

#### **RECEIVED**

11:20 am, Aug 31, 2009

Alameda County
Environmental Health

Stacie H. Frerichs Team Lead Marketing Business Unit

Chevron Environmental Management Company 6001 Bollinger Canyon Road San Ramon, CA 94583 Tel (925) 842-9655 Fax (925) 842-8370

August 27, 2009 (date)

Alameda County Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Re: Chevron Facility #\_9-1583\_\_\_\_\_

Address: 5509 Martin Luther King Jr. Way, Oakland, California

I have reviewed the attached report titled <u>Second Semi-Annual 2009 Groundwater Monitoring</u> and dated <u>August 27, 2009</u>.

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

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

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

Sincerely,

Stacie H. Frerichs Project Manager

5H Frencho

**Enclosure: Report** 

2000 Opportunity Dr, Suite 110, Roseville, California 95678 Telephone: 916-751-4100 Facsimile: 916-751-4199

www.CRAworld.com

August 27, 2009

Reference No. 611960

Mr. Mark Detterman, PG, CEG Alameda County Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Re:

Second Semi-Annual 2009 Groundwater Monitoring Report

Former Chevron Service Station No. 9-1583

5509 Martin Luther King Jr. Way

Oakland, California LOP Case #RO0000002

#### Dear Mr. Detterman:

Conestoga-Rovers & Associates (CRA) is submitting the attached *Groundwater Monitoring and Sampling Report* (report) on behalf of Chevron Environmental Management Company (Chevron) for the site referenced above. The report (prepared by Gettler-Ryan Inc. and dated August 5, 2009) presents the results of the second semi-annual 2009 monitoring event. Monitoring of wells MW-7 and MW-8 is performed on a semi-annual basis during the first and third quarters; and wells MW-1 through MW-6 are monitored on an annual basis during the first quarter. Please note that the reduction of the monitoring frequency of wells MW-1 through MW-3 to annual was proposed in the October 30, 2008 *Second Semi-Annual 2008 Groundwater Monitoring Report*. However, a response was not received from Alameda County Environmental Health (ACEH); therefore, consent was assumed and the reduction was implemented. Also attached are Figure 1 (Vicinity Map) showing the site location, and Figure 2 (Concentration Map) presenting the second semi-annual 2009 analytical results along with a rose diagram. The monitoring results during 2009 are summarized below.

During 2009, petroleum hydrocarbon concentrations in the site wells generally were similar to or less than those observed during 2008, and overall decreasing trends are evident. Total petroleum hydrocarbons as gasoline (TPHg) were not detected in wells MW-1 through MW-7 during 2009, and generally have not been detected in these wells for several years. Relatively low concentrations of TPHg (360 micrograms per liter [ $\mu$ g/L] and 500  $\mu$ g/L) were detected in well MW-8 during 2009; the TPHg concentrations in this well continue to decrease and have significantly decreased over the years. Benzene, toluene, ethylbenzene, and xylenes (BTEX) were not detected in any of the wells during 2009, and generally have not been detected for several years. Low concentrations of methyl tertiary butyl ether (MTBE) (ranging from 2 to 14  $\mu$ g/L) were detected in all the wells except MW-2, MW-4, and MW-5 during 2009. The MTBE concentrations in the wells continue to decrease and have significantly decreased over the years. TPH as motor oil (TPHmo) was detected in wells MW-7 (1,400  $\mu$ g/L and 1,000  $\mu$ g/L).

Equal Employment Opportunity Employer



August 27, 2009

Reference No. 611960

-2-

and MW-8 (62  $\mu$ g/L and 90  $\mu$ g/L) during 2009. The observed TPHmo concentrations are within the range of historical fluctuations. Ethanol was not detected in any of the wells during 2009, and has never been detected; therefore, as proposed in the October 30, 2008 Second Semi-Annual 2008 Groundwater Monitoring Report, it has been removed from the analytical suite.

Based on the analytical results, the plume appears stable and decreasing in size. CRA recommends continued monitoring and sampling to further evaluate groundwater quality and concentration trends. CRA is currently preparing an updated site conceptual model (SCM) to evaluate any potential remaining data gaps that may warrant additional investigation prior to consideration for case closure.

Please contact Mr. James Kiernan at (916) 751-4102 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Christopher J. Benedict

James P. Kiernan, P.E. #C68498

CB/kw/5 Encl.

Figure 1

Vicinity Map

Figure 2

Concentration Map

Attachment A

Groundwater Monitoring and Sampling Report

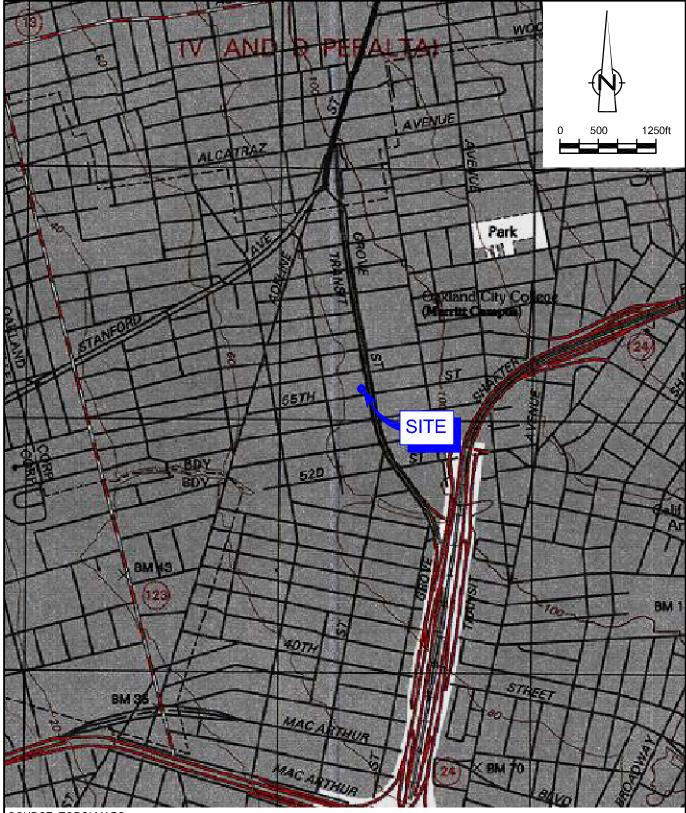
cc:

Ms. Stacie Frerichs, Chevron Environmental Management Company

Mr. Ben Shimek, Petroleum Sales, Inc.



**FIGURES** 

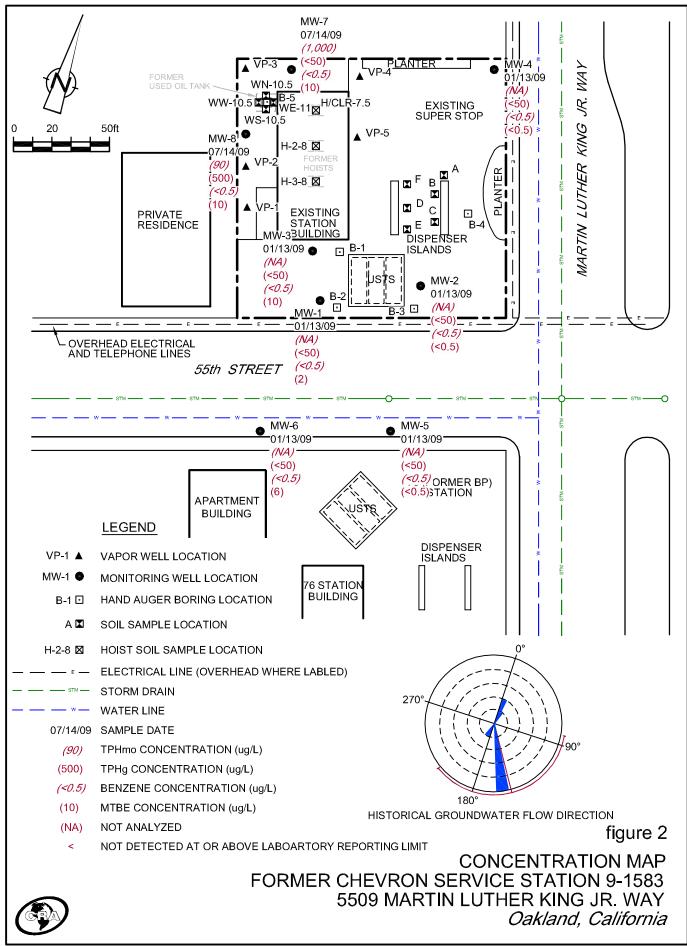


SOURCE: TOPO! MAPS.

figure 1

VICINITY MAP FORMER CHEVRON SERVICE STATION 9-1583 5509 MARTIN LUTHER KING JR. WAY Oakland, California





# ATTACHMENT A GROUNDWATER MONITORING AND SAMPLING REPORT



### TRANSMITTAL

August 14, 2009 G-R #386506

TO:

Mr. James Kiernan

Conestoga-Rovers & Associates 2000 Opportunity Drive, Suite 110 Roseville, California 95678

FROM:

Deanna L. Harding

**Project Coordinator** Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568

**RE:** Former Chevron Service Station

#9-1583 (MTI)

5509 Martin Luther King Way

Oakland, California

RO 0000002

#### WE HAVE ENCLOSED THE FOLLOWING:

 COPIES	DATED	DESCRIPTION
2	August 5, 2009	Groundwater Monitoring and Sampling Report Second Semi-Annual Event of July 14, 2009

#### **COMMENTS:**

Pursuant to your request, we are providing you with copies of the above referenced report for your use and distribution to the following:

Ms. Stacie H. Frerichs, Chevron EMC, 6111 Bollinger Canyon Road, Room 3596. San Ramon, CA 94583

Please provide any comments/changes and propose any groundwater monitoring modifications for the next event prior to August 28, 2009, at which time this final report will be distributed to the following:

Mr. Steven Plunkett, Alameda County Health Care Services, Dept. of Environmental Health, 1131 Harbor cc: Bay Parkway, Suite 250, Alameda, CA 94502-6577 (No Hard Copy-UPLOAD TO ALAMEDA CO.) Mr. Ben Shimek, (Owner), 31 Industrial Way, Greenbrae, CA 94904

#### **Enclosures**



Stacie H. Frerichs Team Lead Marketing Business Unit Chevron Environmental Management Company 6001 Bollinger Canyon Road San Ramon, CA 94583 Tel (925) 842-9655 Fax (925) 842-8370

August 14, 2009

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

Re:

Chevron Facility # 9-1583

Address: 5509 Martin Luther King Way, Oakland, California

I have reviewed the attached routine groundwater monitoring report dated August 14, 2009

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

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

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

Sincerely,

Stacie H. Frerichs Project Manager

Enclosure: Report

#### **WELL CONDITION STATUS SHEET**

Client/Facility #: Chevron #9-1583 Job # 386506	
Site Address: 5509 Martin Luther King Way Event Date: 7-14-09	
City: Oakland, CA Sampler:	

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M)missing	BOLTS (M) Missing (R) Replaced	Bolt Flanges B= Broken S= Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/N	REPLACE CAP Y/N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Yes / No
MW-1	0.10	N/A	N/A	NA	0.10	0.10	0.10	N	N	christy sox	No
MW-2		NIA	NIA	NIA		1		ſ	,	9	1
MW.3		NIA	NIA	NIA							
NW-7		o.k	0. K	(7076)		9				6" Morrison/2	33. 89
mw-8	1	o.k	6.10	Both	V		V	1		6" Morrison/2 12" EMCo/2	V
	•										
					(1.		-				····
			<u></u> ≈								ži.
		rig.		<b>2</b> 0							
								.00			·
							73.	7			
			. <u></u> .								
		<u>ज</u>									

Comments		10	_	 			· · · · · · · · · · · · · · · · · · ·
	 -	-		 	 <u>"</u>	·	-
			<del>,</del>		 7	<u> </u>	 



August 5, 2009 G-R Job #386506

Ms. Stacie H. Frerichs Chevron Environmental Management Company 6111 Bollinger Canyon Road, Room 3596 San Ramon, CA 94583

RE: Second Semi-Annual Event of July 14, 2009

Groundwater Monitoring & Sampling Report Former Chevron Service Station #9-1583 5509 Martin Luther King Way Oakland, California

#### Dear Ms. Frerichs:

This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

Static groundwater levels were measured and the wells were checked for the presence of separate-phase hydrocarbons. Static water level data, groundwater elevations, and separate-phase hydrocarbon thickness (if any) are presented in the attached Table 1. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells and submitted to a state certified laboratory for analyses. The field data sheets for this event are attached. Analytical results are presented in the table(s) listed below. The chain of custody document and laboratory analytical report are also attached. All groundwater and decontamination water generated during sampling activities was removed from the site, per the Standard Operating Procedure

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

Sincerely,

Deanna L. Harding Project Coordinator

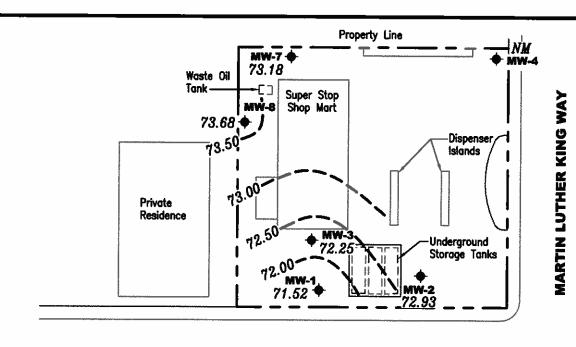
Douglas J'Lée Senior Geologist, P.G. No. 6882

Figure 1: Potentiometric Map

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

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports



#### **EXPLANATION**

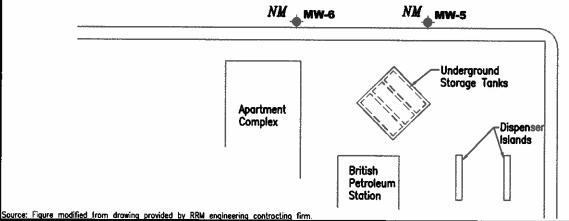
Groundwater manitoring well

99.99 Graundwater elevation in feet referenced to Mean Sea Level

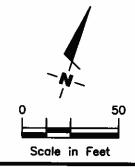
Groundwater elevation contaur, dashed where inferred

NM Not Monitored

**55TH STREET** 



Approximate groundwater flow direction at a gradient of 0.02 to 0.03 Ft./Ft.



GETTLER - RYAN INC.
6747 Sierro Court, Suite J
Dublin, CA 94568 (925) 551-7555

POTENTIOMETRIC MAP
Former Chevron Service Station #9-1583
5509 Martin Luther King Way
Oakland, California

REVISED DATE

386506

PROJECT NUMBER

DATE
July 14, 2009

FILE NAME: P:\Enviro\Chevron\9-1583\Q09-9-1583.dwg | Layout Tob: Pat3

REVIEWED BY

FIGURE

WELL ID/ DATE	TOC (ft)	GWE (msl)	DTW (ft.)	SPHT (fl.)	TPH-DRO (µg/L)	TPH-MO (µg/L)	TPH-GRO (µg/L)	Β (μg/L)	Τ (μg/L)	E. (µg/L)			
		**************************************	<u>zanaran (genyeranana</u>	1147	(P8/L)	(PB/L)	(PB/1-)	(µg/L)	(μβ/1.)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-1													
12/22/83	81.97	71.72	10.25										
12/30/83	81.97	72.80	9.17		••								
03/12/90	81.97	71.89	10.08	••	••		50,000	3,000	7,300	1,900	18,000		
03/25/90	82.42	71.51	10.46										
10/18/90	82.42			••								••	
10/31/90	82.42			••									
11/16/90	82.42	70.84	11.58										
02/08/91	82.42	72.31	10.11				100,000	4,200	8,400	16,000	2,600		
05/08/91	82.42	71.97	10.45				31,000	200	66	670	2,000		
08/12/91	82.42	71.19	11.23				17,000	81	7.2	270	710		
11/07/91	82.42	71.72	10.70				7,100	24	6.0	130	170		
02/05/92	82.42	72.05	10.37				110,000	8,900	14,000	2,700	12,000		
05/13/92	82.42	71.84	10.58				19,000	450	85	480	870		
07/17/92	82.42	71.37	11.05				8,500	170	<10	360	600		
10/05/92	82.42	71.01	11.41				22,000	4,300	5,100	570	2,900		
11/11/92	82.42						••						
11/17/92	82.42						••						
11/24/92	82.42												
12/01/92	82.42												
12/29/92	82.42												
01/05/93	82.42					-	••						
01/08/93	82.42	74.31	8.11				14,000,000	12,000	79,000	270,000	1,300,000		••
02/02/93	82.42						••					••	
04/14/93	82.42	72.57	9.85				48,000	670	1,100	1,600	6,300	••	
08/06/93	82.42	71.59	10.83				44,000	660	990	1,600	6,100		
10/21/93	82.42	71.52	10.90				18,000	270	460	1,300	4,700	••	
01/05/94	82.42	72.09	10.33				22,000	160	160	630	2,300		
04/08/94	82.42	72.24	10.18	••			21,000	37	110	570	1,400	••	
07/06/94	82.42	71.78	10.64				28,000	210	100	540	1,200	••	••
08/04/94	82.42	71.91	10.51	••			20,000						
10/05/94	82.42	71.51	10.91	••			120,000	39	22	320	900		
01/18/95	82.42	73.80	8.62				12,000	<20	<20	130	160		
04/07/95	82.42	72.89	9.53			••	2,500	<2.5	<2.5	71	38		
07/06/95	82.42	72.03	10.39				5,700	<0.5	<0.5	110	110		
10/11/95	82.42	70.54	11.88				2,700	13	<5.0	13	5.7		
01/17/96	82.42	73.14	9.28				4,200	12	<5.0			650 300	••
	02.12	73.17	7.20			••	4,200	12	₹3.0	43	24	300	

							and, California						
WELL ID/	TOC	GWE	DTW	SPHT	TPH-DRO	трн-мо	TPH-GRO	В	<b>T</b>	E	X	MTBE	TOG
DATE	(ft.)	(msl)	(ft.)	(ft.)	(µg/L)	(µg/L)	(µ8/L)	(μg/ <b>L</b> )	(µg/L)	(µg/L)	(μg/L)	(µg/L)	(µg/L)
MW-1 (cont	:)												
04/05/96	82.42	72.82	9.60				1,300	<1.2	<1.2	7.6	2.8	220	
07/23/96	82.42	72.19	10.23				700	<1.0	<1.0	7.0	4.8	240	
10/02/96	82.42	71.67	10.75			••	1,700	<2.5	9.8	10	13	610	
01/23/97	82.42	74.75	7.67				1,300	21	<10	<10	<10	2,700	
04/01/97	82.42	72.22	10.20				670	<2.0	<2.0	4.1	3.6	1,200	
07/09/97	82.42	72.12	10.30				460	<1.0	<1.0	<1.0	<1.0	440	
10/07/97	82.42	71.73	10.69				1,100	8.5	<2.0	<2.0	2.0	250	
01/22/98	82.42	74.20	8.22			••	460	1.4	5.8	<0.5	<0.5	150	
04/02/98	82.42	72.89	9.53				220	2.5	1.2	<1.0	1.9	260	
07/02/98	82.42	72.08	10.34				270	<0.5	0.82	<0.5	<0.5	140	
10/02/98	82.42	71.70	10.72				170	1.3	<0.5	<0.5	<1.5	320	
01/18/99	82.42	72.87	9.55				416	<2.5	<2.5	<2.5	<2.5	316/295 <sup>2</sup>	
07/22/99	82.42	71.61	10.81				186	<0.5	3.94	1.46	2.37	63.7	
01/17/00	82.42	72.21	10.21		-		248	1.6	<0.5	< 0.5	<0.5	41.0	
07/05/00	82.42	72.12	10.30	0.00			76³	< 0.50	<0.50	<0.50	0.79	69	
01/15/01	82.42	73.01	9.41	0.00			66.6	<0.500	< 0.500	< 0.500	0.585	22.5	
07/03/01	82.42	72.13	10.29	0.00			<50	< 0.50	< 0.50	< 0.50	< 0.50	8.8	
02/28/02	82.42	72.74	9.68	0.00			58	< 0.50	< 0.50	< 0.50	<1.5	21	
07/08/02	82.42	72.14	10.28	0.00			<50	< 0.50	< 0.50	< 0.50	<1.5	23	
01/01/03	82.42	74.28	8.14	0.00		••	<50	< 0.50	< 0.50	< 0.50	<1.5	15	
07/14/03 <sup>8</sup>	82.42	72.12	10.30	0.00			<50	<0.5	< 0.5	<0.5	<0.5	5	
01/12/04 <sup>8</sup>	82.42	73.40	9.02	0.00			<50	<0.5	<0.5	<0.5	<0.5	61	
07/27/04 <sup>8</sup>	82.42	72.10	10.32	0.00			<50	< 0.5	< 0.5	<0.5	<0.5	54	
01/25/058	82.42	74.24	8.18	0.00			<50	< 0.5	< 0.5	< 0.5	<0.5	5	
07/26/05 <sup>8</sup>	82.42	72.40	10.02	0.00			<50	< 0.5	< 0.5	<0.5	<0.5	25	
01/24/068	82.42	74.22	8.20	0.00			<50	<0.5	<0.5	< 0.5	< 0.5	25	
07/25/06 <sup>8</sup>	82.42	72.30	10.12	0.00			<50	< 0.5	<0.5	<0.5	<0.5	14	
01/23/078	82.42	72.57	9.85	0.00			<50	< 0.5	<0.5	< 0.5	<0.5	17	
07/24/078	82.42	70.59	11.83	0.00			<50	<0.5	< 0.5	<0.5	<0.5	7	
01/22/088	82.42	73.12	9.30	0.00			<50	<0.5	<0.5	<0.5	<0.5	8	
07/22/088	82.42	71.69	10.73	0.00			<50	<0.5	<0.5	<0.5	<0.5	<0.5	
01/13/09 <sup>8</sup>	82.42	72.41	10.01	0.00	<u></u>		<50	<0.5	<0.5	<0.5	<0.5	2	
0 <b>7/14/09</b>	82.42	71.52	10.90	0.00	SAMPLED A	NNUALLY							

													TOG
DATE	(ft.)	(msl)	(ft.)	(ft.)	(µg/L)	(μg/L)	(µg/L)						
MW-2													
12/22/83	83.48	72.98	10.50										
12/30/83	83.48	73.56	9.92										
03/12/90	83.48	72.46	11.02				800	400	22	18	55		
03/25/90	83.48	72.15	11.33										
10/18/90	83.48	71.17	12.31										
10/31/90	83.48												
11/16/90	83.48												
02/08/91	83.48	72.43	11.05				4,600	820	440	720	210		
05/08/91	83.48	72.12	11.36				<50	5.0	<0.5	<0.5	<0.5		
08/12/91	83.48	71.51	11.97				<50	<0.5	<0.5	<0.5	<0.5		
11/07/91	83.48	71.98	11.50				<50	<0.5	<0.5	<0.5	<0.5		
02/05/92	83.48	72.29	11.19				1,700	390	170	60	200		
05/13/92	83.48	71.99	11.49				74	9.3	<0.5	<0.5	<0.5		
07/17/92	83.48	71.63	11.85				<50	2.0	<0.5	<0.5	<0.5		
10/05/92	83.48	71.48	12.00				3,500	1,200	530	86	220		
11/11/92	83.48						·						
11/17/92	83.48												
11/24/92	83.48					••							
12/01/92	83.48		••										
12/29/92	83.48												
01/05/93	83.48												
01/08/93	83.48	74.65	8.83				390	140	0.8	7.7	26		
02/02/93	83.48												
04/14/93	83.48	72.69	10.79				<50	5.0	<0.5	<0.5	<0.5		
08/06/93	83.48	71.77	11.71				<50	1.0	<0.5	<0.5	<0.5		
10/21/93	83.48	71.74	11.74				<50	1.0	<0.5	9.0	<0.5		
01/05/94	83.48	72.30	11.18				<50	0.7	<0.5	<0.5	0.9		
04/08/94	83.48	72.42	11.06				<50	<0.5	<0.5	<0.5	<0.5		
07/06/94	83.48	71.80	11.68				<50	<0.5	<0.5	<0.5	<0.5		
08/04/94	83.48	72.29	11.19										
10/05/94	83.48	71.79	11.69				<50	<0.5	<0.5	<0.5	< 0.5		
01/18/95	83.48	74.26	9.22				<50	< 0.5	<0.5	<0.5	<0.5		
04/07/95	83.48	73.62	9.86				<50	<0.5	<0.5	<0.5	<0.5		
07/06/95	83.48	72.74	10.74				<50	<0.5	<0.5	<0.5	<0.5		
10/11/95	83.48	72.26	11.22				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
01/17/96	83.48	73.74	9.74				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
											2.5		

						Oakla	and, California	ı					
WELL ID/	TOC	GWE	DTW	SPHT	TPH-DRO	ТРН-МО	TPH-GRO	<b>B</b>	$\mathbf{T}$	<b>E</b> 100	X	MTBE	TOG
DATE	(ft)	(mst)	(A)	(ft.)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(μg/L)	(µg/L)	(µg/L)
MW-2 (cont)									_		20.00	- X. 3 4. 2 4 -	
04/05/96	83.48	73.52	9.96				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
07/23/96	83.48	72.57	10.91				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
10/02/96	83.48	72.41	11.07		••		<50	<0.5	<0.5	<0.5	<0.5	<2.5	
01/23/97	83.48	75.18	8.30				<50	<0.5	<0.5	<0.5	<0.5	3.4	
04/01/97	83.48	72.90	10.58				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
07/09/97	83.48	72.58	10.90			==	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
10/07/97	83.48	72.52	10.96				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
01/22/98	83.48	74.73	8.75				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
04/02/98	83.48	73.66	9.82				89	3.0	5.4	4.1	21	<2.5	
07/02/98	83.48	72.74	10.74				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
10/02/98	83.48	72.43	11.05				<50	<0.5	<0.5	<0.5	<1.5	<2.5	
01/18/99	83.48	73.09	10.39				<50	<0.5	<0.5	<0.5	<0.5	<2.0	
07/22/99	83.48	72.61	10.87				<50	<0.5	<0.5	<0.5	<0.5	<2.0	
01/17/00	83.48	72.89	10.59				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
07/05/00	83.48	72.84	10.64	0.00			<50	<0.50	<0.50	<0.50	<0.50	<2.5	
01/15/01	83.48	73.77	9.71	0.00			555 <sup>6</sup>	< 0.500	<0.500	<0.500	< 0.500	<2.50	
07/03/01	83.48	73.02	10.46	0.00			<50	< 0.50	<0.50	<0.50	<0.50	<2.5	
02/28/02	83.48	73.49	9.99	0.00			<50	<0.50	<0.50	<0.50	<1.5	<2.5	
07/08/02	83.48	72.98	10.50	0.00			<50	< 0.50	< 0.50	< 0.50	<1.5	<2.5	
01/01/03	83.48	75.33	8.15	0.00			<50	< 0.50	< 0.50	<0.50	<1.5	<2.5	
07/14/03 <sup>8</sup>	83.48	72.96	10.52	0.00			<50	<0.5	<0.5	<0.5	<0.5	<0.5	
01/12/04 <sup>8</sup>	83.48	74.31	9.17	0.00			<50	<0.5	<0.5	<0.5	<0.5	<0.5	
07/27/048	83.48	72.85	10.63	0.00			<50	<0.5	< 0.5	<0.5	< 0.5	<0.5	
01/25/058	83.48	74.36	9.12	0.00			<50	<0.5	<0.5	<0.5	<0.5	<0.5	
07/26/058	83.48	73.56	9.92	0.00			<50	<0.5	<0.5	<0.5	<0.5	<0.5	
01/24/068	83.48	74.33	9.15	0.00			<50	< 0.5	< 0.5	<0.5	<0.5	<0.5	
07/25/06 <sup>8</sup>	83.48	73.03	10.45	0.00			<50	< 0.5	< 0.5	< 0.5	<0.5	<0.5	
01/23/078	83.48	73.37	10.11	0.00			<50	<0.5	< 0.5	<0.5	<0.5	<0.5	
07/24/07 <sup>8</sup>	83.48	72.90	10.58	0.00			<50	<0.5	<0.5	<0.5	<0.5	<0.5	
01/22/08 <sup>8</sup>	83.48	73.85	9.63	0.00			<50	<0.5	<0.5	<0.5	<0.5	<0.5	
07/22/088	83.48	73.08	10.40	0.00			<50	<0.5	<0.5	<0.5	<0.5	2	
01/13/09 <sup>8</sup>	83.48	73.10	10.38	0.00		••	<50	<0.5	< 0.5	<0.5	<0.5	<0.5	
07/14/09	83.48	72.93	10.55	0.00	SAMPLED A	NNUALLY		_	_			-	-

Former Chevron Service Station #9-1583 5509 Martin Luther King Way

Oakland, California

<b>发展的数学者不够感觉不</b> 证。	WELLID/ TOC GWE DTW SPHT TPH-DRO TPH-MO TPH-GRO B T E X MTBE TOG												
DATE													TOG
	(ft.)	(mst)	(ft.)	(ft.)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(jug/L)	(µg/L)	(µg/L)	(µg/L)
MW-3													
12/22/83	84.36	72.78	11.58										
12/30/83	84.36	73.19	11.17										
03/12/90	84.36	72.22	12.14				47,000	1,000	9,900	1,700	9,800		
03/25/90	84.38	71.81	12.55										
10/18/90	84.38											••	
10/31/90	84.38				••								
11/16/90	84.38	70.76	13.62										
02/08/91	84.38	72.20	12.18				58,000	4,900	5,200	9,500	2,000		
05/08/91	84.38	71.86	12.52				50,000	2,100	1,400	2,000	9,400		
08/12/91	84.38	71.11	13.27				15,000	1,300	160	920	1,900		
11/07/91	84.38	71.57	12.81				26,000	1,000	310	1,900	5,900		
02/05/92	84.38	71.91	12.47				35,000	2,800	1,300	1,500	4,700		
05/13/92	84.38	71.76	12.62				47,000	1,500	1,200	1,100	4,800		
07/17/92	84.38	71.25	13.13				15,000	120	11	88	140		
10/05/92	84.38	70.95	13.62	0.24									
11/11/92	84.38	71.63	12.89	0.17									
11/17/92	84.38	71.54	12.89	0.06									
11/24/92	84.38	71.56	12.86	0.05									
12/01/92	84.38	71.48	12.92	0.03									
12/29/92	84.38	73.14	11.24	Sheen							••		
01/05/93	84.38	73.23	11.15	Sheen									
01/08/93	84.38	74.28	10.10				250,000	5,000	17,000	5,500	28,000		
02/02/93	84.38												
04/14/93	84.38	72.48	11.91	0.01									
08/06/93	84.38	71.49	12.90	0.01			150,000	3,800	6,600	3,700	17,000		
10/21/93	84.38	71.41	12.97				22,000	2,300	1,700	1,400	5,100		
01/05/94	84.38	71.96	12.42				37,000	1,600	1,100	1,300	6,500		
04/08/94	84.38	72.51	11.87				16,000	250	310	500	2,500		
07/06/94	84.38	71.64	12.74				43,000	660	320	1,900	6,400		
08/04/94.	84.38	71.71	12.67									-	
10/05/94	84.38	71.43	12.95				12,000	280	90	480	370	••	••
01/18/95	84.38	73.72	10.66	••			20,000	200	230	700	3,500	••	
04/07/95	84.38	72.84	11.54				22,000	120	120	810	4,400		
07/06/95	84.38	71.99	12.39				15,000	110	<50	630	2,100	••	
10/11/95	84.38	72.07	12.31				8,600	24	<10	360	560	1,100	
01/17/96	84.38	73.68	10.70				9,300	<50	<50	230	1,100	2,300	

WELLID/ TOC GWE DTW SPHT TPH-DRO TPH-MO TPH-GRO B T E X MTBE TOG													
									26.000		X	MTBE	TOG
DATE	(fi.)	(msl)	(fL)	(ft.)	(μg/L)	(µg/L)	(μg/L)	(µg/L)	(µg/L)	(μg/L)	(µg/L)	(µg/L)	(μg/ <b>L</b> )
MW-3 (cont)													
04/05/96	84.38	73.35	11.03				8,700	16	<10	110	650	990	
07/23/96	84.38	72.38	12.00				5,400	20	<5.0	190	480	2,300	
10/02/96	84.38	72.20	12.18				6,200	43	<20	130	140	2,800	
01/23/97	84.38	75.12	9.26				5,600	<5.0	<5.0	39	160	550	
04/01/97	84.38	72.75	11.63				6,900	17	<10	150	330	3,900	
07/09/97	84.38	72.38	12.00				5,300	31	<5.0	100	180	2,300	
10/07/97	84.38	72.27	12.11				2,400	15	<2.0	30	15	900	
01/22/98	84.38	74.73	9.65				3,200	2.5	7.9	70	220	660	
04/02/98	84.38	73.49	10.89	••			1,300	14	9.7	25	63	430	
07/02/98	84.38	72.69	11.69				750	6.9	<5.0	18	9.1	370	
10/02/98	84.38	72.23	12.15				1,400	5.3	0.73	18	6.6	900	
01/18/99	84.38	74.05	10.33				1,270	<1.0	<1.0	7.95	<1.0	100/99.7 <sup>2</sup>	
07/22/99	84.38	72.08	12.30				2,240	<1.0	<1.0	29.4	13.7	189	
01/17/00	84.38	72.78	11.60				848	6.72	2.53	5.02	2.49	90	
07/05/00	84.38	72.67	11.71	0.00			90 <sup>3</sup>	5.3	< 0.50	0.70	< 0.50	770	
01/15/01	84.38	73.93	10.45	0.00			206	< 0.500	< 0.500	< 0.500	1.09	4.04	
07/03/01	84.38	72.62	11.76	0.00			<50	0.53	< 0.50	< 0.50	1.1	20	
02/28/02	84.38	73.29	11.09	0.00			170	<1.0	<1.0	<1.0	1.6	45	
07/08/02	84.38	71.38	13.00	0.00			430	0.60	< 0.50	0.79	<1.5	42	
01/01/03	84.38	74.89	9.49	0.00			140	< 0.50	< 0.50	< 0.50	<1.5	6.1	
07/14/03 <sup>8</sup>	84.38	71.36	13.02	0.00			<50	<0.5	< 0.5	< 0.5	<0.5	43	
01/12/04 <sup>8</sup>	84.38	74.00	10.38	0.00			<50	<0.5	<0.5	<0.5	<0.5	2	
07/27/04 <sup>8</sup>	84.38	72.60	11.78	0.00			<50	<0.5	<0.5	<0.5	< 0.5	41	
01/25/05 <sup>8</sup>	84.38	73.96	10.42	0.00			<50	<0.5	<0.5	<0.5	<0.5	27	
07/26/05 <sup>8</sup>	84.38	72.17	12.21	0.00			<50	<0.5	<0.5	< 0.5	<0.5	12	
01/24/06 <sup>8</sup>	84.38	73.99	10.39	0.00			<50	<0.5	<0.5	< 0.5	< 0.5	0.8	
07/25/06 <sup>8</sup>	84.38	72.76	11.62	0.00			<50	<0.5	<0.5	<0.5	< 0.5	23	
01/23/078	84.38	73.44	10.94	0.00			130	<0.5	<0.5	<0.5	< 0.5	2	
07/24/078	84.38	74.10	10.28	0.00			210	<0.5	<0.5	<0.5	<0.5	20	
01/22/088	84.38	73.83	10.55	0.00			<50	<0.5	<0.5	<0.5	< 0.5	<0.5	
07/22/08 <sup>8</sup>	84.38	72.40	11.98	0.00			<50	<0.5	<0.5	<0.5	< 0.5	7	••
01/13/09 <sup>8</sup>	84.38	72.82	11.56	0.00			<50	<0.5	<0.5	<0.5	< 0.5	10	
07/14/09	84.38	72.25	12.13	0.00	SAMPLED A	NNUALLY		_			_		

CERCO CARACTE	WELL ID/ TOC GWE DTW SPHT TPH-DRO TPH-MO TPH-GRO B T E X MTBE TOC												
		GWE	DTW	SPHT	TPH-DRO	трн-мо	TPH-GRO	10	T	<b>E</b>	X	MTBE	TOG
DATE	(ft)	(msl)	(ft.)	(ft.)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(μg/L)	(μg/L)	(µg/L)
MW-4													
10/18/90	84.25	68.50	15.75					-					
10/31/90	84.25	70.35	13.90				<50	<0.5	<0.5	<0.5	1.0		
11/16/90	84.25	70.00	14.25					••					
02/08/91	84.25	71.93	12.32				60	17	2.0	12	<0.5		
05/08/91	84.25	72.02	12.23				65	<0.5	<0.5	<0.5	<0.5		
08/12/91	84.25	70.32	13.93				<50	<0.5	<0.5	<0.5	< 0.5		
11/07/91	84.25	70.83	13.42				<50	<0.5	<0.5	<0.5	<0.5		
02/05/92	84.25	71.42	12.83				<50	<0.5	<0.5	<0.5	<0.5		
05/13/92	84.25	70.97	13.28				<50	<0.5	<0.5	< 0.5	<0.5		
07/17/92	84.25	70.27	13.98				<50	<0.5	<0.5	<0.5	<0.5		
10/05/92	84.25	70.02	14.23				<50	<0.5	<0.5	<0.5	<0.5		
11/11/92	84.25												
11/17/92	84.25												
11/24/92	84.25												
12/01/92	84.25			••									
12/29/92	84.25												
01/05/93	84.25			••									
01/08/93	84.25	74.09	10.16			••	<50	<0.5	< 0.5	<0.5	< 0.5		
02/02/93	84.25			••									
04/14/93	84.25	72.21	12.04				<50	<0.5	< 0.5	<0.5	< 0.5		
08/06/93	84.25	70.34	13.91	••			<50	<0.5	<0.5	< 0.5	<0.5		
10/21/93	84.25	70.26	13.99	••			<50	<0.5	<0.5	< 0.5	1.0		
01/05/94	84.25	71.30	12.95				<50	<0.5	< 0.5	<0.5	<0.5		
04/08/94	84.25	71.31	12.94	••			<50	<0.5	<0.5	< 0.5	<0.5		
07/06/94	84.25	70.57	13.68	••			<50	<0.5	< 0.5	<0.5	<0.5		
08/04/94	84.25	70.71	13.54										
10/05/94	84.25	70.65	13.60		••		<50	<0.5	<0.5	< 0.5	<0.5		
01/18/95	84.25	74.77	9.48		••		<50	<0.5	<0.5	<0.5	<0.5		
04/07/95	84.25	72.70	11.55				<50	< 0.5	<0.5	< 0.5	<0.5		••
07/06/95	84.25	71.25	13.00	••			<50	<0.5	< 0.5	<0.5	<0.5		
10/11/95	84.25	70.27	13.98		••		<50	< 0.5	<0.5	<0.5	<0.5	<2.5	
01/17/96	84.25	73.17	11.08				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
04/05/96	84.25	72.65	11.60				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
07/23/96	84.25	70.86	13.39				<50	<0.5	< 0.5	<0.5	<0.5	<2.5	
10/02/96	84.25	70.27	13.98				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
01/23/97	84.25	74.72	9.53				<50	<0.5	<0.5	<0.5	<0.5	<2.5	

						Oakl	and, California	ı					
WELL ID/	TOC	GWE	DTW	SPHT	TPH-DRO	TPH-MO	TPH-GRO	<b>B</b>	<b>1</b>	<b>*</b>	<b>X</b>	MTBE	TOG
DATE	(ft.)	(mst)	(ft,)	(ft.)	(μg/L)	(μg/L)	(Hg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(μg/L)	(μg/L)
MW-4 (cont)	<b>)</b>												
04/01/97	84.25	71.68	12.57				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
07/09/97	84.25	70.64	13.61				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
10/07/97	84.25	70.51	13.74				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
01/22/98	84.25	74.90	9.35		••		<50	<0.5	<0.5	<0.5	<0.5	<2.5	
04/02/98	84.25	73.00	11.25	••			<50	<0.5	<0.5	<0.5	<0.5	<2.5	<del></del>
07/02/98	84.25	71.84	12.41	••			<50	<0.5 <0.5	<0.5	<0.5	<0.5	<2.5	
10/02/98	84.25	71.00	13.25	••			<50	<0.5	<0.5	<0.5	<1.5	<2.5	
01/18/99	84.25	72.65	11.60				<50	<0.5	<0.5	<0.5	<0.5	<2.0	
07/22/99	84.25	70.70	13.55	••		••	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
01/17/00	84.25	71.32	12.93			••	<50	<0.50	<0.50	<0.50	<0.50	<2.0 <2.5	
07/05/00	84.25		ED/SAMPLE							~0.JU	~0.30		
01/15/01	84.25	72.73	11.52	0.00		•••	<50.0	<0.500	< 0.500	<0.500	<0.500	<2.50	
07/03/01	84.25	71.30	12.95	0.00				~0.500 ••		~0.500	~0.500		
02/28/02	84.25	72.54	11.71	0.00			<50	<0.50	<0.50	<0.50	<1.5	<2.5	
07/08/02	84.24		ED/SAMPLE		Y				~0.50 	~0.50	~15		
01/01/03	84.24				D OVER WELL								
07/14/03	84.24		ED/SAMPLE					••	••				
01/12/048	84.24	73.23	11.01	0.00			<50	<0.5	<0.5	<0.5	<0.5	<0.5	
01/25/058	84.24	73.28	10.96	0.00			<50	<0.5	<0.5	<0.5	<0.5	<0.5	
07/26/05	84.24		ED/SAMPLE		.Υ	••			-0.5				
01/24/068	84.24	73.36	10.88	0.00		••	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
07/25/06	84.24		ED/SAMPLE		.Y				••			~0.5	
01/23/078	84.24	71.85	12.39	0.00			<50	<0.5	<0.5	<0.5	<0.5	<0.5	
07/24/07	84.24		ED/SAMPLE					•••			-0.5		••
01/22/088	84.24	72.77	11.47	0.00	••		<50	<0.5	<0.5	<0.5	<0.5	<0.5	
07/22/08	84.24		ED/SAMPLEI		·Υ					-0.5			
01/13/098	84.24	71.56	12.68	0.00	••		<50	<0.5	<0.5	<0.5	<0.5	<0.5	
07/14/09	84.24	MONITOR	ED/SAMPLI		LLY							-	
												_	
MW-5													
10/18/90	81.95	71.17	10.78					**		••		2254	
10/31/90	81.95	71.32	10.63				110	<0.5	<0.5	<0.5	<0.5		
11/16/90	81.95	71.27	10.68		-				~0.5			22	2.5
02/08/91	81.95	72.78	9.17			_	<50	<0.5	<0.5	<0.5	<0.5	7	
05/08/91	81.95	73.27	8.68				<50	<0.5	<0.5	<0.5	<0.5		
			2.00			1.50	~JU	~0.3	~0.3	~0.3	<b>~U.</b> 3	**	

						Oaki	land, California						
WELL ID/	TOC	GWE	DTW	SPHT	TPH-DRO	TPH-MO	TPH-GRO	<b>B</b>	T	E	X	MTBE	TOG
DATE	(ft)	(mst)	(fL)	(ft.)	(µg/L)	(μg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(μg/L)	(µg/L)	(µg/L)
MW-5 (cont)	)						i is received	806 ()	14.00				
08/12/91	81.95	71.62	10.33		••	. 0	<50	<0.5	<0.5	<0.5	<0.5		
11/07/91	81.95	72.19	9.76				<50	<0.5	<0.5	<0.5	<0.5 <0.5		
02/05/92	81.95	72.48	9.47				69	<0.5	<0.5	<0.5	<0.5		••
05/13/92	81.95	72.25	9.70				74	<0.5	<0.5 <0.5	<0.5	<0.5		
07/17/92	81.95	71.74	10.21		••		880	2.6	<1.2	4.6	11		
10/05/92	81.95	71.34	10.61	••			120	<0.5	<0.5	0.6	4.9		
11/11/92	81.95												••
11/17/92	81.95								••		-		
11/24/92	81.95		••										
12/01/92	81.95				_								
12/29/92	81.95	••		••									
01/05/93	81.95			••	••								
01/08/93	81.95	74.61	7.34	••			61	<0.5	<0.5	<0.5	<0.5		
02/02/93	81.95												
04/14/93	81.95	-							••				
08/06/93	81.95	71.99	9.96		••		<50	<0.5	<0.5	<0.5			
10/21/93	81.95	71.89	10.06				<50	<0.5	<0.5 <0.5		<0.5		
01/05/94	81.95	72.52	9.43				<50		<0.5	2.0	4.0		
04/08/94	81.95	72.56	9.39				<50	<0.5 <0.5	<0.5	<0.5	<0.5		
07/06/94	81.95	72.19	9.76				<50	0.6	<0.5	<0.5	<0.5		
08/04/94	81.95	72.13	9.82							<0.5	<0.5		
10/05/94	81.95	71.89	10.06				 -50	-0.6	-0.5	-0.5			
01/18/95	81.95	INACCESS					<50	<0.5	<0.5	<0.5	<0.5	••	
04/07/95	81.95	73.31	8.64	_		 	<50	<0.5	<0.5	-0.5	 -0.6		
07/06/95	81.95	72.52	9.43				<50	<0.5		<0.5	<0.5		
10/11/95	81.95	72.12	9.83				<50	<0.5	<0.5 <0.5	<0.5	<0.5	 	
01/17/96	81.95	73.63	8.32				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
04/05/96	81.95	73.23	8.72				<50	<0.5		<0.5	<0.5	<2.5	
07/23/96	81.95	72.25	9.70				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
10/02/96	81.95	72.06	9.89				<50 <50		<0.5	<0.5	<0.5	<2.5	
01/23/97	81.95	74.72	7.23					<0.5	<0.5	<0.5	<0.5	<2.5	
04/01/97	81.95	INACCESS				••	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
07/09/97	81.95	72.27			••		-50	-0.6					
10/07/97	81.95	72.14	9.68 9.81			••	<50	<0.5	<0.5	<0.5	<0.5	<2.5	
01/22/98	81.95	74.80					<50	<0.5	<0.5	<0.5	<0.5	<2.5	
04/02/98	81.95		7.15				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
U4/U4/ <b>70</b>	01.73	INACCESSI	IDLE			••	2. <del></del>						

Former Chevron Service Station #9-1583 5509 Martin Luther King Way

			<u></u>			Oakl	and, California						
WELL ID/	TOC	GWE	DTW	SPHT	TPH-DRO	трн-мо	TPH-GRO	В	T	<b>E</b>	X	MTBE	TOG
DATE	(ft.)	(msl)	(ft.)	(ft)	(µg/L)	(µg/L)	(µg/L)	(μg/L)	(µg/L)	(µg/L)	(μg/L)	(µg/L)	(µg/L)
MW-5 (cont)													
07/02/98	81.95	72.43	9.52				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
10/02/98	81.95	72.14	9.81				<50	<0.5	<0.5	<0.5	<1.5	<2.5	
01/18/99	81.95	73.11	8.84				<50	<0.5	<0.5	<0.5	<0.5	<2.0	
07/22/99	81.95	72.01	9.94				<50	<0.5	<0.5	<0.5	<0.5	<2.0	
01/17/00	81.95	72.70	9.25				<50	<0.5	<0.5	<0.5	<0.5	<2.5	
07/05/00	81.95			D ANNUALLY	Y						-0.5		
01/15/01	81.95	73.41	8.54	0.00			423 <sup>6</sup>	<0.500	<0.500	<0.500	<0.500	<2.50	
07/03/01	81.95	72.62	9.33	0.00			<del></del>					~2.50	
02/28/02	81.95	73.24	8.71	0.00		••	270	<0.50	<0.50	<0.50	<1.5	<2.5	
07/08/02	81.95			D ANNUALLY								-2.3	
01/01/03	81.95			CLE PARKED									
07/14/03	81.95			D ANNUALLY									
01/12/048	81.95	73.91	8.04	0.00			<50	<0.5	<0.5	<0.5	<0.5	<0.5	
01/25/058	81.95	73.94	8.01	0.00			<50	<0.5	<0.5	<0.5	<0.5	<0.5	
07/26/05	81.95			D ANNUALLY	7	••						-0.5	
01/24/068	81.95	73.89	8.06	0.00			<50	<0.5	<0.5	<0.5	<0.5	<0.5	
07/25/06	81.95			D ANNUALLY	7								
01/23/07	81.95			CLE PARKED									
07/24/07	81.95			D ANNUALLY									
01/22/088	81.95	73.50	8.45	0.00			<50	<0.5	<0.5	<0.5	<0.5	<0.5	
07/22/08	81.95	MONITORE		D ANNUALLY	7	••				-0.5		-0.5	
01/13/098	81.95	71.69	10.26	0.00			<50	<0.5	<0.5	<0.5	<0.5	<0.5	
07/14/09	81.95	MONITOR		ED ANNUALI	LY						-0.5	-0.5	
													_
MW-6													
10/18/90	80.60	70.81	9.79			-					-	22	
10/31/90	80.60	70.91	9.69				<50	< 0.5	< 0.5	< 0.5	3.0		
11/16/90	80.60	70.86	9.74			_		-				-	-
02/08/91	80.60				-	-							-
05/08/91	80.60	71.06	9.54		-	-	56	< 0.5	< 0.5	<0.5	<0.5		
08/12/91	80.60	71.10	9.50				<50	< 0.5	<0.5	< 0.5	<0.5		
11/07/91	80.60	71.71	8.89	-			<50	< 0.5	<0.5	<0.5	<0.5	_	
02/05/92	80.60	72.01	8.59				<50	<0.5	<0.5	<0.5	<0.5		
05/13/92	80.60			-		_	••						
07/17/92	80.60												

Former Chevron Service Station #9-1583 5509 Martin Luther King Way

Oakland, California

SELECTION CO.							and, Cambrina						
WELL ID/	TOC	GWE	DTW	SPHT	TPH-DRO	трн-мо	TPH-GRO	<b>B</b>	T	E	*	MTBE	TOG
DATE	(ft.)	(mst)	(ft.)	(ft.)	(µg/L)	(µg/L)	(µg/L)	(μg/ <b>L</b> )	(µg/L)	(µg/L)	(μg/L)	(µg/L)	(μg/L)
MW-6 (cont)													
10/05/92	80.60												
11/11/92	80.60			••									
11/17/92	80.60			••							••		
11/24/92	80.60					••					••		
12/01/92	80.60	••			••	••							
12/29/92	80.60					••					••		
01/05/93	80.60					••							
01/08/93	80.60								••		••	••	
02/02/93	80.60	72.89	7.71			••	<50	2.1	<0.5	<0.5	2.2		
04/14/93	80.60	72.41	8.19			••	<50	1.0	<0.5	<0.5	<0.5		
08/06/93	80.60	71.52	9.08				<50	<0.5	<0.5	<0.5	<0.5	••	
10/21/93	80.60	71.46	9.14			••	<50	<0.5	<0.5	<0.5	<0.5		
01/05/94	80.60	72.06	8.54				<50	4.0	<0.5	<0.5	<0.5		
04/08/94	80.60												
07/06/94	80.60	INACCESSI	BLE	-		••							
08/04/94	80.60	71.66	8.94	••			<50	<0.5	<0.5	<0.5	<0.5		
10/05/94	80.60	INACCESSI:	BLE										
01/18/95	80.60	73.50	7.10	••			<50	0.69	<0.5	<0.5	0.57		
04/07/95	80.60	72.77	7.83				<50	1.8	<0.5	<0.5	<0.5		
07/06/95	80.60	72.03	8.57	••			<50	<0.5	<0.5	<0.5	<0.5		••
10/11/95	80.60	71.54	9.06				<125	<1.2	<1.2	<1.2	<1.2	540	••
01/17/96	80.60	73.20	7.40				<50	<0.5	<0.5	<0.5	<0.5	180	
04/05/96	80.60	72.70	7.90	••			<125	1.4	<1.2	<1.2	<1.2	700	
07/23/96	80.60	71.86	8.74				<500	<5.0	<5.0	<5.0	<5.0	540	
10/02/96	80.60	71.62	8.98				<100	<1.0	<1.0	<1.0	1.8	910	
01/23/97	80.60	INACCESSII	BLE			••	••						
04/01/97	80.60	72.22	8.38				<250	<2.5	<2.5	<2.5	<2.5	640	
07/09/97	80.60	INACCESSII	BLE										
10/07/97	80.60	71.71	8.89	••			<50	< 0.5	<0.5	<0.5	<0.5	640	
01/22/98	80.60	73.90	6.70				<50	<0.5	<0.5	<0.5	<0.5	200	
04/02/98	80.60	72.79	7.81				<250	<2.5	<2.5	<2.5	<2.5	480	
07/02/98	80.60	71.62	8.98				<50	<0.5	<0.5	<0.5	<0.5	420	
10/02/98	80.60	71.68	8.92				<50	<0.5	<0.5	<0.5	<1.5	270	
01/18/99	80.60	INACCESSI	BLE			••	••	••					
07/22/99	80.60	INACCESSII	BLE			••							
01/17/00	80.60	INACCESSI	BLE			••							

						Oakl	and, California						
WELL ID/	TOC	GWE	DTW	SPHT	TPH-DRO	TPH-MO	TPH-GRO	B	Terre	<b>E</b>	X	MTBE	TOG
DATE	(ft.)	(msl)	(ft.)	(ft.)	(μg/L)	(µg/L)	(µg/L)	(μg/L)	(µg/L)	(µg/L)	(μg/L)	(µg/L)	(µg/L)
MW-6 (cont)											11.71.367		791344 Z
07/05/00	80.60	MONITORI	ED/SAMPLE	D ANNUALL'	Y								
01/15/01	80.60			PARKED OVE									
07/03/01	80.60			PARKED OVE			••						
02/28/02	80.60	72.70	7.90	0.00		••	<50	<0.50	< 0.50	< 0.50	<1.5	55	
07/08/02	80.60	MONITORI	ED/SAMPLE	D ANNUALLY	Y		••						
01/01/03	80.60			CLE PARKED									
07/14/03	80.60			D ANNUALLY									
01/12/04 <sup>8</sup>	80.60	73.23	7.37	0.00			<50	<0.5	<0.5	<0.5	<0.5	25	
01/25/05 <sup>8</sup>	80.60	73.17	7.43	0.00			<50	<0.5	<0.5	<0.5	<0.5	3	
07/26/05	80.60	MONITORI	ED/SAMPLE	D ANNUALLY	Y								
01/24/06 <sup>8</sup>	80.60	73.20	7.40	0.00			<50	<0.5	<0.5	<0.5	<0.5	<0.5	
07/25/06	80.60	MONITORI	ED/SAMPLE	D ANNUALLY	Y								••
01/23/078	80.60	72.53	8.07	0.00			<50	<0.5	<0.5	<0.5	<0.5	8	
07/24/07	80.60	MONITORI	ED/SAMPLE	D ANNUALLY	Y								
01/22/088	80.60	73.07	7.53	0.00			<50	<0.5	<0.5	1	2	4	
07/22/08	80.60	MONITORE	ED/SAMPLE	D ANNUALLY	ď	••							**
01/13/09 <sup>8</sup>	80.60	70.73	9.87	0.00			<50	<0.5	<0.5	<0.5	<0.5	6	
07/14/09	80.60	MONITOR	ED/SAMPL	ED ANNUALI	LY		_						
MW-7													
03/08/94	86.36	74.99	11.37		<10	4,100	1,200	440	31	73	200	-	••
07/06/94	86.36												
08/04/94	86.36	73.86	12.50	-			120	15	< 0.5	3.8	1.8		_
10/05/94	86.36	73.99	12.37				150	1.2	< 0.5	1.2	1.7		
01/18/95	86.36	74.82	11.54				260	11	<1.0	17	6.8	240	
04/07/95	86.36	75.63	10.73	-			230	<0.5	< 0.5	25	0.93		
07/06/95	86.36	74.36	12.00				320	<1.0	<1.0	<1.0	<1.0		6,900
10/11/95	86.36	73.56	12.80		-	2,300 <sup>1</sup>	<50	<0.5	<0.5	<0.5	<0.5	120	
01/17/96	86.36	75.90	10.46			1,700	<50	<0.5	< 0.5	<0.5	<0.5	460	
04/05/96	86.36	76.56	9.80			590	130	<0.5	<0.5	<0.5	<0.5	120	
07/23/96	86.36	74.57	11.79			820	<500	<5.0	<5.0	<5.0	<0.5	1,200	
10/02/96	86.36	73.10	13.26	-		1,500	<100	<1.0	<1.0	<1.0	<1.0	360	
01/23/97	86.36	77.64	8.72			<500	<100	<1.0	<1.0	<1.0	<1.0	490	••
04/01/97	86.36	75.09	11.27		-	1,600	<250	<2.5	<2.5	<2.5	<2.5	1,200	
07/09/97	86.36	73.92	12.44			5,700	<250	5.9	<2.5	<2.5	<2.5	1,200	

						Oakl	and, California						
WELL ID/	TOC	GWE	DTW	SPHT	TPH-DRO	ТРН-МО	TPH-GRO	В			X	MTBE	TOG
DATE	(ft.)	(msl)	(ft.)	(ft.)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(μg/L)	(µg/L)	(μg/L)	(µg/L)	(µg/L)
MW-7 (cont)	)												
10/07/97	86.36	73.44	12.92			<500	<50	<0.5	<0.5	< 0.5	<0.5	240	
01/22/98	86.36	75.14	11.22			<500	<50	<0.5	<0.5	<0.5	<0.5	400	
04/02/98	86.36	75.67	10.69	••		<500	56	<0.5	<0.5	<0.5	<0.5	290	
07/02/98	86.36	75.94	10.42			<500	<50	<0.5	<0.5	<0.5	<0.5	380	
10/02/98	86.36	74.14	12.22			1,700	<50	<0.5	<0.5	<0.5	<1.5	660	
01/18/99	86.36	75.36	11.00			543	<100	<1.0	<1.0	<1.0	<1.0	281/296 <sup>2</sup>	••
07/22/99	86.36	74.06	12.30				<50	<0.5	<0.5	<0.5	<0.5	155	
01/17/00	86.36	75.84	10.52		256 <sup>1</sup>	1,040	<50	<0.5	<0.5	<0.5	<0.5	104	
07/05/00	86.36	74.23	12.13	0.00		1,4004	<50	<0.50	< 0.50	< 0.50	< 0.50	110	
01/15/01	86.36	75.23	11.13	0.00		2,700	<50.0	< 0.500	< 0.500	< 0.500	< 0.500	84.3	
07/03/01	86.36	74.47	11.89	0.00		760 <sup>7</sup>	<50	< 0.50	< 0.50	< 0.50	< 0.50	27	
02/28/02	86.36	75.26	11.10	0.00		<1,000	<50	< 0.50	< 0.50	< 0.50	<1.5	66	
07/08/02	86.36	74.05	12.31	0.00		1,400	<50	< 0.50	< 0.50	< 0.50	<1.5	49	
01/01/03	86.36	76.65	9.71	0.00		1,300	<50	< 0.50	< 0.50	< 0.50	<1.5	35	
07/14/03 <sup>8</sup>	86.36	74.01	12.35	0.00		130	<50	<0.5	<0.5	<0.5	<0.5	20	
01/12/04 <sup>8</sup>	86.36	75.66	10.70	0.00		250	<50	<0.5	<0.5	<0.5	<0.5	27	
07/27/04 <sup>8</sup>	86.36	74.08	12.28	0.00		730	<50	<0.5	<0.5	<0.5	< 0.5	44	
01/25/058	86.36	75.56	10.80	0.00		980	<50	<0.5	< 0.5	<0.5	< 0.5	34	
07/26/05 <sup>8</sup>	86.36	73.69	12.67	0.00		1,100	<50	< 0.5	<0.5	< 0.5	<0.5	19	•
01/24/068	86.36	75.60	10.76	0.00		230	<50	<0.5	<0.5	<0.5	<0.5	18	
07/25/06 <sup>8</sup>	86.36	74.17	12.19	0.00		160	<50	<0.5	<0.5	< 0.5	< 0.5	19	
01/23/078	86.36	74.60	11.76	0.00		2,100	<50	<0.5	<0.5	<0.5	< 0.5	15	
07/24/078	86.36	73.91	12.45	0.00		3,100	<50	< 0.5	<0.5	< 0.5	< 0.5	24	
01/22/088	86.36	75.36	11.00	0.00		4,400	<50	<0.5	<0.5	<0.5	< 0.5	12	
07/22/08 <sup>8</sup>	86.36	73.38	12.98	0.00		200	<50	<0.5	<0.5	<0.5	< 0.5	25	
01/13/09 <sup>8</sup>	86.36	73.85	12.51	0.00		1,400	<50	<0.5	<0.5	<0.5	< 0.5	7	
07/14/09 <sup>8</sup>	86.36	73.18	13.18	0.00		1,000	<50	<0.5	<0.5	<0.5	<0.5	10	
MW-8													
03/08/94	85.93	75.06	10.87		<10	<100	28,000	2,900	1,300	1 200	£ 900		
07/06/94	85.93	75.00		-		-100	28,000			1,200	6,800	-	
08/04/94	85.93	73.77	12.16		_	-	22,000	3,000	260	 870	4 400		-
10/05/94	85.93	72.71	13.22	_			12,000	1,800	34	870 4.6	4,400 890	-	
01/18/95	85.93	75.51	10.42	_			19,000	1,000					-
04/07/95	85.93	75.48	10.42	_		-	14,000	310	65 <25	1,100 720	3,500	575.7	77.5
- 11 - 11 - 12	55.75	75.40	10.43		-	800	14,000	210	<25	/20	1,700	-	

	Oakland, California  WRILID/ TOC GWE DIW SPHT TRUMPO TRUMO TRUE CROSS RESERVED TO THE CR													
WELL ID/	TOC	GWE	DTW	SPHT	TPH-DRO	трн-мо	TPH-GRO	В	Ţ	E	X	MTBE	TOG	
DATE	(ft.)	(msl)	(ft.)	(ft)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(μg/L)	
MW-8 (cont)														
07/06/95	85.93	74.30	11.63	••			19,000	280	<50	1,200	2,600			
10/11/95	85.93	73.51	12.42				6,100	140	5.5	320	280	1,200		
01/17/96	85.93	75.95	9.98			<500	12,000	86	<20	590	1,400	1,100		
04/05/96	85.93	75.60	10.33			<500	7,500	180	23	410	480	560		
07/23/96	85.93	74.56	11.37			<500	3,800	47	<5.0	350	84	1,800		
10/02/96	85.93	73.90	12.03			<500	4,400	65	<5.0	140	28	1,500		
01/23/97	85.93	77.73	8.20			<500	3,800	36	5.9	140	36	910		
04/01/97	85.93	75.80	10.13			<500	6,100	43	<20	380	76	1,800		
07/09/97	85.93	73.77	12.16			<500	7,300	48	<25	120	<25	2,400	••	
10/07/97	85.93	73.77	12.16			<500	3,100	<10	<10	67	<10	1,400		
01/22/98	85.93	75.83	10.10			<500	1,900	5.5	8.3	120	17	780		
04/02/98	85.93	75.55	10.38			<500	2,900	43	19	110	<10	800		
07/02/98	85.93	74.78	11.15			<500	5,000	31	<10	120	15	780		
10/02/98	85.93	74.03	11.90			1,200¹	2,200	6.5	< 0.5	21	2.6	140		
01/18/99	85.93	75.12	10.81		554	<250	2,870	<5.0	<5.0	9.02	<5.0	476/478 <sup>2</sup>		
07/22/99	85.93	74.38	11.55				2,190	<1.0	<1.0	3.51	1.61	228		
01/17/00	85.93	75.06	10.87		955¹	<500	1,220	1.3	1.56	1.56	1.87	344		
07/05/00	85.93	74.55	11.38	0.00	••	260 <sup>5</sup>	1,900 <sup>3</sup>	15	6.6	<5.0	<5.0	170		
01/15/01	85.93	75.59	10.34	0.00		<250	2,820	<1.00	<1.00	5.13	3.90	110		
07/03/01	85.93	74.77	11.16	0.00		<250	1,900 <sup>3</sup>	6.0	<5.0	<5.0	<5.0	46		
02/28/02	85.93	75.26	10.67	0.00		<1,000	1,500	4.6	<2.0	0.80	2.2	56		
07/08/02	85.93	74.30	11.63	0.00	- ,	<400	2,500	4.2	0.85	0.68	2.5	46		
01/01/03	85.93	76.01	9.92	0.00		<400	1,300	2.1	0.66	1.1	2.1	45		
07/14/03 <sup>8</sup>	85.93	74.27	11.66	0.00		160	1,900	<0.5	< 0.5	< 0.5	< 0.5	58		
01/12/04 <sup>8</sup>	85.93	75.92	10.01	0.00		<40	1,400	<0.5	<0.5	<0.5	< 0.5	110		
07/27/04 <sup>8</sup>	85.93	74.33	11.60	0.00		<40	1,100	<0.5	< 0.5	<0.5	< 0.5	89		
01/25/05 <sup>8</sup>	85.93	75.96	9.97	0.00	••	130	900	<0.5	<0.5	< 0.5	<0.5	52		
07/26/05 <sup>8</sup>	85.93	74.08	11.85	0.00		99	580	< 0.5	<0.5	<0.5	<0.5	23		
01/24/068	85.93	76.06	9.87	0.00	••	69	620	<0.5	<0.5	<0.5	<0.5	31		
07/25/06 <sup>8</sup>	85.93	74.77	11.16	0.00		<40	420	<0.5	<0.5	< 0.5	< 0.5	20		
01/23/07 <sup>8</sup>	85.93	74.78	11.15	0.00		200	710	<0.5	<0.5	<0.5	< 0.5	26		
07/24/07 <sup>8</sup>	85.93	74.15	11.78	0.00	<b>'</b>	730	560	<0.5	<0.5	<0.5	<0.5	30	••	
01/22/088	85.93	75.59	10.34	0.00		500	520	<0.5	<0.5	<0.5	< 0.5	27		
07/22/08 <sup>8</sup>	85.93	73.86	12.07	0.00		90	330	<0.5	<0.5	< 0.5	<0.5	21	••	
01/13/09 <sup>8</sup>	85.93	74.35	11.58	0.00		62	360	<0.5	<0.5	<0.5	<0.5	14	••	
07/14/09 <sup>8</sup>	85.93	73.68	12.25	0.00		90	<b>50</b> 0	<0.5	<0.5	<0.5	<0.5	10		

						Oakl	and, California	l.					
WELL ID/	TOC	GWE	DTW	SPHT	TPH-DRO	TPH-MO	TPH-GRO	B	T		X	MTBE	TOG
DATE	(ft.)	(msl)	(A)	(ft)	(µg/L)	(μg/L)	(µg/L)	(µg/L)	(µg/L)	(μg/L)	(pg/L)	(µg/L)	(µg/L)
TRIP BLAN	ĸ												
03/12/90				••			<50	<0.3	< 0.3	< 0.3	<0.6		
02/08/91							<50	<0.5	<0.5	<0.5	<0.5		
05/08/91			••			••	<50	<0.5	<0.5	<0.5	<0.5	••	
08/12/91							<50	<0.5	<0.5	<0.5	<0.5		
11/07/91			••				<50	<0.5	<0.5	<0.5	<0.5		
02/05/92							<50	<0.5	<0.5	<0.5	<0.5		
05/13/92							<50	<0.5	<0.5	<0.5	<0.5		
07/17/92							<50	<0.5	<0.5	<0.5	<0.5		
10/05/92							<50	<0.5	<0.5	<0.5	<0.5		<b></b>
11/11/92	••												
11/17/92						••							
11/29/92													
12/01/92	••							••					
12/29/92						••							
01/05/93	••										••		
01/08/93	••					••	<50	<0.5	<0.5	<0.5	<0.5		
02/02/93		••					- <del>-</del>		~0.J		~0.5		
04/14/93	••						<50	<0.5	<0.5	<0.5	<0.5		
08/06/93	••						<50	<0.5	<0.5	<0.5	<0.5	••	
10/21/93	**						<50	<0.5	<0.5	<0.5	<0.5		
01/05/94		••		••			<50	<0.5	<0.5	<0.5	<0.5		
04/08/94							<50	<0.5	<0.5	<0.5	<0.5		
07/06/94							<50	<0.5	<0.5	<0.5 <0.5	<0.5		••
08/04/94		••		••			<50	<0.5	<0.5	<0.5	<0.5		
10/05/94		••				••	<50 <50	<0.5	<0.5	<0.5	<0.5		
01/18/95							<50 <50	<0.5	<0.5	<0.5	<0.5		
04/07/95		-					<50	<0.5	<0.5	<0.5	<0.5 <0.5		
07/06/95						••	<50	<0.5	<0.5	<0.5	<0.5 <0.5		
10/11/95			••	••			<50	<0.5	<0.5	<0.5	<0.5	<2.5	
01/17/96			••			••	<50 <50	<0.5	<0.5	<0.5	<0.5		
04/05/96			••	••			<50	<0.5	<0.5	<0.5	<0.5		••
07/23/96							<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5		<2.5	••
10/02/96							<50 <50	<0.5 <0.5	<0.5 <0.5		<0.5	<2.5	
01/23/97							<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5	<0.5		
04/01/97					-		<50 <50			<0.5	<0.5	<2.5	
07/09/97					<del></del>			<0.5	<0.5	<0.5	<0.5	<2.5	
V1107171							<50	< 0.5	< 0.5	< 0.5	< 0.5	<2.5	

							and, California	<u>,                                      </u>					
WELL ID/	TOC	GWE	DTW	SPHT	TPH-DRO	TPH-MO	TPH-GRO	В	<b>*</b>	<b>E</b> (1)	X	MTBE	TOG
DATE	(ft.)	(msl)	(ft.)	(ft)	(μg/L)	(µg/L)	(µg/L)	(μg/ <b>L</b> )	(µg/L)	(µg/L)	(μg/L)	(µg/L)	$(\mu g/L)$
TRIP BLANI	K (cont)										0.43	3836 38	-
10/07/97				••			<50	<0.5	<0.5	<0.5	<0.5	<2.5	
01/22/98							<50	<0.5	<0.5	<0.5	<0.5	<2.5	
04/02/98			••			-	<50	<0.5	<0.5	<0.5	<0.5	<2.5	••
07/02/98							<50	<0.5	<0.5	<0.5	<0.5	<2.5	
10/02/98		••					<50	<0.5	<0.5	<0.5	<1.5	<2.5	
01/18/99							<50	<0.5	<0.5	<0.5	<0.5	<2.0	••
07/05/00							<50	<0.50	<0.50	<0.50	<0.50	<2.5	
01/15/01							<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	
07/03/01							<50	<0.50	<0.50	<0.50	<0.50	<2.5	
QA										7.00		2.0	
02/28/02							<50	<0.50	< 0.50	<0.50	<1.5	<2.5	
07/08/02							<50	<0.50	<0.50	<0.50	<1.5	<2.5	
01/01/03							<50	<0.50	<0.50	<0.50	<1.5	<2.5	
07/14/03 <sup>8</sup>							<50	<0.5	< 0.5	<0.5	<0.5	<0.5	
01/12/04 <sup>8</sup>							<50	<0.5	<0.5	<0.5	<0.5	<0.5	
07/27/04 <sup>8</sup>							<50	<0.5	<0.5	<0.5	<0.5	<0.5	
01/25/05 <sup>8</sup>		••	••				<50	<0.5	<0.5	< 0.5	<0.5	<0.5	
07/26/05 <sup>8</sup>							<50	<0.5	<0.5	<0.5	<0.5	<0.5	
01/24/06 <sup>8</sup>							<50	<0.5	<0.5	<0.5	<0.5	<0.5	
07/25/06 <sup>8</sup>		••				••	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
01/23/07 <sup>8</sup>		••	••				<50	< 0.5	<0.5	<0.5	<0.5	<0.5	
07/24/07 <sup>8</sup>	••					••	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
01/22/088			••				<50	< 0.5	<0.5	<0.5	<0.5	<0.5	
07/22/088							<50	<0.5	<0.5	<0.5	<0.5	<0.5	
01/13/09 <sup>8</sup>							<50	<0.5	<0.5	<0.5	<0.5	<0.5	
0 <b>7/14/09<sup>8</sup></b>			••				<50	<0.5	<0.5	<0.5	<0.5	<0.5	

#### Table 1

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

Former Chevron Service Station #9-1583 5509 Martin Luther King Way Oakland, California

#### **EXPLANATIONS:**

Groundwater monitoring data and laboratory analytical results prior to July 5, 2000, were compiled from reports prepared by Blaine Tech Services, Inc.

TOC = Top of CasingDRO = Diesel Range Organics MTBE = Methyl Tertiary Butyl Ether (ft.) = FeetMO = Motor OilTOG = Total Oil & Grease GWE = Groundwater Elevation GRO = Gasoline Range Organics  $(\mu g/L)$  = Micrograms per liter (msl) = Mean sea level B = Benzene-- = Not Measured/Not Analyzed DTW = Depth to Water T = TolueneQA = Quality Assurance/Trip Blank SPHT = Separate Phase Hydrocarbon Thickness E = Ethylbenzene

- <sup>2</sup> Confirmation run.
- Laboratory report indicates gasoline C6-C12.

TPH = Total Petroleum Hydrocarbons

- Laboratory report indicates motor oil C16-C36.
- Laboratory report indicates unidentified hydrocarbons C9-C24.
- Laboratory report indicates hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

  The pattern more closely resembles that of a heavier fuel.

X = Xylenes

- Laboratory report indicates unidentified hydrocarbons >C16.
- 8 BTEX and MTBE by EPA Method 8260.

Laboratory report indicates an unidentified hydrocarbon.

# Table 2 Groundwater Analytical Results - Oxygenate Compounds

Former Chevron Service Station #9-1583 5509 Martin Luther King Way

Oakland, California  WELLID DATE ETHANOL TBA MTBE DIPE ETBE TAME												
WELL ID	DATE					ETBE	TAME					
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(j4g/L)	(µg/L)					
MW-1	07/14/03	<50		5								
	01/12/04	<50		61	==							
	07/27/04	<50		54								
	01/25/05	<50		5	_		2007 					
	07/26/05	<50		25								
	01/24/06	<50		25								
	07/25/06	<50		14								
	01/23/07	<50		17		42						
	07/24/07	<50		7		<u></u>						
	01/22/08	<50		8	_	_	_					
	07/22/08	<50	_	<0.5	-		I					
	01/13/09	<50		2	10.00							
IW-2	07/14/03	<50		<0.5	-		_					
	01/12/04	<50		<0.5	N <u>a.</u>		22					
	07/27/04	<50	12	<0.5	_							
	01/25/05	<50	_	<0.5	-		***					
	07/26/05	<50		<0.5	**							
	01/24/06	<50		<0.5	-							
	07/25/06	<50		<0.5	_							
	01/23/07	<50		<0.5		6 <u>45</u>						
	07/24/07	<50	-	< 0.5	7 <u>2-2</u>	_	-					
	01/22/08	<50		<0.5		_	-					
	07/22/08	<50		2								
	01/13/09	<50	-	<0.5	-	-						
IW-3	07/14/03	<50		43	12		-					
	01/12/04	<50		2		-						
	07/27/04	<50		41	-	_						
	01/25/05	<50	-	27								
	07/26/05	<50	-	12	-	5-4	-					
	01/24/06	<50		0.8	-		-					
	07/25/06	<50		23								
	01/23/07	<50		2	-	-						
	07/24/07	<50		20		-						

# Table 2 Groundwater Analytical Results - Oxygenate Compounds

			Oal	kland, California			
WELL ID	DATE	ETHANOL	TBA	MTBE	DIPE	ETBE	TAME
		(µg/L)	(µg/L)	(µg/L)	(49/1)	(µg/L)	(µg/L)
MW-3 (cont)	01/22/08	<50		<0.5	12	_	_
	07/22/08	<50		7			
	01/13/09	<50	373	10	-	-	**
MW-4	07/14/03	SAMPLED ANNUALLY			( <u></u>	_	<u>.</u>
	01/12/04	<50	_	< 0.5	N <u>-2</u>	922	
	01/25/05	<50	_	< 0.5			
	01/24/06	<50		<0.5			10-
	01/23/07	<50		<0.5	••		
	01/22/08	<50		< 0.5	_	-	-
3K	01/13/09	<50	-	<0.5	-		72 <u>1</u>
MW-5	07/14/03	SAMPLED ANNUALLY					
14144-2	01/12/04	<50		-0.6		-	
	01/12/04	<50	-	<0.5		-	· ·
	01/23/03	<50		<0.5		-	
	01/24/00	INACCESSIBLE - VEHICLE	 DADVED AVED V	<0.5			-
	01/23/07				-	-	-
		<50		<0.5	_	-	-
	01/13/09	<50		<0.5	-	3 <del>.7</del> .	-
MW-6	07/14/03	SAMPLED ANNUALLY					; <b></b>
	01/12/04	<50	-	25	-	-	-
	01/25/05	<50		3			-
	01/24/06	<50		<0.5	2		V
	01/23/07	<50		8	-		-
	01/22/08	<50		4	-	_	-
	01/13/09	<50	==1	6	-		••
MW-7	07/14/02	<b>~5</b> 0		80			
IAT AA - \	07/14/03 01/12/04	<50 <50	-	20	-	S-20 3000	-
	01/12/04	<50 <50	-	27	-	-	
		<50	-	44	200	1.77	1.77
	01/25/05	<50	100	34			5 <del></del>
	07/26/05	<50		19		-	

# Table 2 Groundwater Analytical Results - Oxygenate Compounds

WELLID	DATE	ETHANOL	TBA	MTBE	DIPE	ETBE	TAME
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-7 (cont)	01/24/06	<50	_	18			22
	07/25/06	<50	-	19			_
	01/23/07	<50	-	15			
	07/24/07	<50		24		••	
	01/22/08	<50	-	12	-	<u> </u>	
	07/22/08	<50		25			
	01/13/09	<50		7	- <u> </u>		
	07/14/09	-	-	10	-	1 T	-
1W-8	07/14/03	<50		58			
	01/12/04	<50		110	••		
	07/27/04	<50		89			
	01/25/05	<50		52			
	07/26/05	<50		23			
	01/24/06	<50		31			
	07/25/06	<50		20			
	01/23/07	<50		26			
	07/24/07	<50		30			
	01/22/08	<50		27			
	07/22/08	<50		21			
	01/13/09	<50		14	••		
	07/14/09			10			

#### Table 2

#### **Groundwater Analytical Results - Oxygenate Compounds**

Former Chevron Service Station #9-1583 5509 Martin Luther King Way Oakland, California

#### **EXPLANATIONS:**

TBA = t-Butyl alcohol

MTBE = Methyl Tertiary Butyl Ether

DIPE = di-Isopropyl ether

ETBE = Ethyl t-butyl ether

TAME = t-Amyl methyl ether

(µg/L) = Micrograms per liter

-- = Not Analyzed

#### **ANALYTICAL METHODS:**

EPA Method 8260 for Oxygenate Compounds

### STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Environmental Management Company, the purge water and decontamination water generated during sampling activities is transported by IWM to Chemical Waste Management located in Kettleman Hills, California.



### WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#:	Cnevron #9-	1583		Job Number:	386506		
Site Address:	5509 Martin	Luther I	King Way	Event Date:	7-14	09	- (inclusive)
City:	Oakland, CA			Sampler:	-52		_ `,
Well ID Well Diameter Total Depth Depth to Water	MW-   2/85 in [9.67 ft [0.90 ft		Fa Check if water col	Date Monitored:  olume 3/4"= 0.  octor (VF) 4"= 0.  umn is less then 0.5	02 1"= 0.04 66 5"= 1.02 6	2"= 0.17 3"= 0.3 3"= 1.50 12"= 5.8	0
Depth to Water v	w/ 80% Recharge	_xVF (Height of	= Water Column x 0.2	x3 case volume : 0) + DTW]:	= Estimated Purge \	/olume:	_ gal.
Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:		\$ F C	Sampling Equipme Disposable Bailer Pressure Bailer Discrete Bailer Peristaltic Pump QED Bladder Pump Other:	nt:	Time Starte Time Comp Depth to Pr Depth to W Hydrocarbo Visual Conf Skimmer / A Amt Remov Amt Remov Water Remov	d:	ft f
Start Time (purge Sample Time/Dat Approx. Flow Rat Did well de-water Time (2400 nr.)	te: /	gpm. yes, Time	Water Col Sediment	Conditions: or: Description: lume:  Temperature C / F )	_Odor: Y / N gal. DTW @ S D.O. (mg/L)	ampling: ORP (mV)	
				INFORMATION			
SAMPLE ID	(#) CONTAINER  x voa vial  x 1 liter ambers	YES YES	HCL NP	E LABORATORY LANCASTER LANCASTER	TPH-GRO(8015)/6	ANALYSES BTEX+MTBE(8260)	
COMMENTS:	Mion	4					
Add/Replaced Lo	ock:	Add/	Replaced Plug:	· · · · · · · · · · · · · · · · · · ·	Add/Replaced	Bolt:	



### WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#:		Job Number: 386506						
Site Address:	Site Address: 5509 Martin Luther King Way				Event Date:		7-14-09	
City:	Oakland, CA			Sampler:		Tre		_ (inclusive)
Well ID	MW-2			Date Mon	itored <sup>.</sup>	7-14-		<u> </u>
Well Diameter	2/ <b>3</b> in.			<del></del>				<del>~</del>
Total Depth	18.82 ft	_		Volume Factor (VF)	3/4"= 0.03 $4$ "= 0.66		'= 0.17	-
Depth to Water	10.55 ft.		Check if water c				1.00 12 - 0.0	בי
	<del>- (0//33 "</del>	_				Estimated Purge Vo	luma.	•
Depth to Water v	v/ 80% Recharge	_^V	f Water Column v 0	X3 Case (	rolulile –	Estimated Furge Vo	ilume:	gal.
	oo io recendige	, i(v icigi ii oi	T TTALET COLUMN X O		-	Time Started:	<u> </u>	(2400 hrs)
Purge Equipment:			Sampling Equipm	ent:		Time Comple	ted:	(2400 hrs)
Disposable Bailer			Disposable Bailer			Depth to Prod	luct:	ft
Stainless Steel Bailer			Pressure Bailer			Hydrocarbon	er:	n
Stack Pump Discrete Baile				Hydrocarbon Thickness: Visual Confirmation/Description:				
Suction Pump			Peristaltic Pump					
Grundfos QED Blado				p		Skimmer / Absorbant Sock (circle one) Amt Removed from Skimmer:gal		ale one)
Peristaltic Pump Other:							d from Well:	gai gal
QED Bladder Pump			Water Removed:					
Other:						Product Trans	sferred to:	<del></del>
Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cin - µs	Tempera	ture	D.O. (mg/L)	orp (mV)	
SAMPLE ID	(#) CONTAINER	REFRIG.	LABORATOR PRESERV. TO				ANALYSES	
MW-	x voa vial	YES	HCL	LANCA		TPH-GRO(8015)/BT		<del></del>
	x t liter ambers	YES	NP	LANCA		TPH-MO (8015)		
<del></del>						<del></del>		
	<del></del>		67			<del></del>	<del></del> ·	
			<del> </del>	-				<del></del>
								<del></del>
			]					
COMMENTS:	W. 041	4	··					
Add/Peoleced L	 ock:	Add	/Replaced Plug	<del>-</del>		Add/Replaced B	olt:	



### WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#:	Chevron #9-	1583			Job Number:	386506		
Site Address:	5509 Martin	Luther	King Way		Event Date:	7-	14-09	– (inclusive)
City:	Oakland, CA	<u> </u>		;	Sampler:		re	<del>-</del> `
Well ID	MW-3			Det	e Monitored:	7-1	4-09	
Well Diameter	210	<del>_</del>	ı	Dat	e Monitorea:		4-0-1	<del></del>
Total Depth		_		Volume Factor (VI	3/4"= 0.0 F) 4"= 0.0		2"= 0.17 3"= 0.3	- 1
•			a				6"= 1.50 12"= 5.8	<u> </u>
Depth to Water	12-13 ft		Check if water					
Depth to Water v	w/ 80% Recharge		= Water Column x			- W		gal.
Duran Equipment			O			Time St	arted:	(2400 hrs)
Purge Equipment: Disposable Bailer			Sampling Equip			Depth to	Product:	(2+00+115)
Stainless Steel Bailer	. ——		Disposable Baile	_	<del></del>	Depth to	o Water:	ft
Stack Pump	<u> </u>		Pressure Bailer Discrete Bailer	_			arbon Thickness:	
Suction Pump	<del></del>		Peristaltic Pump	_		Visual C	Confirmation/Description	1:
Grundfos	<del></del>		Pensialuc Pump QED Bladder Pur	- nn		Skimme	er / Absorbant Sock (cire	de one)
Peristaltic Pump			Other:	_	<del></del> _	Amt Rer	moved from Skimmer:	gal
QED Bladder Pump			<u>.</u>			Ami Rer	noved from Well:	gal
Other:							Transferred to:	<del></del>
Start Time (purge Sample Time/Dat Approx. Flow Rat Did well de-water	te:/	gpm.	Water ( Sedime	er Condit Color: int Desc Volume:	ription:	_Odor: Y /	N	
Time (2400 hr.)	Volume (gal.)	pH	Conductivit (µmhos/cm -	y \ 1	emperature C / F )	D.O. (mg/L)	ORP (mV)	
<u> </u>								
SAMPLE ID	(#) CONTAINED	DEEDIG	LABORATO					
MW-	(#) CONTAINER x voa vial	REFRIG. YES	PRESERV. 1		ABORATORY	TDU CDOVEG	ANALYSES	
14144	x 1 liter ambers	YES	HCL NP		LANCASTER LANCASTER	TPH-GRO(801	15)/BTEX-MTBE(8260)	-
<del>-</del>	\		<del>                                     </del>	<del>-  </del>	LATOAOTEK	1111-110 (001)	-	-
						<del></del>		
_	***							
			<del> </del>	—↓				
		_	<del> </del>			·		
COMMENTS:	M.ov(	1						
Add/Replaced L	ock:	—`——Add	/Replaced Plu	g:		Add/Replace	ed Bolt:	



### WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#:	Chevron #9	-1583		Job Number:	386506					
Site Address:	5509 Martin	Luther I	King Way	Event Date:	7-14-09	(inclusive)				
City:	Oakland, CA	<u> </u>		Sampler:	Jue /	<del></del> ` ,				
	, n					<del></del>				
Well ID	MW- 7	_		Date Monitored:	7-14-09					
Well Diameter		<u>ı.</u>	Vol	lume 3/4"= 0.1	02 1"= 0.04 2"= 0.17 3	"= 0.38				
Total Depth	19.43 ft	<u>.</u>	Fac	ctor (VF) 4"= 0.0		"= 5.80				
Depth to Water	13.18 #		Check if water colu	umn is less then 0.5	60 ft.					
	6.25	_xVF <b>_</b>	17 = 1.06	2 x3 case volume :	= Estimated Purge Volume: 3	gal.				
Depth to Water	w/ 80% Recharge	e [(Height of	Water Column x 0.20	0) + DTWJ: <u>[44</u>	3					
					Time Started: Time Completed:	(2400 hrs)				
Purge Equipment:			Sampling Equipmen	nt:	Depth to Product:	(2400 IIIS)				
Disposable Bailer Stainless Steel Baile			Disposable Bailer		Depth to Water:					
Stack Pump	<del></del>		Pressure Bailer		Hydrocarbon Thickness:_					
Suction Pump	<del></del>		Discrete Bailer Peristaltic Pump		Visual Confirmation/Desc	ription:				
Grundfos	<del></del>		QED Bladder Pump		Skimmer / Absorbant Soc	k (circle one)				
Peristaltic Pump	<del></del>		Other:	<del></del>	Amt Removed from Skimi	mer:gal				
QED Bladder Pump		•	Julio1	<del></del> _	Amt Removed from Well:	gal				
Other:	<del></del>				Water Removed: Product Transferred to:	<del></del>				
Start Time /	e): <u>0815</u>		144							
Start Time (purge	0013	7 ( (	Weather C	onditions:	Clear	<del></del>				
Sample Time/Da	ite: <u>4845 /</u>	1-14	Water Col	or: <u>Sean</u>	Odor: O/N Sha	9				
Approx. Flow Ra				Description:		<u> </u>				
Did well de-wate	r? if	yes, Time	: Vo	lume:	gal. DTW @ Sampling: 4	4.02				
Time			Complexative	T						
(2400 hr.)	Volume (gal.)	рН	Conductivity (µmhos/cm - µS	Temperature	D.O. ORP (mg/L) (mV)					
0822	1	156	1041		(1114)					
0371	- "	4 37	7047	19.2						
0000	- 1/-	6:63	<u> </u>	19.6	<del></del>					
<del>085/</del>	3.7	46)	/oCo	<del>- /9.)</del>	<del></del>					
						<del></del>				
			LABORATORY							
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYP		ANALYSES					
MW-	6 x voa vial		HCL	LANCASTER	TPH-GRO(8015)/BTEX+MTBE(	8260)				
	2 x 1 liter ambers	YES	NP	LANCASTER	TPH-MO (8015)					
	<del>-</del>		<del>}</del>		<u> </u>	<del></del>				
					<del></del>					
						·				
		8								
		_	L		<u></u>					
COMMENTS:						,				
Add/Replaced L	ock:	A	Poplesed Dive		Add (Daules and Daul	<del></del>				
Aum vehiacen r		Aua/	Replaced Plug:		Add/Replaced Bolt:					



### WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#:	Chevron #9	<u>-1583</u>		Job Number:	386506	
Site Address:	5509 Martin	Luther h	King Way	Event Date:	7-14-09	(inclusive)
City:	Oakland, CA	1		Sampler:	Juc	
Well ID Well Diameter Total Depth Depth to Water	MW-8 C2/3 in 17.08 ft 12.26 ft 2/3-3 w/ 80% Recharge	xVF	Check if water col	Date Monitored:    Jume	02 1"= 0.04 2"= 0.17 66 5"= 1.02 6"= 1.50  0 ft.  Estimated Purge Volume:  Time Started: Time Completed: Depth to Product: Depth to Water: Hydrocarbon Thicknes Visual Confirmation/De	3"= 0.38 12"= 5.80  gal.  (2400 hrs) (2400 hrs) ft ft ss:ft escription:
Peristaltic Pump QED Bladder Pump Other:			Other:		Amt Removed from Sk	kimmer: gal  ell: gal
Start Time (purge Sample Time/Dat Approx. Flow Rat Did well de-water Time (2400 hr.)	te: 0425 1	gpm.	Water Col Sediment	or:	and the second s	
			LABORATORY	INFORMATION	<del>-</del> <del></del>	
SAMPLE ID  MW-  COMMENTS:	x voa vial x 1 liter ambers	YES YES	PRESERV. TYP HCL NP		ANALYS TPH-GRO(8015)/BTEX+MTE TPH-MO (8015)	
Add/Replaced L	ock:	Add/	Replaced Plug:		Add/Replaced Bolt:	

# Chevron California Region Analysis Request/Chain of Custody



071409-61

Acct. # 12099

For Lancaster Laboratories use only Sample # 5723410-12

\_\_ Group #: 017443

		CRA M	RA MTI Project # 61H-1960					Analyses Requested						1153475							
Facility #: SS#9-1583 G-R#386506 Gk	obal ID#T06	00100348		T	Matri	×	_				Pr	<b>ese</b>	rval	ion	Co	des	_	_	-	Preservative Codes	_
Site Address: 5509 MARTIN LUTHER KING	WAY, OAK	LAND, CA						1			_	$\dashv$	$\dashv$	$\neg$	$\dashv$	$\Box$			L	H = HCl T = Thiosulfa	ıte
Chevron PM: MTI Lead	Consultant.C	RAKJ		╌	1	$\mathbf{T}$							$\parallel$			ı				$N = HNO_3$ $B = NaOH$ $S = H_2SO_4$ $O = Other$	
Consultant/Office: G-R, Inc., 6747 Sierra Co	urt, Suite J,	Dublin, C4	9456	8	9 S	3	Jers		-	흥			$\parallel$		น	- 1				☐ J value reporting needed	ᅱ
Consultant Prj. Mgr.: Deanna L. Harding (d	eanna@grin	c.com)		7	☐ Potable		Containers	BTEX+MTBE 8280 1 8021 □		TPH 8015 MOD DRO Silica Gel Cleanup			П		201				1	Must meet lowest detection to	imite
Consultant Phone #:925-551-7555		5-551-7899	<del></del>	1		<u> </u>	ပ္ပိ	M		ğ	-		8	8	U					possible for 8260 compounds	3
Sampler: JOE A SEMIAN	/ cax w. <u>yee</u>			╡	12		ğ	8	E	SE SE		200	Method	Method	5					8021 MTBE Confirmation  Confirm highest hit by 8260	
				Soil	3.1	₹	Total Number		1PH 8015 MOD GRO	<u>§</u>	<b>E</b>	Oxygenates		Dissolved Lead	ロガース		i			Confirm all hits by 8260	
Parmete Information and	Sample Identification  Date  Collected  Collected  Collected		<b>1</b> g	톍	Water	□  ō	<u> </u>	Ž	8	98	8260 full scan	Š	Total Lead	Deved	2		ł			Run oxy's on highest hi	à l
	Collected	Collected	0	3 8	3				囙	Ĕ	8	1	힐	8	7	_				Run oxy's on all hits	
	7-14-09	0845	1	╁┈	0		2	<u> </u>	<del> </del>		+	+	+	+	$\overline{\mathcal{A}}$	$\dashv$				Comments / Remarks	$\Box$
MW-8	11	0935	ci	╁			2	7		$\dashv$	+	+	+	-	7	$\dashv$	$\dashv$		Н		]
				1	<del>- ' / -</del>		"	<del>`</del>	+	+	+	+	十	$\dashv$	+	+					ļ
							7	7	$\top$		1	+	$\dagger$	7	十	$\dashv$	7				- 1
	<u> </u>			$\perp$			$\Box$					工			$\exists$	7					1
			┢╌┝	╂		$\vdash \vdash$	4		4	1	Ţ	1	Ι.	1	$\Box$	325					
	<del>                                     </del>	<del>-</del>	╂─┼	╫	<del> </del>	╀┼	-	+	+	-	+	+	+	+	$\dashv$	4		_			
				+	0	-	+	+	+	+	╅	+	+	+	-+	-	┥	$\dashv$	$\dashv$		
					í			à	1	+	1	+	†	+	+	十	7	ᅱ	12		- [
		<u> </u>						$oxed{T}$								1	Ť				- 1
		Defin	<u> </u>								1			$\perp$							
Turnaround Time Requested (TAT) (please cir	-	Relingo	ished by	r. 	_				ŀ	Dai		Tim	18	Re	CEİV	ed by	: _/	L		2 14 Date Time	$\Box$
24 hour 4 day 5 day	ſ	Helingu	ished by			585			,,		4-4	(Im	0 - 10	Re	ceive	ad bv	<b>"</b>		_	Deta Tim	_
•		Relingui	iched by	and the	-			8.	4	V		Tim G3	8		£	15	1	1	7	Date Till	
Data Package Options (please circle if required)  QC Summary  Type I - Full  Relinquished by						<del></del>		ı	Dat	œ	Tim	9	Pé	ceilve	ed by	<u></u>	<u>.                                    </u>		Date Time	В	
Type VI (Raw Data) Coeff Deliverable not needed Relinquished by					l Carrie	er:							Re	eive	dby	<u>.</u>	H		Date Time	$\exists$	
WIP (RWQCB)				der	-	Ott										Uhi		<u> </u>	VX	7 148 व्याच्या	
Disk Temperature Upo					eceipt_		Į.	<b>4</b> -4	1.3				c°	Cu	itog	Sec	als ir	ntact	2 \	Yes No	1



12425, Lancester, PA 17605-2425 -717-656-2300 Fer: 717-656-2661 - www.lancesterlebs.com

# ANALYTICAL RESULT RECEIVED

Prepared for:

Chevron c/o CRA Suite 110 2000 Opportunity Drive Roseville CA 95678

GETTLER-RYAN INC. GENERAL CONTRACTORS

916-677-3407

Prepared by:

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

July 22, 2009

#### **SAMPLE GROUP**

The sample group for this submittal is 1153475. Samples arrived at the laboratory on Wednesday, July 15, 2009. The PO# for this group is 91583 and the release number is MTI.

Client Description Lancaster Labs Number QA-T-090714 NA Water 5723410 MW-7-W-090714 Grab Water 5723411 MW-8-W-090714 Grab Water 5723412

#### **METHODOLOGY**

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

**ELECTRONIC** COPY TO

Gettler-Ryan, Inc.

Attn: Cheryl Hansen



2425 New Holland Piles, PO Box 12425, Lancester, PA 17605-2425 •717-656-2300 Fex: 717-656-2661 • www.fancesterlabs.com

Questions? Contact your Client Services Representative Jill M Parker at (717) 656-2300

Respectfully Submitted,

Sarah Snyder Specialist



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 5723410

Group No. 1153475

CA

QA-T-090714 NA Water

Facility# 91583 Job# 386506 MTI# 61H-1960 GRD

5509 MLK Way-Oakland T0600100348 QA

Collected: 07/14/2009

Account Number: 12099

Submitted: 07/15/2009 09:00

Chevron c/o CRA

Reported: 07/22/2009 at 17:02

Suite 110

Discard: 08/22/2009

2000 Opportunity Drive Roseville CA 95678

1583Q

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Nethod Detection Limit	Dilution Factor
SW-846	8260B GC/MS Vol	atiles	ug/l	ug/l	
06054	Benzene	71-43-2	N.D.	0.5	1
06054	Ethylbenzene	100-41-4	N.D.	0.5	1
06054	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
06054	Toluene	108-88-3	N.D.	0.5	1
06054	Xylene (Total)	1330-20-7	N.D.	0.5	1
SW-846	8015B GC Volati	les	ug/1	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1

#### General Sample Comments

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06054 01146	GC/MS VOA Water Prep BTEX+MTBE by 8260B GC VOA Water Prep TPH-GRO N. CA water C6-C12	SW-846 5030B SW-846 8260B SW-846 5030B SW-846 8015B	1 1 1	F091983AA F091983AA 09197A20A 09197A20A	07/18/2009 00:28 07/18/2009 00:28 07/16/2009 17:18 07/16/2009 17:18		1



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

Page 1 of 1

Lancaster Laboratories Sample No. WW 5723411

Group No. 1153475

CA

MW-7-W-090714 Grab Water

Facility# 91583 Job# 386506 MTI# 61H-1960 GRD

5509 MLK Way-Oakland T0600100348 MW-7

Collected: 07/14/2009 08:45

by JA

Account Number: 12099

Submitted: 07/15/2009 09:00

Reported: 07/22/2009 at 17:02

Discard: 08/22/2009

Chevron c/o CRA

Suite 110

2000 Opportunity Drive Roseville CA 95678

15837

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846	8260B	GC/MS Vola	tiles_	ug/1	ug/l	
06054	Benzene		71-43-2	N.D.	0.5	1
06054	Ethylbenzene		100-41-4	N.D.	0.5	1
06054	Methyl Tertiary But	yl Ether	1634-04-4	10	0.5	1
06054	Toluene	-	108-88-3	N.D.	0.5	1
06054	Xylene (Total)		1330-20-7	N.D.	0.5	1
SW-846	8015B	GC Volatil	es	ug/l	ug/l	
01728	TPH-GRO N. CA water	C6-C12	n.a.	N.D.	50	1
SW-846	8015B modified	GC Extract	able TPH	ug/l	ug/l	
02500	Total TPH		n.a.	1,000	38	,
02500	TPH Motor Oil C16-C	36	n.a.	1,000	38	1
that	quantitation is based of a hydrocarbon com n-octane) through C40	mponent mix ca	comparison of libration in a	the sample pattern to	•	E .

#### General Sample Comments

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F091983AA	07/18/2009 00:	49 Kelly E Brickley	1
	BTEX+MTBE by 8260B	SW-846 8260B	1	P091983AA	07/18/2009 00:		1
01146	GC VOA Water Prep	SW-846 5030B	1	09197A20A	07/16/2009 19:		i
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09197A20A	07/16/2009 19:		1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	091970006A	07/16/2009 15:		1
02500	TPH Fuels by GC (Waters)	SW-846 8015B modified	1	091970006A	07/17/2009 19:	Attenberger 23 Heather E William	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-856-2300 Fax: 717-856-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5723412

Group No. 1153475

MW-8-W-090714 Grab Water

Facility# 91583 Job# 386506 MTI# 61H-1960 GRD

5509 MLK Way-Oakland T0600100348 MW-8

Collected: 07/14/2009 09:35

by JA

Account Number: 12099

Submitted: 07/15/2009 09:00

Reported: 07/22/2009 at 17:02

Discard: 08/22/2009

Chevron c/o CRA

Suite 110

2000 Opportunity Drive Roseville CA 95678

15838

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Nethod Detection Limit	Dilution Factor
SW-846	8260B GC/MS Vol	atiles	ug/l	ug/l	
06054	Benzene	71-43-2	N.D.	0.5	1
06054	Ethylbenzene	100-41-4	N.D.	0.5	î
06054	Methyl Tertiary Butyl Ether	1634-04-4	10	0.5	1
06054	Toluene	108-88-3	N.D.	0.5	î
06054	Xylene (Total)	1330-20-7	N.D.	0.5	i
SW-846	8015B GC Volati	les	ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	500	50	1
SW-846	8015B modified GC Extract	table TPH	ug/l	ug/l	
02500	Total TPH	n.a.	90	41	,
02500	TPH Motor Oil C16-C36	n.a.	90	41	1
that	muntitation is based on peak are of a hydrocarbon component mix con- noctane) through C40 (n-tetracon	alibration in a	f the sample pattern to a range that includes		4

#### General Sample Comments

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

#### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F091983AA	07/18/2009 01:10	Kelly E Brickley	1
06054		SW-846 9260B	1	F091983AA	07/18/2009 01:10	-	1
01146	GC VOA Water Prep	SW-846 5030B	1	09197A20A	07/16/2009 20:12	- +	1
01728		SW-846 8015B	1	09197A20A	07/16/2009 20:12		1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	091970006A	07/16/2009 15:29		î
02500	TPH Fuels by GC (Waters)	SW-846 8015B modified	1	091970006A	07/17/2009 18:58	Attenberger Heather E Williams	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: Chevron c/o CRA Reported: 07/22/09 at 05:02 PM

Group Number: 1153475

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

### Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>NDL</u>	Report Units	LCS <u>%REC</u>	LCSD <u>%RBC</u>	LCS/LCSD Limits	RPD	RPD Max
Batch number: F091983AA	Sample num	ber(s): 57	23410-5723	412				
Benzene Ethylbenzene Methyl Tertiary Butyl Ether Toluene Xylene (Total)	N.D. 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	95 93 90 93 93		80-116 80-113 78-117 80-115 81-114		
Batch number: 09197A20A TPH-GRO N. CA water C6-C12	Sample num	ber(s): 57: 50.	23410-5723 ug/l	412 109	118	75-135	8	30
Batch number: 091970006A Total TPH TPH Motor Oil C16-C36	Sample num N.D. N.D.	ber(s): 572 40. 40.	23411-5723 ug/l ug/l	412 99	100	60-120	1	20

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	ms <u>%rec</u>	msd <del>1</del> rec	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: F091983AA	Sample	number(s	): 5723410	-57234	12 UNSE	K: P722212			
Benzene	105	104	80-126	1	30				
Ethylbenzene	103	99	77-125	4	30				
Methyl Tertiary Butyl Ether	95	93	72-126	2	30				
Toluene	104	103	80-125	1	30				
Xylene (Total)	102	99	79-125	4	30				
Batch number: 09197A20A TPH-GRO N. CA water C6-C12	Sample	number (s	): 5723410 63-154	-57234	12 UNSP	K: P722105			

#### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: BTEX+MTBE by 8260B Batch number: F091983AA

Batch numb	er: F091983AA Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5723410	85	91	90	0.4

#### \*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17805-2425 •717-656-2300 Fax: 717-656-2681 • www.lancaster(abs.com

Page 2 of 2

### Quality Control Summary

Client   Reported	Name: Chevron c/o d: 07/22/09 at 05	CRA:02 PM	Group Number:	1153475
-	, ,		te Quality Contro	01
5723411	86	89	88	
5723412	84	89	89	93 105
Blank	88	92	88	
LCS	89	92	88	96 96
MS	89	92	87	
MSD	89	91	87	97 9 <b>4</b>
			0,	74
Limits:	80-116	77-113	80-113	78-113
Analysis	Name: TPH-GRO N. CA wa	ater C6-C12		
Batch numl	ber: 09197A20A			
	Trifluorotoluene-F			
5723410	103			· · · · · · · · · · · · · · · · · · ·
5723411	104			
5723412	114			
Blank	103			
LCS	126			
LCSD	131			
MS	133			
Limits:	63-135			
Analysis Name: TPH Fuels by GC (Waters) Batch number: 091970006A				
	Chlorobenzene	Orthoterphenyl		
5723411	66	90		
5723412	101	103		
Blank	66	90		
LCS	91	113		
LCSD	96	117		
Limits:	28-152	52-131		<del></del>

### \*- Outside of specification

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

<sup>(2)</sup> The unspiked result was more than four times the spike added.

### Lancaster Laboratories Explanation-of Symbols and Abbreviations

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

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
· IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
C	degrees Celsius	F	degrees Fahrenheit
Cai	(diet) calories	lb.	pound(s)
meq	milliequivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	Ĭ	liter(s)
ml	milliliter(s)	ul	microliter(s)
m3	cubic meter(s)	fib >5 um/mi	fibers greater than 5 microns in length per ml

- 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
- 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.

**Inorganic Qualifiers** 

- ppb parts per billion
- Dry weight Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Orga	nic	Qui	aiifi	ers

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

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

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.