>	. /	_ <del> </del>	-
		/		-
	- <del> </del>			-
				<u>,</u>
SAMPLE ID	LABORATORY IN (#) CONTAINED REFRIG. PRESERV. TYPE		RY ANALYSES	
MW-	x voe vial YES HCL	hancaster		
mw-	Kamber " "		TPH-DX WSg-	
			. 0	
<del></del>	<del>+</del>	<del></del> -		_
	10 1 and 11		<u> </u>	
COMMENTS:	Monitoring Only	<del></del> -		
		<del></del>	· · · · · · · · · · · · · · · · · · ·	
Add/Repla	aced Lock:	Add/Replaced	Plug: Size:	



Add/Replaced Lock: \_\_\_\_\_\_

# GETTLER-RYAN INC.

Client/Facility #:	Chevron SS #9-626	6	Job Number: 3	86681	
Site Address:	1554 N.E. 145th Str	e <u>et</u>	Event Date:	6-3-6	
City:	Seattle, Washington	<u>n</u>	Sampler:	BWA	<i>)</i> ·
Well ID	MW-9	Well Condition	n:	O.K.	
Well Diameter	<b>2/4</b> in.	Hydrocarbon		Amount Bailed	
Total Depth	13.37 ft.	Thickness:	<u>₩ ft.</u>	(product/water):	gal.
Depth to Water		Volume Factor		1"= 0.04 2"= 0.17 5"= 1.02 6"= 1.50	3"= 0.38 12"= 5.80
•	xVF	=	_ x3 (case volume) = Est	mated Purge Volume: _	gal.
		,	· Campling p	viene se bla Deilor	
Purge	Disposable Bailer		_	Disposable Bailer Pressure Bailer	
Equipment:	Stainless Steel Bailer			Discrete Bailer	
	Stack Pump	A	•	Other:	
	Suction Pump		-	)(ilei	
	Grundfos		•		
Start Time (pur Sample Time/I	- 1 <del>- 1</del>	Veather Condition Water Col		Odor:	slight
	ge): 930 V Date: 945 / Rate: gpm. Seter? // // If yes	,	or: <u>C(ear</u> on:	Odor: _	Slight ORP (mV)
Sample Time/D Purging Flow F Did well de-wa	ge): 930 V Date: 945 / Rate: gpm. Seter? // // If yes	Water Colediment Description, Time:	or: C(ENT on: Volume: Temperature	Odor: gal. gal.	ORP
Sample Time/D Purging Flow F Did well de-wa	ge): 930 V Date: 945 / Rate: gpm. Seter? // // If yes	Water Colediment Description, Time:	or: C(ENT on: Volume: Temperature	Odor: gal. gal.	ORP
Sample Time/D Purging Flow F Did well de-wa	ge): 930 V Date: 945 / Rate: gpm. Seter? // // If yes	Water Colediment Description, Time:	or: C(ENT on: Volume: Temperature	Odor: gal. gal.	ORP
Sample Time/D Purging Flow F Did well de-wa	ge): 930 V Date: 945 / Rate: gpm. Seter? // // If yes	Water Colediment Description, Time:	or: C(ENT on: Volume: Temperature	Odor: gal. gal.	ORP
Sample Time/D Purging Flow F Did well de-wa	ge): 930 V Date: 945 / Rate: gpm. Seter? // // If yes	Water Colediment Description, Time:	or: C(ENT on: Volume: Temperature	Odor: gal. gal.	ORP
Sample Time/D Purging Flow F Did well de-wa	ge): 930 V Date: 945 / Rate: gpm. Seter? // // If yes	Water Colediment Description, Time:	or: C(ENT on: Volume: Temperature (C/F)	Odor: gal.  D.O. (mg/L)	ORP (mV)
Sample Time/D Purging Flow F Did well de-wa	ge): 930 V Date: 945 / Rate: gpm. Seter? // // If yes	Water Colediment Description, Time:  Conductivity (umhos/cm)  LABORATORY  RIG. PRESERV. TV	Or: C(EM) On: Volume: Temperature (C/F) INFORMATION YPE LABORATORY	gal.  D.O. (mg/L)	ORP (mV)
Sample Time/D Purging Flow F Did well de-wa Time (2400 hr.	ge): 930 V Date: 945 / Rate: gpm. Setter? Mo If yes  Volume (gal.) pH  (#) CONTAINER REFE	Water Colediment Description, Time:  Conductivity (umhos/cm)  LABORATORY RIG. PRESERV. TV	Or: C(ENTON:  Volume:  Temperature (C/F)  INFORMATION  YPE LABORATORY	gal.  D.O. (mg/L)  ANAL  TPH-G/BTEX/MTBE	ORP (mV)
Sample Time/D Purging Flow F Did well de-wa Time (2400 hr.	ge): 930 V Date: 945 / Rate: gpm. Setter? // U If yes  Volume (gal.) PH  (#) CONTAINER REFE	Water Colediment Description, Time:  Conductivity (umhos/cm)  LABORATORY RIG. PRESERV. TV	Or: C(EM) On: Volume: Temperature (C/F) INFORMATION YPE LABORATORY	gal.  D.O. (mg/L)	ORP (mV)
Sample Time/D Purging Flow F Did well de-wa Time (2400 hr.	ge): 930 V Date: 945 / Rate: gpm. Setter? Mo If yes  Volume (gal.) pH  (#) CONTAINER REFE	Water Colediment Description, Time:  Conductivity (umhos/cm)  LABORATORY RIG. PRESERV. TV	Or: C(ENTON:  Volume:  Temperature (C/F)  INFORMATION  YPE LABORATORY	gal.  D.O. (mg/L)  ANAL  TPH-G/BTEX/MTBE	ORP (mV)
Sample Time/D Purging Flow F Did well de-wa Time (2400 hr.	ge): 930 V Date: 945 / Rate: gpm. Set ter? No If yes  Volume (gal.) pH  (#) CONTAINER REFE  ( & x voa vial YE  9 2 XDMDU "	Water Colediment Description, Time:  Conductivity (umhos/cm)  LABORATORY I	Or: C(ENTON:  Volume:  Temperature (C/F)  INFORMATION  YPE LABORATORY	gal.  D.O. (mg/L)  ANAL  TPH-G/BTEX/MTBE	ORP (mV)

Client/Facility #:	Chevron SS #9-6		Job Number: 386681					
Site Address:	1554 N.E. 145th	Street	Event Date:	6.3.83				
City:	Seattle, Washing	gton	Sampler:	BWN				
<del></del>			14					
Well ID	MW-{0	Well Condition	: <u> </u>	·				
Well Diameter	<b>(2)4</b> in.	Hydrocarbon	<del>K</del>	Amount Bailed	18			
Total Depth	13.12 ft.	Thickness:		(product/water):	gal.			
Depth to Water	4-38 ft.	Volume		1"= 0.04 2"= 0.17				
		Factor (	<del></del>	5"= 1.02 6"= 1.50				
	xVF	==	x3 (case volume) = E	stimated Purge Volume:	gal.			
Purge	Disposable Bailer		Sampling	Disposable Bailer				
Equipment:	Stainless Steel Baile		Equipment:	Pressure Bailer				
	Stack Pump	"		Discrete Bailer				
	Suction Pump			Other:				
	Grundfos							
	Other:				1			
			$\overline{}$					
		/		/				
Start Time (nur	rol:	Weather condition	s. \ /	/				
Start Time (purg	· · <del></del>	Weather Condition		/ Odor:	<del></del>			
Sample Time/D	Pate:	Water Cold	r:	Odor:	<del></del>			
Sample Time/D Purging Flow R	Pate: gpm.	Water Cold Sediment Descriptio	r:	<del></del>				
Sample Time/D	Pate: gpm.	Water Cold Sediment Descriptio yes, Time:	n:	gal.				
Sample Time/D Purging Flow R Did well de-wat	Pate:	Water Cold Sediment Descriptio yes, Time: Conductivity	r:	gal.	ORP (mV)			
Sample Time/D Purging Flow R Did well de-wat	Pate: gpm. lf Volume	Water Cold Sediment Descriptio yes, Time:	n:Volume:	gal.	ORP (mV)			
Sample Time/D Purging Flow R Did well de-wat	Pate:	Water Cold Sediment Descriptio yes, Time: Conductivity	r:	gal.				
Sample Time/D Purging Flow R Did well de-wat	Pate:	Water Cold Sediment Descriptio yes, Time: Conductivity	r:	gal.				
Sample Time/D Purging Flow R Did well de-wat	Pate:	Water Cold Sediment Descriptio yes, Time: Conductivity	r:	gal.				
Sample Time/D Purging Flow R Did well de-wat	Pate:	Water Cold Sediment Descriptio yes, Time: Conductivity	r:	gal.				
Sample Time/D Purging Flow R Did well de-wat	Pate:	Water Cold Sediment Descriptio yes, Time: Conductivity	r:	gal.				
Sample Time/D Purging Flow R Did well de-wat	Volume (gal.)	Water Cold Sediment Descriptio yes, Time:  Conductivity (umhos/cm)  LABORATORY IN	Temperature (C/F)	gal. D.O. (mg/L)	(mV)			
Sample Time/D Purging Flow R Did well de-wat Time (2400 hr.)	Volume (gal.)  (#) CONTAINER R	Water Cold Sediment Description yes, Time:  Conductivity (umhos/cm)  LABORATORY IN REFRIG. PRESERV. TYPE	Volume: Temperature (C/F)  IFORMATION PE LABORATOR	gal. D.O. (mg/L)	(mV)			
Sample Time/D Purging Flow R Did well de-wat  Time (2400 hr.)  SAMPLE ID MW-	Volume (gal.)  (#) CONTAINER R x voa vial	Water Cold Sediment Description yes, Time:  Conductivity (umhos/cm)  LABORATORY IN REFRIG. PRESERV. TYI YES HCL	Temperature (C/F)  IFORMATION DE LABORATOR	gal.  D.O. (mg/L)  Y ANAL TPH-G/BTEX/MTBE	(mV)			
Sample Time/D Purging Flow R Did well de-wat Time (2400 hr.)	Volume (gal.)  (#) CONTAINER R	Water Cold Sediment Description yes, Time:  Conductivity (umhos/cm)  LABORATORY IN REFRIG. PRESERV. TYI YES HCL	Temperature (C/F)  IFORMATION DE LABORATOR	gal.  D.O. (mg/L)  Y ANAL TPH-G/BTEX/MTBE	(mV)			
Sample Time/D Purging Flow R Did well de-wat  Time (2400 hr.)  SAMPLE ID MW-	Volume (gal.)  (#) CONTAINER R x voa vial	Water Cold Sediment Description yes, Time:  Conductivity (umhos/cm)  LABORATORY IN REFRIG. PRESERV. TYI YES HCL	Temperature (C/F)  IFORMATION DE LABORATOR	gal.  D.O. (mg/L)  Y ANAL TPH-G/BTEX/MTBE	(mV)			
Sample Time/D Purging Flow R Did well de-wat  Time (2400 hr.)  SAMPLE ID MW-	Volume (gal.)  (#) CONTAINER  x voa vial  X0,ymbur	Water Cold Sediment Description yes, Time:  Conductivity (umhos/cm)  LABORATORY IN REFRIG. PRESERV. TYP YES HCL	Temperature (C/F)  IFORMATION DE LABORATOR	gal.  D.O. (mg/L)  Y ANAL TPH-G/BTEX/MTBE	(mV)			
Sample Time/D Purging Flow R Did well de-wat Time (2400 hr.)  SAMPLE ID MW-	Volume (gal.)  (#) CONTAINER R x voa vial	Water Cold Sediment Description yes, Time:  Conductivity (umhos/cm)  LABORATORY IN REFRIG. PRESERV. TYP YES HCL	Temperature (C/F)  IFORMATION DE LABORATOR	gal.  D.O. (mg/L)  Y ANAL TPH-G/BTEX/MTBE	(mV)			

# Chevron Northwest Region Analysis Request/Chain of Custody

For Lancaster Laboratories use only

Received by:

Received by:

Received

**Custody Seals Intact?** 

Date

Date



Type I - Full

Disk / EDD.

Standard Format

4 day

Data Package Options (please circle if required)

24 hour

Disk .

**QC Summary** 

WIP (RWQCB)

Type VI (Raw Data)

Other.

Lancaster Laboratories Where quality is a science.		٠			Acc	ct. #: <u> </u>	12	<u>(00</u>	Se	F	or La #:	O (	er Lai 200	borgt 18	ories -20	): ):	nly 	scr#:_85	3700	<u> </u>
Vineequality s a soci k.e.	•						Г			A	naly	ses F	gequ	ste	1		•			
		•		T	Matrix	,	╅			F	rese	rvati	on C	odes	· .	<del></del>	二	Preservat		
Facility #:S\$#9-6266 G-R#386681			<del></del>	1	MIGLIA	`	H			H	ΤŁ		_	- -	4	1	_	11	r = Thiosi 3 = NaOH	
Site Address: 1554 NE 145th Street, SEA	TLE, WA			L		_	E E												O = Other	
Chevron PM:BH Lead Consultant:SAICLB				ļ		ဗြ	S S	}			<b>a</b> .		_ ا				Ì	☐ J value reportir	g needed	
Consultant/Office: _G_R, Inc., 6747 Sierre (			9456	36	☐ Potable ☐ NPDES	Oil C Air C	8021, 23 8260  Naphth	ł			D LET Silica Gel Clearup	athod	To wantification		1			Must meet low possible for 82	est detection	on limits
Consultant Prj. Mgr.: Deanna L. Harding (				}	A Z	ا	82	.			a Gel	ž	iges.		١,	1	. ]	8021 MTBE Conf		
			7899-	1		=		<u>'                                       </u>	22		日記	iss.	1	-		1		Confirm MTBE		alene
Consultant Phone #: 925 551 7555 Sampler: Ben W. New to	m		٩					.   =	enate	ی			VPH/EPH			1		Confirm highes	t hit by 82	
Service Order #:	Non SAR:			ξ	=		}   <u>₹</u>	X  ==	ð	Œ	E	Total	돐			.		⊠Confirm all hits □ Run oxy		st hit
	Date Collected	Time Collected	g g	Soil	Water	Oil   Air	BTEX + MTBE	8260 full scan	Oxygenates		4TPHO.	Lead	VPHCEPH					Runoxy	s on eil hit	8
Sample identification  @Ad	6-3-03	Collected	X	1	X	1	ightarrow			X				· ]				Comments / R	emarks	į
MW-3	1	915	X		X	8				×	X			$\bot$	$\perp$	_				
MW-9	V	945	X	$\perp$	X	8	2 2	<u> </u>	↓_	X	X		4	-	+	┼-	_		٠,	
· · · · · · · · · · · · · · · · · · ·					<del> </del>	<del>    -</del>		-	<del> </del>	├			-	-		┼				
	<del>-   </del>		+	╁	╅	╁╌┼╌			┼	╁		<u> </u>	$\vdash$	+	+	<del> </del>				
	<del></del>		╂─┼╌		+-	<del>    ,</del>	_	╁	┼-	<del>                                     </del>	-	<b> </b>		$\dashv$	十	+-	<del> </del>	1		• •
	<del></del>		!	1	1	1 1	<b>-</b>  -	╁												·
	1															_	<u> </u>			
									$oxed{oxed}$	_		ļ.,			1	<del> </del>	₋	_		
		<b></b>	<b>-</b>   -	_ _	_ -	<del>   </del> -		- -	<del>  -</del>	-		+-	$\vdash$	-		_	-	1		
	<del>.</del>	<u> </u>	<del>                                     </del>	+		++		- -	+	╁	+-	╀	┼┼	$\dashv$	-		+	-		
		Relina	l uished b		1	Ц.		_1_	╁	Date	<del>                                      </del>	Time	R	ecelv	ed by:	-1-	ــــــــــــــــــــــــــــــــــــــ		Date	Time
Turnaround Time Requested (TAT) (please of			uished b	Tu	do	~			- 6	6-9-	3	400						1	L	
STD, TAT 72 hour 48 h	our .	Poling	uiched h					_		Date	<u>.                                     </u>	Time	R	acah	ed hy				Dáte	Time

3468 Rev. 8/6/01

Dât

Date

Date

No

**Smil** 

Time

Relinquished by:

Relinguished by:

Relinquished by Commercial Carrier:

FedEx

Temperature Upon Receipt



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

#### ANALYTICAL RESULTS

Prepared for:

ChevronTexaco 6001 Bollinger Canyon Road L4310 San Ramon CA 94583 925-842-8582

Prepared by:

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

GETTI HK-KYAN INC

#### **SAMPLE GROUP**

The sample group for this submittal is 855102. Samples arrived at the laboratory on Tuesday, June 10, 2003. The PO# for this group is 99011184 and the release number is HUNTER.

Client Description	Lancaster Labs Number
QA Water Sample	4060318
MW-3 Grab Water Sample	4060319
MW-9 Grab Water Sample	4060320

ELECTRONIC COPY TO

Gettler Ryan

Attn: Michael Sharaeff

COPY TO 1 COPY TO

SAIC

Attn: Ms. Deanna Harding



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

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

Respectfully Submitted,

LA HAMATELL
Victoria M. Mariell
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 4060318

Collected:06/03/2003 00:00

Submitted: 06/10/2003 09:10 Reported: 06/23/2003 at 14:29

Discard: 07/24/2003

QA Water Sample

Facility# 96266 Job# 386681 1554 NE 145th Street; Seattle, WA Account Number: 11260

ChevronTexaco

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D.	0.5	ug/l	1
00777	Toluene	108-88-3	N.D.	0.5	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.5	ug/1	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	N.D.	2.5	ug/l	1
08274	TPH by NWTPH-Gx waters			•		•
01648	TPH by NWTPH-Gx waters	n.a.	N.D.	50.	ug/l	1

Laboratory C	Chronicle
--------------	-----------

CAT		,		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
08214	BTEX. MTBE (8021)	SW-846 8021B	1	06/12/2003 19:16	Martha L Seidel	1
08274	TPH by NWTPH-Gx waters	трн by имтрн-Gx -	1	06/12/2003 19:16	Martha L Seidel	1
01146	GC VOA Water Prep	8015B Mod. SW-846 5030B	1	06/12/2003 19:16	Martha L Seidel	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 4060319

Collected:06/03/2003 09:15

by BN

Account Number: 11260

Submitted: 06/10/2003 09:10

Reported: 06/23/2003 at 14:29

Discard: 07/24/2003 MW-3 Grab Water Sample

Facility# 96266 Job# 386681 1554 NE 145th Street; Seattle, WA ChevronTexaco

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

NE--3

CAT	1	4 .	As Received	As Received Method	r	Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	2,300.	400.	ug/l	5
02096	Heavy Range Organics	n.a.	2,100.	500.	ug/l	5
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	1,100.	1.0	ug/l	5
00777	Toluene	108-88-3	120.	1.0	ug/l	5
00778	Ethylbenzene	100-41-4	4.5	1.0	ug/l	5
00779	Total Xylenes	1330-20-7	51.	3.0	ug/l	5
00780	Methyl tert-Butyl Ether	1634-04-4	N.D. #	10.	ug/l	5
	Due to the presence of an inter	ferent near it	s retention time,	the normal		
	reporting limit was not attaine presence or concentration of th presence of this interferent.	d for MTBE. To	ne nnot be determine	d due to the		
08274	TPH by NWTPH-Gx waters					
01648	TPH by NWTPH-Gx waters	n.a.	530.	250.	ug/l	5

CAT		Laboratory	Chro:	nicle Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
02211	TPH by NWTPH-Dx(water)	NWTPH-Dx, ECY 97-	1	06/17/2003 18:11	Devin M Hetrick	5
00024	w/SiGel	602(modified) SW-846 8021B	1	06/12/2003 14:54	Linda C Pape	5
08214 08274	BTEX, MTBE (8021) TPH by NWTPH-Gx waters	TPH by NWTPH-Gx -	ī	06/12/2003 14:54	Linda C Pape	5
01146	GC VOA Water Prep	SW-846 5030B	1	06/12/2003 14:54	Linda C Pape	n.a.
07003	Extraction - DRO (Waters)	NWTPH-Dx, ECY 97-602, 6/97	· 1	06/12/2003 01:30	David V Hershey Jr	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

4060320 Lancaster Laboratories Sample No.

Collected:06/03/2003 09:45

by BN

Account Number: 11260

Submitted: 06/10/2003 09:10

Reported: 06/23/2003 at 14:29

Discard: 07/24/2003

MW-9 Grab Water Sample

Facility# 96266 Job# 386681 1554 NE 145th Street; Seattle, WA ChevronTexaco

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

NE--9

•	A STATE OF THE STA		2 2	As Received	•	•
CAT	•		As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
022	TPH by NWTPH-Dx(water) w/Si	Gel ·				F
020	95 Diesel Range Organics	n.a.	N.D.	250.	ug/l	1
020	96 Heavy Range Organics	n.a.	N.D.	250.	ug/l	1,
082	214 BTEX, MTBE (8021)					
. 007	776 Benzene	71-43-2	N.D.	0.5	ug/l	1
007	777 Toluene	108-88-3	N.D.	0.5	ug/l	1
007	778 Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
007	779 Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1 .
007	780 Methyl tert-Butyl Ether	1634-04-4	14.	2.5	ug/l	1
082	274 TPH by NWTPH-Gx waters					
016	648 TPH by NWTPH-Gx waters	n.a.	N.D.	50.	ug/l	1
023	309 MTBE by GC/MS (water)					
020	010 Methyl Tertiary Butyl Ether	1634-04-4	12.	2.	ug/l	1

Labora	tory	Chronicle	е
--------	------	-----------	---

CAT		_		Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
02211	TPH by NWTPH-Dx(water) w/SiGel	NWTPH-Dx, ECY 97- 602(modified)	1	06/17/2003 18:36	Devin M Hetrick	1
08214	BTEX, MTBE (8021)	SW-846 8021B	1	06/12/2003 15:27	Linda C Pape	1
08274	TPH by NWTPH-Gx waters	TPH by NWTPH-Gx - 8015B Mod.	1	06/12/2003 15:27	Linda C Pape	1
02309	MTBE by GC/MS (water)	SW-846 8260B	1	06/17/2003 14:50	John B Kiser	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/12/2003 15:27	Linda C Pape	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/17/2003 14:50	John B Kiser	n.a.
07003	Extraction - DRO (Waters)	NWTPH-Dx, ECY 97-602,	. 1	06/12/2003 01:30	David V Hershey Jr	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 2

### Quality Control Summary

Client Name: ChevronTexaco

Group Number: 855102

Reported: 06/23/03 at 02:29 PM

### Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD %REC	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: 031620017A Diesel Range Organics Heavy Range Organics	Sample nu N.D. N.D.	mber(s): 4 0.080 0.10	mg/l mg/l mg/l	60320 65		55-126		
Batch number: 03162A55A Benzene Toluene Ethylbenzene Total Xylenes Methyl tert-Butyl Ether TPH by NWTPH-Gx waters	Sample nu N.D. N.D. N.D. N.D. N.D.	mber(s): 4 0.2 0.2 0.2 0.6 0.3 0.048	ug/l ug/l ug/l ug/l ug/l ug/l ug/l	97 101 101 102 92 83	97 100 101 102 95 81	80-118 82-119 81-119 82-120 79-127 70-130	0 1 0 0 3 2	30 30 30 30 30 30
Batch number: P031672AA Methyl Tertiary Butyl Ether	Sample nu N.D.	mber(s):	4060320 ug/l	97		77-127		

#### Sample Matrix Quality Control

	MS	MSD	ms/msd		RPD	BKG	DUP	DUP.	Dup RPD
Analysis Name	%REC	%REC	<u>Limits</u>	RPD	<u>XAM</u>	Conc	Conc	RPD	<u>Max</u>
Batch number: 031620017A Diesel Range Organics Heavy Range Organics	Sample	e number	(s): 40603	19-4060:	320	N.D. N.D.	N.D. N.D.	0 (1) 0 (1)	20 20
Batch number: 031624554	Sample	e number	(s): 40603	18-4060	320				

69-134

Batch number: 03162A55A	Sample	number (	s):	4060318	-406032	:0
	98	82	67-	136	9	30
Benzene		(2)		129	5	30
Toluene	(2) (2)	(2)	. •	133	5	30
Ethylbenzene Total Xylenes	(2)	(2)	78-	130	4	30
Methyl tert-Butyl Ether	126	113	66-	136	11	30
TPH by NWTPH-Gx waters	(2)	(2)	70-	130	2	30
Batch number, B031672AA	Sample	number	(s):	4060320		

Batch number: P031672AA Methyl Tertiary Butyl Ether

Surrogate Quality Control

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

Batch number: 031620017A Orthoterphenyl

4060319	85
4060320	83
Blank	101
LCS	93

Limits: 50-150

Analysis Name: TPH by NWTPH-Gx waters

#### \*- 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 2

#### Quality Control Summary

Client Name: ChevronTexaco

Group "Number: 855102

Reported: 06/23/03 at 02:29 PM

Surrogate Quality Control

Batch number:	03162A55A
---------------	-----------

	Trifluorotoluene-P	Trifluorotoluene-F	
4060318	115	100	
4060319	113	97	
4060320	113	98	
Blank	114	99	
rcsd .	111	98	
rcsd.	112	98	
MS	111	97	
MSD	112	100	
Limits:	66-136	57-146	

Analysis Name: MTBE by GC/MS (water)

Datah numbar, D03167233

Batch number: P031672AA Dibromofluoromethane				4-Bromofluorobenzer	
4060320	98	100	89	87	
Blank	99	102	92	86	
LCS	98	. 99	90	89	
MS	99	101	93	92	
MSD	99	97	92	90	
Limits:	81-120	82-112	85-112	83-113	

\*- Outside of specification

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

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



# **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 m3	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 falls within the Method Detection Limit (MDL) and 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**Besults 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 dualiners		_
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 M 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 Y.Z	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

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.

## FORMER CHEVRON SERVICE STATION #9-6266 Seattle, Washington

MONITORING & SAMPLING EVENT OF DECEMBER 11, 2003



Client/Facility #:		o #9-6266	Job Number:	386681	<del></del>
Site Address:	1554 Ne 145Th		Event Date:	12-11-93	(inclusiv
			Sampler:	BWN	
City:	Seattle, WA				
Well ID	MW-3	Date Monitored:	12-11-03	_ Well Condition: 0 K	
Well Diameter	in.	·			0.38
Total Depth	9,85 ft.	Volume Factor	•	1 - 0.04	= 5.80
Depth to Water	6.48 ft.				•
Deptil to Water		VF=	x3 (case volume) =	Estimated Purge Volume:	gal.
				Time Started:	(2400 hrs)
Purge Equipment:		Sampling Equipm	ent:	Time Bailed:	(2400 hrs)
Disposable Bailer	<b>√</b>	Disposable Bailer	/	Depth to Product:	<u>/</u> ft
Stainless Steel Baile		Pressure Bailer		Depth to Water. Hydrocarbon Thickness:	——— <u>—</u> '1
Stack Pump		Discrete Bailer		Visual Confirmation/Descrip	otion:
Suction Pump		Other:			
Grundfos				Skimmer / Absorbant Sock	(circle one) er: gal
Other:				Amt Removed from Skimm Amt Removed from Well:	er: gal
			•	Product Transferred to:	
			C		
Start Time (pur	ge): 420  200	) Weather Condition	ons: <u>Kair</u>		<del></del>
Sample Time/		1-11-03 Water Co	olor: <u>ඉ(ක/</u>	Odor: <u>Xe</u>	<u> </u>
		Sediment Descript	ion:	·	<u> </u>
Purging Flow F		If yes, Time:		gal.	*
Did well de-wa	ter? <u> </u>	ii yes, riine		<del></del>	
•			Temperatura	5.0	ORP
Time	Volume	Conductivity	Temperature	D.O.	
Time (2400 hr.)	Volume	pH Conductivity (u mhos/cm)		(mg/L)	(mV)
Time (2400 hr.					
		pH (u mhos/cm)	(C/F)		
(2400 hr.	) (gal.)	pH (u mhos/cm)	(C/F)	(mg/L)	(mV)
(2400 hr.	(gal.) (gal.)	LABORATORY REFRIG. PRESERV. T	INFORMATION YPE LABORATO	(mg/L)	(mV)
SAMPLE ID MW- 3	(#) CONTAINER  (**) X voa vial	LABORATORY REFRIG. PRESERV. T YES HCL	INFORMATION YPE LABORATO LANCASTE	RY ANALYSE R TPH-G/BTEX/MTBE	(mV)
(2400 hr.	(gal.) (gal.)	LABORATORY REFRIG. PRESERV. T YES HCL	INFORMATION YPE LABORATO	RY ANALYSE R TPH-G/BTEX/MTBE	(mV)
SAMPLE ID MW- 3	(#) CONTAINER  (**) X voa vial	LABORATORY REFRIG. PRESERV. T YES HCL	INFORMATION YPE LABORATO LANCASTE	RY ANALYSE R TPH-G/BTEX/MTBE	(mV)
SAMPLE ID MW- 3	(#) CONTAINER  (**) X voa vial	LABORATORY REFRIG. PRESERV. T YES HCL	INFORMATION YPE LABORATO LANCASTE	RY ANALYSE R TPH-G/BTEX/MTBE	(mV)
SAMPLE ID MW- 3	(#) CONTAINER  (**) X voa vial	LABORATORY REFRIG. PRESERV. T YES HCL	INFORMATION YPE LABORATO LANCASTE	RY ANALYSE R TPH-G/BTEX/MTBE	(mV)
SAMPLE ID MW- 3 MW- 3	(#) CONTAINER  (*) x voa vial  x amber	LABORATORY REFRIG. PRESERV.T YES HCL YES HCL	INFORMATION YPE LABORATO LANCASTE	RY ANALYSE R TPH-G/BTEX/MTBE	(mV)
SAMPLE ID MW- 3	(#) CONTAINER  (x voa vial  x amber	LABORATORY REFRIG. PRESERV.T YES HCL YES HCL	INFORMATION YPE LABORATO LANCASTE	RY ANALYSE R TPH-G/BTEX/MTBE	(mV)
SAMPLE ID  MW- 3  MW- 3	(#) CONTAINER  (*) x voa vial  x amber	LABORATORY REFRIG. PRESERV.T YES HCL YES HCL	INFORMATION YPE LABORATO LANCASTE	RY ANALYSE R TPH-G/BTEX/MTBE	(mV)



Client/Facility #:	ChevronTexaco #9-6266	Job Number: -		
Site Address:	1554 Ne 145Th Street	Event Date:	12-11-03	(inclusi
City:	Seattle, WA	Sampler:	BWN	
Well ID	MW- 9 Date Monitored:	12-11-03	Well Condition: 0	<del></del>
Well Diameter  Total Depth	2 in. Volume Factor		1"= 0.04 2"= 0.17 3"= 0.38 5"= 1.02 6"= 1.50 12"= 5.80	
Depth to Water	5,13ft. ==	x3 (case volume) = E	stimated Purge Volume:ga	ıi.
D <b>F</b> !	Sampling Equipme	e <b>nt</b> •	Time Started:	(2400 hrs) (2400 hrs)
Purge Equipment:		<b>1116</b>	Depth to Product:	(2400 IIIS) ft
Disposable Bailer	Disposable Bailer		Depth to Water:	
Stainless Steel Baile			Hydrocarbon Thickness:	ft
Stack Pump Suction Pump	Discrete Baller Other:		Visual Confirmation/Description:	
Grundfos	<del></del>	••	Skimmer / Absorbant Sock (circle o	ne)
Other:	/		Amt Removed from Skimmer:	gal
· ·	<del></del>		Amt Removed from Well:	gal
			Product Transferred to:	<u>:</u>
		·		
Start Time (purg Sample Time/Da Purging Flow Ra Did well de-wate	ate: / Water Col ate: gpm. / Sediment Description	lor.	Odor:	<u>3                                    </u>
Time (2400 hr.)	Volume (gal.) pH Conductivity (u mhos/cm)	Temperature (C/F)	D.O. ORP (mg/L) (mV)	
		/ (	**	
	/- \	<del>-</del>		<u> </u>
<u> </u>				<del></del>
	LABORATORY	NFORMATION		
SAMPLE ID	LABORATORY I  (#) CONTAINER REFRIG. PRESERV. T)	PE LABORATORY	ANALYSES	
		LABORATORY LANCASTER	ANALYSES TPH-G/ETEX/MTBE	
SAMPLE ID MW- MW-	(#) CONTAINER REFRIG. PRESERV. T)	PE LABORATORY	ANALYSES	
MW-	(#) CONTAINER REFRIG. PRESERV. T)  x voa vial YES HCL	LABORATORY LANCASTER	ANALYSES TPH-G/ETEX/MTBE	
MW-	(#) CONTAINER REFRIG. PRESERV. T)  x voa vial YES HCL  x amber YES HCL	LABORATORY LANCASTER	ANALYSES TPH-G/ETEX/MTBE	
MW-	(#) CONTAINER REFRIG. PRESERV. T)  x voa vial YES HCL	LABORATORY LANCASTER	ANALYSES TPH-G/ETEX/MTBE	
MW-	(#) CONTAINER REFRIG. PRESERV. T)  x voa vial YES HCL  x amber YES HCL	LABORATORY LANCASTER	ANALYSES TPH-G/ETEX/MTBE	
MW-	(#) CONTAINER REFRIG. PRESERV. T)  x voa vial YES HCL  x amber YES HCL	LABORATORY LANCASTER	ANALYSES TPH-G/ETEX/MTBE	
MW- MW-	(#) CONTAINER REFRIG. PRESERV. T)  x voa vial YES HCL  x amber YES HCL	LABORATORY LANCASTER	ANALYSES TPH-G/ETEX/MTBE	



Client/Facility #:	ChevronTexac	o #9-62	66	Job Number:	386681	
Site Address:	1554 Ne 145T			Event Date:	12-11-03	(inclusive
City:	Seattle, WA		· · _	Sampler:	BWN	
Well ID	MW- 9	Dat	te Monitored: \	2-11-03	Well Condition: 0	<u></u>
Well Diameter	2 in.		Volume	3/4"= 0.02	1"= 0.04 2"= 0.17 3"= 0	.38
Total Depth	13.36 ft.		Factor (VI		5"= 1.02 6"= 1.50 12"=	5.80
Depth to Water	$(c_1)$ ft.			20 (2000 volume) =	Estimated Purge Volume:	g <b>al.</b>
	×	VF	= <del></del>	x3 (case volume) -	Time Started:	(2400 hrs)
Purge Equipment:	•	Sar	mpling Equipment	t:	Time Bailed:	(2400 hrs)
Disposable Bailer			posable Bailer		Depth to Product:	ft
Stainless Steel Baile	r		essure Bailer		Depth to Water: Hydrocarbon Thickness:	ft I
Stack Pump	<u> </u>		screte Bailer he <b>r:</b>		Visual Confirmation Description	o <b>n:</b>
Suction Pump Grundfos	<u> </u>	Ou			Skimmer / Absorbant Sock (c	ircle one)
Other:				•	Amt Removed from Skimmer	: gal
				,	Amt Removed from Well:	gal
	•				Product Transferred to:	
	· · · · · · · · · · · · · · · · · · ·	<del></del>	<del></del>	D . o		
Start Time (purg	je): <u>1230                                    </u>	Wea	ther Conditions			<del></del>
Sample Time/D	ate: 1245 / 1	<u>2-11-03</u>	•		Odor: _ <u>\/                                  </u>	<del></del>
Purging Flow R	ate: gpm.		ent Description		1	<del></del>
Did well de-wat	er? <u>^^</u>	If yes, Tin	ne:	_ Volume:	gal.	•
Time (2400 hr.)	Volume (gal.)	pН	Conductivity (u mhos/cm)	Temperatu <b>re</b> (C/F)		nV)
	<del>-</del>	<del>- /-</del>	•			
						<u></u>
		$\overline{}$				
	/					<u></u>
						<del></del>
	. ,	L&	BORATORY IN			<del></del> 1 .
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE			<del></del>
MW- 9	6 x voa vial		HCL	LANCASTER		
MW- 19	2 x amber	YES	HCL	LANCASTER	. ITT-DA WIGG	
	<del></del>	<del></del>	-	+		
.	1		<u> </u>	·		
COMMENTS:	NO PV	PGE				
	<u> </u>					
A -1 -1 -1				Add/Replaced I	Plug: Size:	
Add/Repla	aced Lock:		•		<del></del>	_

V- 10 Date Monitored:  in. Volume Factor (  xVF = Sampling Equipme Disposable Bailer Pressure Bailer Discrete Bailer Other:	3/4"= 0.02 VF) 4"= 0.66 x3 (case volume) = 8	Time Bailed: (2 Depth to Product: Depth to Water: Hydrocarbon Thickness: Visual Confirmation/Description:  Skimmer / Absorbant Sock (circle one Amt Removed from Skimmer: Amt Removed from Well:	2400 hrs) 2400 hrs) ft ft ft
e, WA  V- 10  Date Monitored:  In.  Volume Factor (  23 ft.  xVF =  Sampling Equipme Disposable Bailer Pressure Bailer Discrete Bailer	3/4"= 0.02 VF) 4"= 0.66 x3 (case volume) = 8	Well Condition:  1"= 0.04	2400 hrs) 2400 hrs) ft ft ft
in.  It.  It.  XVF = Sampling Equipme Disposable Bailer Pressure Bailer Discrete Bailer	3/4"= 0.02 VF) 4"= 0.66 x3 (case volume) = 8	1"= 0.04 2"= 0.17 3"= 0.38 5"= 1.02 6"= 1.50 12"= 5.80  Estimated Purge Volume:	2400 hrs) 2400 hrs) ft ft ft
Volume Factor (  2.3. ft.  xVF =   Sampling Equipme Disposable Bailer Pressure Bailer Discrete Bailer	x3 (case volume) = 8	5 = 1.02 6 = 1.50 12 = 5.80  Estimated Purge Volume: gal.  Time Started: (2 Time Bailed: (3 Depth to Product: Depth to Water: Hydrocarbon Thickness: Visual Confirmation/Description:  Skimmer / Absorbant Sock (circle one Amt Removed/from Skimmer: Amt Removed from Well:	2400 hrs) 2400 hrs) ft ft ft
xVF = = Sampling Equipme Disposable Bailer Pressure Bailer Discrete Bailer	ent:	Time Started: (2 Time Bailed: (2 Depth to Product: Depth to Water: Hydrocarbon Thickness: Visual Confirmation/Description:  Skimmer / Absorbant Sock (circle one Amt Removed from Skimmer: Amt Removed from Well:	2400 hrs) 2400 hrs) ft ft ft
Sampling Equipme Disposable Bailer Pressure Bailer Discrete Bailer	_	Time Bailed: (2 Depth to Product: Depth to Water: Hydrocarbon Thickness: Visual Confirmation/Description:  Skimmer / Absorbant Sock (circle one Amt Removed from Skimmer: Amt Removed from Well:	2400 hrs)ftffftfts) gal
Discrete Bailer		Hydrocarbon Thickness: Visual Confirmation/Description: Skimmer / Absorbant Sock (circle one Amt Removed from Skimmer: Amt Removed from Well:	gal
		Amt Removed from Skimmer:	gal
	`	Product Transferred to:	gal
Weather Condition  / Water Color  gpm. Sediment Description  If yes, Time:  Colume (gal.) Ph Conductivity (umhos/cm)	or:	Odor: gal.  D.O. ORP (mg/L) (mV)	- - -
			- - - -
I ABORATORY II	NFORMATION		
ONTAINER REFRIG. PRESERV. TY x voa vial YES HCL	PE LABORATOR LANCASTER	TPH-G/BTEX/MTBE	
Monitoring Only			
·	If yes, Time:  Conductivity (umhos/cm)  LABORATORY II  ONTAINER REFRIG. PRESERV. TY  x voa vial YES HCL  x amber YES HCL  Meni-foring On	If yes, Time:	LABORATORY INFORMATION  Container Refrig. Preserv. Type LABORATORY TPH-G/BTEX/MTBE  x amber YES HCL LANCASTER TPH-Dx w/sg

## Chevron Northwest Region Analysis Requesi/Church



ACE # 11260

Sample # 41 04130-34

819006

			5/0			<b>)</b>	4.		. [	,	=1 °		Ar	ısiye	ids F	tequ		Ю		: 0. <b>d</b> :		175 11		<u> </u>		• .
	A STATE OF THE STA	No. 1		<u> </u>	40.4		Nati X	351	+				Pı	resei	viiti	on C	ode	8	f		/			dve Codes		1
Fedity #: SS#9-6266 G-R#	386681	NY THE			<u> </u>		Nacix		•	H			W.	W	) )	, A			` '			N = H	GI 🧢 🦖	# = Thiosu	ifate :	١.,
Site Address 1554 NE 145th Stre	SFATTI	E.WA		twii	elie 1		34	"		미					4		<u>.</u> [2	r 1				W = H	NO: : : : :SO: : : :	B = NaOH	' ''	
			MICLE		15171		***	$\dashv$		E de Z	-	` .[.		,					, i	, T	Ñ	·	٠		35 - 25.	K
Chevron PM: BH							စ္က		ė i	<b>Z</b>			*	9		. 1	5 /	5	5 T .		1.1		ne Lebou	ing needed		
Consultant/Office: G-R. Inc. 674	1 Slexm Cou	iri. Suite J. I	Sublin.	Cars	<b>456</b>	1	at 9	. [	FE.	岁		*		g 8.	€.			3.	3.		ş. Y	Mus	i meet lov lible for 8	west detection 260 compau	nda 🐇	
Consultant Pri Mpr Deanna L	Transfer of the state of the st				1		ă Z		Contain	28	l	1		\$3	_	`ر ا		2					• •	dimetion		13
	S THE A P.	Fax#		E4 700	<b>~</b> \	9	ייי	,21 1€.	5	<u> </u>				381	gi i		֓֞֞֞֞֞֞֞֞֞֞֞֜֞֜֞֞֞֞֜֞֜֞֞֞֞֜֞֡֓֡֓֡֡֡֡			. ; }	Ç,	Pitan	fran Mith	E + Nachtha	епе	*
Consultant Phone #925-551-755	OF STATES		923-3:	11-10	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	) ¥.	- 1		ğ	8	4.	₩.		Z	n l	1	≘" ∶	٠.		j		Con	firm blahi	est hit by 826	30	1.
Sampler Bon Newton	A CONTRACTOR		نده دون کورانی	7. 7.	. 149		N.		Ę.	Ď.		8	皇	우	<u>a</u>	_ 1	Ĭ	7	. 1	Ü	$\lambda$	To Con	nnn 🍇 hì	tu by 8200		
Service Order#	UN0	n <b>548</b> :		-	8	,	<b>a</b>		Z	3	3.	6	4		2	9			12	13 9		☐ Run	<u></u>	y a on higher	t hit	ŀ
<b>"你</b> 你,你你不可能没有什么		Deb.			8 8	Š	F A	8	10	G	8280		শ	X	5	<u></u>	<b>Ž</b>	1						y s on all hib		Ä,
Sample Identification		Collected	SCOTTO	300	Yr Ja		X	3.1	7	メ	\$ 7	N.	X.		Ϋ́	~~ <u>}</u>	39	: #				Comi	nerita/	Remarks		
OA	1112	17:11-03	1215			1.00 L	X	3 -	4	X			X	N.	Ŷj.										9	1
MW 3	\$1.000 Page 1	70.55	124		$\frac{1}{x}$	+-	沄		8	文		-	X	X			$\neg$									T
MW 9	- 100		-14	138	-		<del>                                     </del>		-0-	4.5	÷	Н					'				- 1			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		1
10 A	f <sub>3</sub> .				- <u>(8) (3 - 7</u> - (13)		┼		-	X		H		<del></del> -						Ť	;	l		•	37	1
1802			* * * * * * * * * * * * * * * * * * * *			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<del> </del>		-		-				<del></del>						. 4.				·	1.
		30)	10.00			+		(1) (1)	٠.,		-	-	-	<del>                                     </del>	1	_			7.E8	36			Y	6.5 6.5		
			<b>V</b>		-	+-	+			1		.97			7.	. 5	3.5		11.	8.3	1	<i>j</i>	78.1	ari		1
		1 2 2 WASS	- 18 m m				<del>                                     </del>	1.	1.	-				<b>-</b>	-	71.79	7	1				<b>.</b>	100	<b>41</b>	· 特.	1
The state of the s				- 3		-	+	+-		-	╁╌	-	-		-	15%	33	. وا	7	5 J.A	75			A large		ý
		<b>建筑电话</b>			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1-	┽		13.	<u></u>		<del>                                     </del>	-	-				1.		10	1	w		4 2 3	À
200				- 4	<del>}                                    </del>		<del>;</del> }	+	150	1	+-	3	1.74	<del> </del>	+	1	-	<del>  -</del>	<del> ``</del>	1-	+	٠.			, ** \	ា
		1 1168 \$2,	7	- <i>:: ‡</i>		-   ;	<b></b>	100	_	-	┼╌	-	-	<del>}</del> -	1	1:	<del> </del>		┼─-	늰	+-		- Kaj		1. 2.	
<b>"我们就是一个人,我们就是一个人</b>	The State of the S				ئيل	<u> </u>	4	1	1	ــــــــــــــــــــــــــــــــــــــ	<u>ـــــــــــــــــــــــــــــــــــــ</u>	┺	Date	<del></del>	Time		Rece	hed	her:	٠.	4		- X V	Date "	Time	Ħ
Turnaround Time Requested (T/	AT) (pléase circ	sià)	. 🐶	elinqui	7 .	هر بر	This	وأنر			ij		ائ 17ع	' I	202	1	ioco		UJ.			٠.			119	įĵ: `.
STD. TAT 72 hour	48 Hou		٠ ا ـ	Relinqui	<u> </u>		m	W <sub>3</sub>	_	.·.	<u> </u>	-   1	Date	<u> </u>	Time	-	Rece	iVed	Have:	<del></del>				Date	Time	F.
24 hour 4 day	5 day			Considée	31 <b>10</b> 10	<b>y.</b>		`	-	<u>:</u>	٠.	1		. ]			:		. 1		_				<u> </u>	
1 日本	3.7		<u> </u>	telingui	shed b	v:	• •			7	+	7	Date	•	Time	•. T	Rece	Ivec	by:	·	٠.	200		Date	Time	, (
Data Package Options (please cir	5/10									*		<u>. 1</u> .		1		: :		• •				1.		$\rightarrow$		
OC Summary Type I - Fu			់ ្រ	Relingul	shed b	y Çor	nmerci	al Ca	mier:			-	7	₹. 		217	Rece	ilvjec	jby:	í.	, ji	و تا	. A:	Date (	Time	
Type VI (Raw Deta) Disk / EDD			խ	UPS	7	OUE	$\supset$	C	Other	- +				, 14 <sub>5</sub>	·			+ ۲	$\langle \infty \rangle$	世	•	8	بللغ	4 03	104	$\mathcal{S}$
THE (RANGOS)	Other.	ÇÇÇÎY E	` <b> </b>	Temper	ature L	Jpon I	Receip	ري ز	55	<del>, , ,</del>	c°7		u	•°'		7	Cust	ody	Seal	s int	44)	(Y	98) N	َ نَن َ لَوْ		į
Disk	7				<u> </u>		<u>a</u>	3	20	<u>۔</u> ک	<del>-,                                    </del>	ا تجا	- 14		- 3	_1_		ر. د		_	9 (197) 1077		-Aux F			_3



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

#### ANALYTICAL RESULTS

Prepared for:

ChevronTexaco 6001 Bollinger Canyon Road L4310 San Ramon CA 94583 925-842-8582

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 IN 1 2 2004

GETTLER-RYAN INC.

#### **SAMPLE GROUP**

The sample group for this submittal is 879226. Samples arrived at the laboratory on Friday, December 19, 2003. The PO# for this group is 99011184 and the release number is HUNTER.

Client Description
QA Water Sample
MW 3 Grab Water Sample
MW 9 Grab Water Sample

<u>Lancaster Labs Number</u> 4189132 4189133 4189134

1 COPY TO SA ELECTRONIC GO COPY TO

SAIC Gettler Ryan Attn: Ms. Deanna Harding Attn: Michael Sharaeff

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

Respectfully Submitted,

Elizabeth A. Smith 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 4189132

QA Water Sample Facility# 96266 Job# 386681 1554 NE 145th Street; Seattle, WA Collected:12/11/2003 00:00

Submitted: 12/19/2003 10:45 Reported: 01/07/2004 at 15:45

Discard: 02/07/2004

Account Number: 11260

ChevronTexaco 6001 Bollinger Canyon Road L4310

San Ramon CA 94583

CAT No.	Analysis Name BTEX, MTBE (8021)	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00776 00777 00778 00779 00780	Benzene Toluene Ethylbenzene Total Xylenes Methyl tert-Butyl Ether A site-specific MSD sample was was performed to demonstrate p	71-43-2 108-88-3 100-41-4 1330-20-7 1634-04-4 not submitted recision and ac	N.D. N.D. N.D. N.D. N.D. for the project.	0.5 0.5 0.5 1.5 2.5 A LCS/LCSD h level.	ug/1 ug/1 ug/1 ug/1 ug/1	1 1 1 1
08274 01648	TPH by NWTPH-Gx waters  TPH by NWTPH-Gx waters  A site-specific MSD sample was was performed to demonstrate p	n.a. not submitted recision and ac	N.D. for the project. curacy at a batc	50. A LCS/LCSD h level.	ug/l	1 .

		Laboratory	Chro	nicle Analysis		Dilution
CAT No. 08214 08274	Analysis Name BTEX, MTBE (8021) TPH by NWTPH-Gx waters	Method SW-846 8021B TPH by NWTPH-Gx -	Trial# 1 1	Date and Time 12/23/2003 10:12 12/23/2003 10:12	Analyst Linda C Pape Linda C Pape	Factor 1 1
01146	GC VOA Water Prep	8015B Mod. SW-846 5030B	1	12/23/2003 10:12	Linda C Pape	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 2

Lancaster Laboratories Sample No. WW 4189133

MW 3 Grab Water Sample

Facility# 96266 Job# 386681 1554 NE 145th Street; Seattle, WA

Collected:12/11/2003 12:15 by BN

Submitted: 12/19/2003 10:45

Reported: 01/07/2004 at 15:45

Discard: 02/07/2004

Account Number: 11260

ChevronTexaco

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

NES03			
	 	•	

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	N.D.	250.	ug/l	1
02096	Heavy Range Organics	n.a.	N.D.	250.	ug/l	1
08214	BTEX, MTBE (8021)		·			
00776	Benzene	71-43-2	1,400.	2.0	ug/1	10
00777	Toluene	108-88-3	250.	0.5	ug/l	1
00778	Ethylbenzene	100-41-4	6.9	0.5	ug/l	1
00779	Total Xylenes	1330-20-7	83.	1.5	ug/l	1
00780	Methyl tert-Butyl Ether	1634-04-4	N.D. #	50.	ug/1	1 '
11,00	A site-specific MSD sample was was performed to demonstrate pr	not submitted ecision and ac	for the project. curacy at a batch	A LCS/LCSD n level.		

An elevated surrogate recovery was observed. The analysis was repeated and an elevated surrogate recovery was again observed indicating a significant matrix effect.

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

08274 TPH by NWTPH-Gx waters

01648 TPH by NWTPH-Gx waters n.a. 1.4 0.050 mg/l

A site-specific MSD sample was not submitted for the project. A LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

State of Washington Lab Certification No. C259

#### Laboratory Chronicle

CAT		20201011	, 0222	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	<b>Factor</b>
02211	TPH by NWTPH-Dx(water)	NWTPH-Dx, ECY 97-	1	12/30/2003 20:21	Devin M Hetrick	1
08214	w/SiGel BTEX, MTBE (8021)	602(modified) SW-846 8021B	1	12/23/2003 19:37	Martha L Seidel	10



Account Number: 11260

San Ramon CA 94583

6001 Bollinger Canyon Road

ChevronTexaco

L4310

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

6/97

Page 2 of 2

Lancaster Laboratories Sample No. WW 4189133

MW 3 Grab Water Sample Facility# 96266 Job# 386681 1554 NE 145th Street; Seattle, WA Collected:12/11/2003 12:15 by BN

Submitted: 12/19/2003 10:45 Reported: 01/07/2004 at 15:45

Discard: 02/07/2004

NES03 Linda C Pape 12/24/2003 04:24 BTEX, MTBE (8021) SW-846 8021B 08214 Linda C Pape 12/24/2003 04:24 TPH by NWTPH-Gx -TPH by NWTPH-Gx waters 08274 8015B Mod. 12/24/2003 04:24 Linda C Pape n.a. SW-846 5030B 01146 GC VOA Water Prep Danette S Blystone NWTPH-Dx, ECY 97-602, 1 12/22/2003 07:45 Extraction - DRO (Waters) 07003

.



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 4189134

MW 9 Grab Water Sample Facility# 96266 Job# 386681 1554 NE 145th Street; Seattle, WA Collected:12/11/2003 12:45 by BN

Submitted: 12/19/2003 10:45 Reported: 01/07/2004 at 15:46

Discard: 02/07/2004

Account Number: 11260

ChevronTexaco 6001 Bollinger Canyon Road L4310

San Ramon CA 94583

NES09

		•		As Received		
CAT			As Received	Method		Dilution.
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
02211	TPH by NWTPH-Dx(water) w/SiGel					
020 <b>95</b>	Diesel Range Organics	n.a.	N.D.	250.	ug/l	<b>1</b> }
02096	Heavy Range Organics	n.a.	N.D.	250.	ug/l	1
08214	BTEX, MTBE (8021)					
00776	Benzene	71-43-2	N.D.	0.5	ug/l	· 1
00777	Toluene	108-88-3	N.D.	0.5	ug/l	1
00778	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
00779	Total Xylenes	1330-20-7	N.D.	1.5	ug/l	1
00780	-	1634-04-4	N.D.	2.5	ug/l	1 '
	A site-specific MSD sample was	not submitted	for the project.	A LCS/LCSD		•
	was performed to demonstrate p	recision and a	ccuracy at a bato	ch level.		
08274	TPH by NWTPH-Gx waters					,
01648	TPH by NWTPH-Gx waters A site-specific MSD sample was	n.a. not submitted	N.D. for the project.	0.050 A LCS/LCSD	mg/l	1
	was performed to demonstrate p	recision and a	ccuracy at a pate	m level.		

CAT	•	Laboratory	Chro	nicle Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
02211	TPH by NWTPH-Dx(water)	NWTPH-Dx, ECY 97- 602 (modified)	1	12/30/2003 20:46	Devin M Hetrick	1
08214	w/SiGel BTEX, MTBE (8021)	SW-846 8021B	1	12/23/2003 20:47	Martha L Seidel	1
08274	TPH by NWTPH-Gx waters	TPH by NWTPH-Gx - 8015B Mod.	1	12/23/2003 20:47	Martha L Seidel	1
01146	GC VOA Water Prep	SW-846 5030B	1	12/23/2003 20:47	Martha L Seidel	n.a.
07003	Extraction - DRO (Waters)	NWTPH-Dx, ECY 97-602,	, 1	12/22/2003 07:45	Danette S Blystone	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 2

### Quality Control Summary

Client Name: ChevronTexaco

Group Number: 879226

Reported: 01/07/04 at 03:46 PM

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank MDL	Report Units	LCS %REC	LCSD % REC	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: 033540011A Diesel Range Organics Heavy Range Organics	Sample n N.D. N.D.	number(s): 250. 250.	4189133-41 ug/l ug/l	189134 88		46-112		
Batch number: 03356A56A Benzene Toluene Ethylbenzene Total Xylenes Methyl tert-Butyl Ether TPH by NWTPH-Gx waters	Sample r. N.D. N.D. N.D. N.D. N.D. N.D.	number(s): .5 .5 .5 2.5 50.	4189132-43 ug/l ug/l ug/l ug/l ug/l ug/l	84 84 86 86 87 86 92	84 87 86 88 86 95	75-134 82-119 81-119 82-120 59-153 70-130	0 1 0 0 1 3	30 30 30 30 30 30
Batch number: 03356A56B Toluene Ethylbenzene Total Xylenes Methyl tert-Butyl Ether TPH by NWTPH-Gx waters	Sample n N.D. N.D. N.D. N.D. N.D.	number(s): .5 .5 1.5 2.5 50.	4189133 ug/l ug/l ug/l ug/l ug/l	86 86 87 86 92	87 86 88 86 95	82-119 81-119 82-120 59-153 70-130	1 0 0 1 3	30 30 30 30 30

#### Sample Matrix Quality Control

	MS	MSD	MS/MSD		RPD	BKG	DUP	DOF.	RPD
Analysis Name	<u> </u>	% REC	<u>Limits</u>	RPD	<u>XAM</u>	Conc	Conc	RPD	Max
Batch number: 033540011A Diesel Range Organics Heavy Range Organics	Sample	number(	s): 418913	3-41891	34	N.D.	N.D. N.D.	0 (1) 0 (1)	20 20
Batch number: 03356A56A	Sample	number(	s): 418913	32-41891	.34		٠.		

Balti number, obsorbed		
Benzene	107	67-136
Toluene	111	78-129
Ethylbenzene	114	75-133
Total Xylenes	116	78-130
Methyl tert-Butyl Ether	105	66-136
TPH by NWTPH-Gx waters	103	63-154
· · · · · · · · · · · · · · · · · · ·		
Patch number, 03356056B	Sample nu	mber(s): 418

TPH by NWTPH-Gx waters	103	63-154
Batch number: 03356A56B Toluene	Sample nu	mber(s): 4189133 78-129
Ethylbenzene	114	75-133
Total Xylenes	116	78-130
Methyl tert-Butyl Ether	105	66-136
TPH by NWTPH-Gx waters	103	63-154

### Surrogate Quality Control

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

Batch number: 033540011A Orthoterphenyl

\*- Outside of specification

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

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



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

Page 2 of 2

### Quality Control Summary

	me: ChevronTexaco	Group Number: 879226	
Reported:	01/07/04 at 03:46	Surrogate Quality Control	
4189133	82		
4189134	90		
Blank	90	b.	•
LCS	90		
Limits:	50-150		
Analysis Na	me: BTEX, MTBE (8021)		9 (1) (2) (2) (2)
Batch number	r: 03356A56A Trifluorotoluene-P	Trifluorotoluene-F	
	IIIIIuorocoldene-P	11111do10t01dene 1	
4189132	102	95	1
4189133	87		1
4189134	101	95	,
Blank	102	98	
LCS	102	98	
LCSD	102	98	i
MS	99	97	1
Limits:	66-136	57-146	
	me: BTEX, MTBE (8021) r: 03356A56B Trifluorotoluene-P	Trifluorotoluene-F	
			<del></del>
4189133	173*	131	
Blank	100	97 98	
LCS	102	98	•
LCSD	102	98 97	. 1
MS	99		<u> </u>
Limits:	66-136	57-146	

\*- 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 g ug ml m3	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 falls within the Method Detection Limit (MDL) and 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:

X,Y,Z

OL.	OLI Bota Quominoro.		
	Organic Qualifiers		Inorganic Qualifie <b>rs</b>
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 M 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	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

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.

Defined in case narrative

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.