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10:32 am, May 31, 2011 Alameda County Environmental Health

<u>May 24, 2011</u> (date) **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

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

Re: Chevron Facility #_9-1740____

Address: 6550 Moraga Avenue, Oakland, California_

I have reviewed the attached report titled <u>2011 Annual Groundwater Monitoring Report</u> and dated <u>May 24, 2011</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,

SHFrencho

Stacie H. Frerichs Project Manager

Enclosure: Report



10969 Trade Center Drive Rancho Cordova, California 95670 Telephone: (916) 889-8900 Fax: (916) 889-8999 http://www.craworld.com

May 24, 2011

Reference No. 611978

Mr. Mark Detterman, P.G., C.E.G. Alameda County Environmental Health (ACEH) 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Re: 2011 Annual Groundwater Monitoring Report Chevron Service Station 9-1740 6550 Moraga Avenue Oakland, California ACEH Case No. RO0000256

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 March 22, 2011) presents the results of the 2011 annual monitoring event. Sampling of wells C-2 through C-4 is performed annually during the first quarter. Also attached are Figure 1 (Vicinity Map) showing the site location, and Figure 2 (Concentration Map) presenting the 2011 annual analytical results along with a rose diagram. The monitoring results during 2011 are summarized below.

During 2011, petroleum hydrocarbon concentrations in the site wells were similar to, or less than, those observed during 2010. Concentrations of total petroleum hydrocarbons as diesel (TPHd) (1,500 micrograms per liter [μ g/L]), TPH as gasoline (TPHg) (2,500 μ g/L), benzene (270 μ g/L), and methyl tertiary butyl ether (MTBE) (250 μ g/L) continue to be detected in C-4. The detected concentrations were within historical ranges in this well; however, the MTBE concentration was the lowest since 2003. Low concentrations of toluene, ethylbenzene, and xylenes (up to 7 μ g/L) were also detected in C-4; these concentrations were also within historical ranges.

Only MTBE was detected in C-2 (80 μ g/L) and C-3 (3 μ g/L) during 2011. TPHd and TPHg are only periodically detected in C-2, and only at low concentrations; and benzene, toluene, ethylbenzene, and xylenes (BTEX) have not been detected since 1999. Although fluctuations occur, the MTBE concentrations in C-2 continue to decrease and have significantly decreased over the years. Petroleum hydrocarbons generally have not been detected in C-3 throughout the course of monitoring with the exception of low concentrations of MTBE.

> Equal Employment Opportunity Employer



May 24, 2011

Reference No. 611978

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Based on the analytical results, impacted groundwater remains beneath the site in the area of well C-4 just downgradient of the underground storage tanks (USTs); concentrations in this well have remained relatively stable with the exception of MTBE; which is decreasing. Only low concentrations of MTBE remain in wells C-2 and C-3.

Based on previous investigation results, the extent of hydrocarbons in groundwater has been adequately defined to the extent possible and the site is a good candidate for low-risk case closure. As such, CRA recommends discontinuing groundwater monitoring. To address ACEH's remaining concern prior to closure concurrence, CRA prepared and submitted the December 10, 2010 *Evaluation of Potential Discharge of Petroleum Hydrocarbons to Shepherd Creek via Preferential Pathway Migration*, and we are currently awaiting a response from ACEH.

Please note that Ms. Olivia Skance has replaced Ms. Stacie Frerichs as the Chevron Project Manager and all future correspondence should be directed to her at 6101 Bollinger Canyon Road, San Ramon, CA 94583.



May 24, 2011

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Reference No. 611978

Please contact James Kiernan at (916) 889-8917 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

James P. Kiernan, P.E.

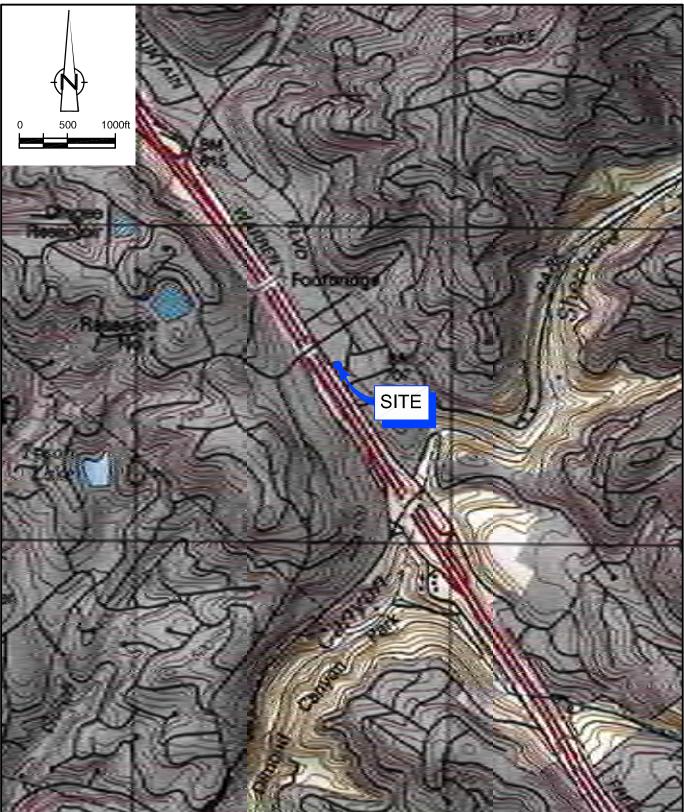
JK/aa/5 Encl.

Figure 1	Vicinity Map
Figure 2	Concentration Map – February 28, 2011

Attachment A Groundwater Monitoring and Sampling Report

No. 68498 Exp. 9/30/ //

cc: Ms. Olivia Skance, Chevron (*electronic copy*) Mr. Douglas Durein, Ken Betts, Inc. FIGURES

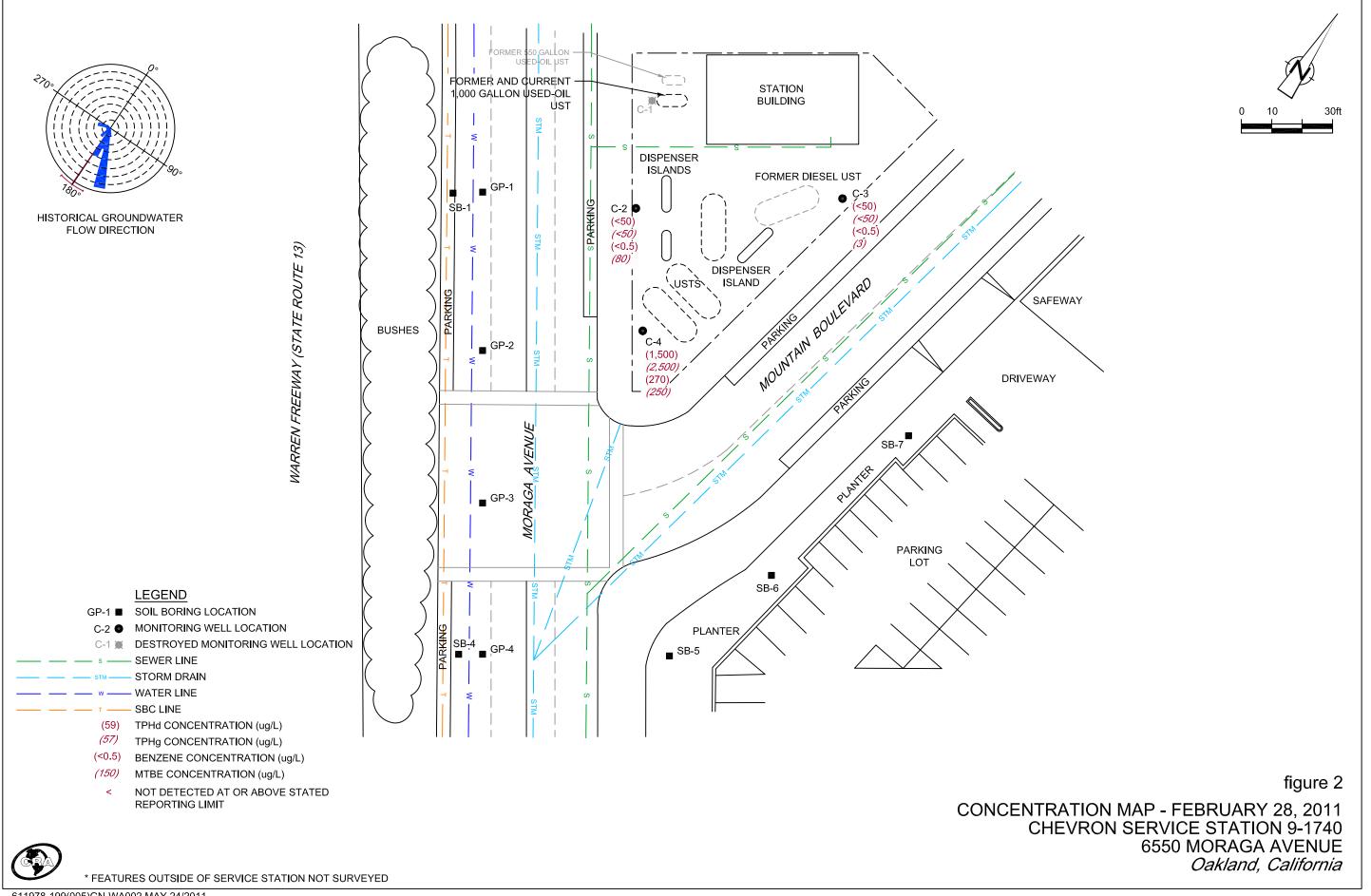


SOURCE: TOPO!MAP



figure 1 VICINITY MAP CHEVRON SERVICE STATION 9-1740 6550 MORAGA AVENUE *Oakland, California*

611978-199(005)GN-WA001 MAY 03/2011



611978-199(005)GN-WA002 MAY 24/2011

ATTACHMENT A

GROUNDWATER MONITORING AND SAMPLING REPORT



March 22, 2011 G-R Job #386507

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

RE: Annual Event of February 28, 2011 Groundwater Monitoring & Sampling Report Chevron Service Station #9-1740 6550 Moraga Avenue 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,

uden Deanna L. Harding **Project Coordinator** No. 6882 Douglas J Lee Senidr Geologist, P.G. No. 6882 CAL Figure 1: Potentiometric Map Table 1: Groundwater Monitoring Data and Analytical Results Table 2: **Dissolved Oxygen Concentrations** Table 3: Groundwater Analytical Results - Oxygenate Compounds Attachments: Standard Operating Procedure - Groundwater Sampling **Field Data Sheets** Chain of Custody Document and Laboratory Analytical Reports

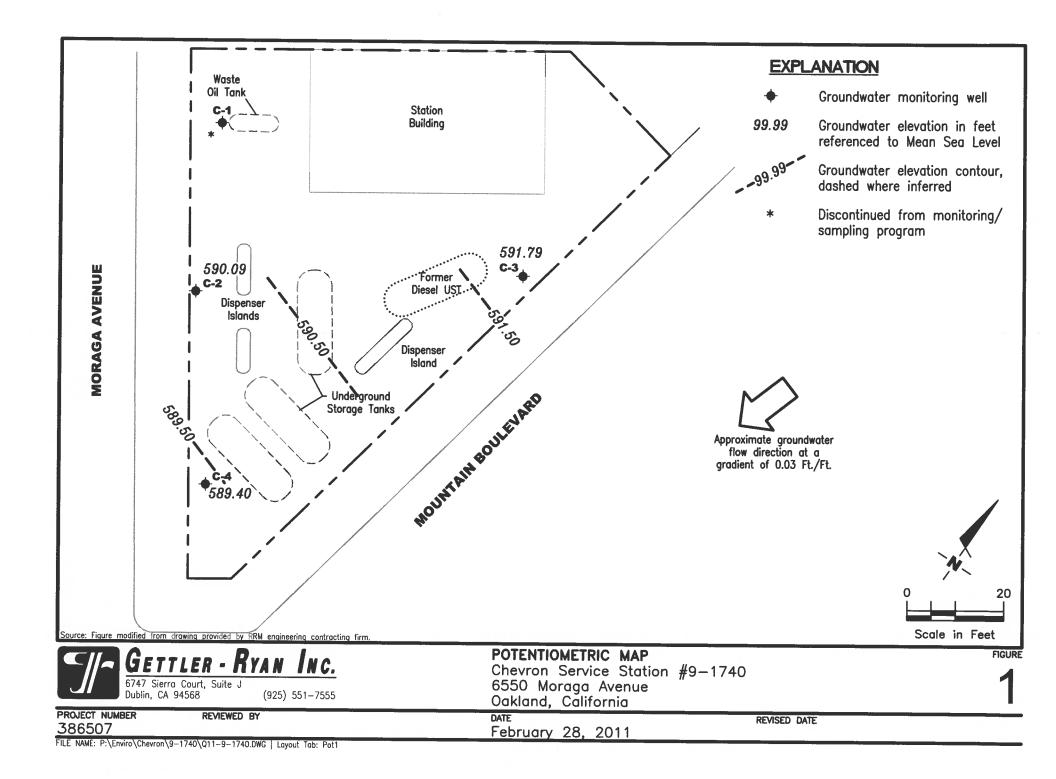


Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Service Station #9-1740
6550 Moraga Avenue

										-
n	0	V	10	n	A	C	.1;	fo	rnia	

					Uak	and, Californi	a				
WELL ID/	TOC*	GWE	DTW	SPHT	TPH-DRO	TPH-GRO	В	Т	E	x	MTBE
DATE	(91-)	(msl)	(ft.)	(ft.)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
C-2											
03/25/91	594.57	571.68	22.89			<50	1.0	<0.5	<0.5	2.0	
07/01/91	594.57	587.20	7.37			660	190	2.5	28	2.0	
09/25/91	594.57	587.59	6.98			110	200	1.9	28	1.7	
12/23/91	594.57	589.56	5.01			<50	1.2	1.2	<0.5	1.7	
03/24/92	594.57	577.30	17.27			100	5.9	7.9	4.0	1.0	
06/23/92	594.57	590.75	3.82			190	45	4.5	9.5	10	
09/30/92	594.57	580.56	14.01			240	99	2.3	11	6.1	
12/16/92	594.57	580.05	14.52			280	160	6.2	7.4	5.0	
03/30/93	594.57	583.49	11.08			110	21	<0.5	0.8	<1.5	
06/10/93	594.57	583.08	11.49			180	53	2.6	8.0	5.8	
09/02/93	594.57	580.49	14.08			51	18	0.8	4.4	<1.5	
12/06/93	594.57	579.87	14.70			<50	20	1.3	2.7	<0.5	
03/02/94	594.57	579.70	14.87			<50	9.9	1.6	<0.5	0.8	
06/03/94	594.57	579.35	15.22			440	300	2.7	61	2.1	
09/07/94	594.57	587.27	7.30			80	30	<0.5	1.6	< 0.5	
12/06/94	594.57	589.29	5.28			120	51	<0.5	4.7	<0.5	
03/31/95	594.57	589.13	5.44			770	250	<5.0	74	<5.0	
06/15/95	594.57	589.62	4.95			240	76	<1.0	26	<1.0	
09/25/95	594.57	587.78	6.79			<50	1.2	<0.5	<0.5	<0.5	
12/19/95	594.57	588.94	5.63			<250	23	<2.5	<2.5	<2.5	860
03/31/97	594.57	589.74	4.83			<500	48	<5.0	<5.0	<5.0	2,900
06/23/97	594.57	589.98	4.59			1200	240	<10	<10	<10	4,900
09/02/97	594.57	590.02	4.55			1400	340	<5.0	54	6.9	2,500
12/15/97	594.57	590.26	4.31			540	100	<2.5	8.7	<2.5	2,400
03/10/98	594.57	590.00	4.57			<500	<5.0	<5.0	<5.0	<5.0	3,000
06/16/98	594.57	589.99	4.58			120	6.6	<1.0	<1.0	<1.0	2,500
08/25/98	594.57	589.67	4.90			140	<0.5	<0.5	<0.5	<0.5	2,600
12/29/98	594.57	589.77	4.80			1830	17.7	<10.0	<10.0	14.9	4,600/4,890 ¹
03/09/99	594.57	590.21	4.36			120	16	<1.0	<1.0	<1.0	3,400
06/23/99 ²	594.57	589.92	4.65								
09/28/99	594.57	585.99	8.58			<50	<0.5	<0.5	<0.5	<0.5	1,250
02/29/00	594.57	586.59	7.98			122	<0.5	<0.5	<0.5	<0.5	249
08/29/00	594.57	587.52	7.05	0.00		<50	<0.50	< 0.50	<0.50	< 0.50	390
03/27/01	594.57	587.73	6.84	0.00		<50.0	<0.500	< 0.500	<0.500	<0.500	9.72
09/05/01 ⁴	594.57	587.37	7.20	0.00	58 ⁵	360	< 0.50	<0.50	<0.50	<1.5	1,300/1,000 ¹
03/04/02 ⁴	594.57	587.59	6.98	0.00	270 ⁶	190	<0.50	<0.50	<0.50	<1.5	440

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					6550	rvice Station #9 Moraga Avenue and, California					
WELL ID/	TOC*	GWE	DTW	SPHT	TPH-DRO	TPH-GRO	B	Т	E	X	MTBE
DATE	(j1.)	(msl)	(ft.)	(f1-)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
C-2 (cont)											
09/03/02 ⁴	594.57	587.29	7.28	0.00	760°	120	<0.50	<0.50	<0.50	<1.5	290
03/29/034	594.57	588.06	6.51	0.00	<50 ⁶	53	<0.5	<0.5	<0.5	<1.5	73
09/23/034,7	594.57	587.71	6.86	0.00	64 ⁶	<50	<0.5	<0.5	<0.5	<0.5	12
03/17/047.8	594.57	587.35	7.22	0.00	<50 ⁶	82	<0.5	<0.5	<0.5	<0.5	370
09/13/047	594.57	589.16	5.41	0.00	<50°	67	<0.5	<0.5	<0.5	<0.5	530
03/11/057	594.57	589.84	4.73	0.00	84°	110	<0.5	<0.5	<0.5	<0.5	580
09/29/05 ⁷	594.57	589.01	5.56	0.00	826,9	61	<0.5	<0.5	<0.5	<0.5	320
03/20/067	594.57	590.15	4.42	0.00	120 ⁶	<50	<0.5	<0.5	<0.5	<0.5	500
08/25/067	594.57	589.06	5.51	0.00	130 ⁶	93	<0.5	<0.5	<0.5	<0.5	460
03/12/077	594.57	589.66	4.91	0.00	_10	<50	<0.5	<0.5	<0.5	<0.5	110
03/21/07	594.57	589.85	4.72	0.00	220 ⁶	-		-			-
09/21/077	594.57	588.93	5.64	0.00	<506	<50	<0.5	<0.5	<0.5	<0.5	180
03/10/087	594.57	589.76	4.81	0.00	<506	73	<0.5	<0.5	<0.5	<0.5	170
09/15/087	594.57	588.61	5.96	0.00	59 ⁶	57	<0.5	<0.5	<0.5	<0.5	150
03/03/097	594.57	589.92	4.65	0.00	<506	<50	<0.5	<0.5	<0.5	<0.5	54
08/31/097	594.57	588.66	5.91	0.00	<506	89	<0.5	<0.5	<0.5	<0.5	240
03/24/107	594.57	590.04	4.53	0.00	62 ⁶	<50	<0.5	<0.5	<0,5	<0.5	50
02/28/11 ⁷	594.57	590.09	4.48	0.00	<50 ⁶	<50	<0.5	<0.5	<0.5	<0.5	80
C-3											
03/25/91	597.14	591.98	5.16		- Q	<50	<0.5	<0.5	<0.5	0.5	
07/01/91	597.14	591.30	5.84		-	<50	<0.5	<0.3 <0.5	<0.5 <0.5		-
09/25/91	597.14	591.20	5.94	-	-	<50	<0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	
12/23/91	597.14	591.20	5.94	-	ā.	<50	1.0	<0.3 <0.5	<0.5 <0.5	<0.5 1.5	
03/24/92	597.14	592.37	4.77		2	<50 <50	<0.5	<0.5	<0.5 <0.5	<0.5	÷.
06/23/92	597.14	591.47	5.67	2		<50 <50	0.9	1.1	<0.3 0.5		
09/30/92	597.14	590.84	6.30			<50 <50	<0.5	<0.5	0.5 <0.5	1.6	
12/16/92	597.14	591.57	5.57			<50 <50	<0.5	<0.5	<0.5 <0.5	<0.5	
03/30/93	597.14	592.08	5.06	1.2		<50 <50	<0.5	<0.3 <0.5	<0.5 <0.5	< 0.5	**
06/10/93	597.14	591.85	5.29	-		<50 <50	<0.5 0.6	<0.5 1.9		<1.5	
09/02/93	597.14	591.22	5.92		-	<50 <50	< 0.5		0.6	3.5	
12/06/93	597.14	591.38	5.76	-		<50 <50	<0.5 <0.5	<0.5 0.6	<0.5	<1.5	-
03/02/94	597.14	591.97	5.17		-	<50 <50	<0.5 <0.5		<0.5	<0.5	-
06/03/94	597.14	591.97	5.40		-	<50 <50		<0.5	<0.5	<0.5	-
00/03/74	577.14	J71./4	5.40	***		~30	<0.5	<0.5	<0.5	<0.5	-

Table 1Groundwater Monitoring Data and Analytical ResultsChevron Service Station #9-17406550 Moraga Avenue

					Oak	land, Californi	a				
WELL ID/	TOC*	GWE	DTW	SPHT	TPH-DRO	TPH-GRO	В	T	E	x	MTBE
DATE	(JL)	(msl)	(ft.)	(f1.)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
C-3 (cont)											
09/07/94	597.14	591.14	6.00			<50	< 0.5	<0.5	<0.5	<0.5	
12/06/94	597.14	591.95	5.19			<50	<0.5	0.8	<0.5	<0.5	
03/31/95	597.14	592.04	5.10			<50	< 0.5	<0.5	<0.5	<0.5	
06/15/95	597.14	591.78	5.36			<50	<0.5	<0.5	<0.5	<0.5	
09/25/95	597.14	591.04	6.10			<50	<0.5	<0.5	<0.5	<0.5	
12/19/95	597.14	591.46	5.68			<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/31/97	597.14	590.65	6.49			<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/23/97	597.14	590.63	6.51			<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/02/97	597.14	591.07	6.07			<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/15/97	597.14	590.86	6.28			<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/10/98	597.14	590.89	6.25			<50	<0.5	<0.5	<0.5	<0.5	4
06/16/98	597.14	590.80	6.34			<50	<0.5	<0.5	<0.5	<0.5	<2.5
08/25/98	597.14	590.61	6.53			<50	<0.5	<0.5	<0.5	<0.5	<5.0
12/29/98	597.14	590.59	6.55			<50	<0.5	<0.5	<0.5	<0.5	<2.0
03/09/99	597.14	591.20	5.94			<50	<0.5	<0.5	<0.5	<0.5	3
09/28/99	597.14	590.26	6.88		SAMPLED A						
02/29/00	597.14	591.56	5.58			<50	<0.5	<0.5	<0.5	<0.5	10
08/29/00	597.14	590.53	6.61	0.00							
03/27/01	597.14	591.00	6.14	0.00		264	<2.50	<2.50	<2.50	<2.50	870
09/05/01	597.14	590.46	6.68	0.00							/<2 ¹
03/04/02	597.14	590.93	6.21	0.00	<50 ⁶	<50	<0.50	<0.50	<0.50	<1.5	<5.0
09/03/02	597.14	590.40	6.74	0.00	SAMPLED A	NNUALLY					
03/29/03	597.14	590.86	6.28	0.00	<50 ⁶	<50	<0.5	<0.5	<0.5	<1.5	<2.5
09/23/03	597.14	590.51	6.63	0.00	SAMPLED A						
03/19/047	597.14	591.24	5.90	0.00	<50 ⁶	<50	<0.5	<0.5	<0.5	<0.5	2
09/13/04	597.14	591.85	5.29	0.00	SAMPLED A						2
03/11/05 ⁷	597.14	591.53	5.61	0.00	<50 ⁶	<50	<0.5	<0.5	<0.5	<0.5	2
09/29/05	597.14	590.22	6.92	0.00	SAMPLED A						
03/20/06 ⁷	597.14	591.86	5.28	0.00	<50 ⁶	<50	<0.5	< 0.5	<0.5	<0.5	3
08/25/06	597.14	590.51	6.63	0.00	SAMPLED AI		-0.5	-0.5		-0.5	
03/12/077	597.14	591.07	6.07	0.00	10	55	<0.5	<0.5	<0.5	<0.5	2
03/21/07	597.14	590.91	6.23	0.00	240 ⁶						
09/21/07	597.14	590.29	6.85		SAMPLED AI	 NNUALLY					
03/10/087	597.14	590.89	6.25	0.00	<50 ⁶	87	<0.5	<0.5	<0.5	<0.5	3
09/15/08	597.14	590.15	6.99		SAMPLED AI			0.0	0.0	-0.0	3

Groundwater Monitoring Data and Analytical Results Chevron Service Station #9-1740 6550 Moraga Avenue Oakland, California											
WELL ID/	TOC*	GWE	DTW	SPHT	TPH-DRO	TPH-GRO	В	т	E	X	MTBE
DATE	(ft.)	(msl)	(ft.)	(fl.)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
C-3 (cont)											
03/03/097	597.14	591.22	5.92	0.00	556	<50	<0.5	<0.5	<0.5	<0.5	3
08/31/09	597.14	590.38	6.76	0.00	SAMPLED AN						-
03/24/107	597.14	591.82	5.32	0.00	776	<50	<0.5	<0.5	<0.5	<0.5	3
02/28/117	597.14	591.79	5.35	0.00	<50 ⁶	<50	<0.5	<0.5	<0.5	<0.5	3
C-4											
03/25/91	593.10	588.65	4.45		-	2700	240	16	<0.5	350	
07/01/91	593.10	587.77	5.33	-	+	7900	1500	230	340	350	
09/25/91	593.10	587.60	5.50			3200	850	160	150	220	
2/23/91	593.10	588.18	4.92			4100	390	52	42	340	
)3/24/92	593.10	589.06**	4.19	0.19							
6/23/92	593.10	588.34**	4.91	0.30							
9/30/92	593.10	584.44	8.66			450	97	14	12	29	
2/16/92	593.10	583.30	9.80			590	130	18	5.6	29	
3/30/93	593.10	583.25**	10.00	0.12	-22						-
06/10/93	593.10	583.46	9.64			1300	290	36	17	73	
9/02/93	593.10	583.02	10.08	÷.		630	97	12	6.6	21	
2/06/93	593.10	582.85	10.25	-		1900	600	68	27	130	
3/02/94	593.10	584.36	8.74			2600	1200	110	43	180	
6/03/94	593.10	583.27	9.83	-		780	180	13	8.5	26	-
9/07/94	593.10	582.80	10.30			<50	14	<0.5	0.7	<0.5	-
2/06/94	593.10	583.90	9.20			980	270	21	12	38	-
3/31/95	593.10	582.86	10.24			1500	450	25	11	49	
6/15/95	593.10	582.78	10.32			960	250	15	4.5	37	
9/25/95	593.10	584.72	8.38			<500	18	<5.0	<5.0	<5.0	
2/19/95	593.10	582.94	10.16	-		<500	32	<5.0	<5.0	<5.0	2,400
3/31/97	593.10	588.42	4.68			3400	960	51	64	140	2,100
6/23/97	593.10	588.36	4.74			1600	580	19	8.2	27	2,300
9/02/97	593.10	588.33	4.77		- 2 0	6900	1400	59	130	410	3,100
2/15/97	593.10	588.60	4.50			3300	1200	37	74	130	3,700
3/10/98	593.10	588.92	4.18			1100	250	19	13	62	4,000
6/16/98	593.10	586.53	6.57			1200	350	<10	12	39	4,500
8/25/98	593.10	586.30	6.80			290	24	0.72	0.87	1.9	3,600
2/29/98	593.10	586.80	6.30		144	3190	957	<25	<25	<25	8,100/8,500 ¹
)3/09/99	593.10	585.87	7.23		(2200	850	15	35	56	5,900

Table 1 Groundwater Monitoring Data and Analytical Results Chevron Service Station #9-1740

6550 Moraga Avenue Oakland, California											
WELL ID/	TOC*	GWE	DTW	SPHT	TPH-DRO	TPH-GRO	В	T	E	x	MTBE
DATE	(91.)	(msl)	(fl.)	(fL)	(µg/L)	(pg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
C-4 (cont)											
06/23/99 ²	593.10	585.60	7.50								
09/28/99	593.10	586.15	6.95		÷	1390	7.85	<5.0	<5.0	<5.0	4,190
02/29/00	593.10	586.09	7.01	A-	-	<50	1.35	<0.5	<0.5	<0.5	310
08/29/00	593.10	586.58	6.52	0.00		150 ³	60	< 0.50	0.79	0.78	570
03/27/01	593.10	587.29	5.81	0.00		986	27.2	<2.50	3.25	4.11	252
09/05/014	593.10	586.72	6.38	0.00	3,800 ⁵	330	140	0.84	< 0.50	<1.5	580/520 ¹
03/04/024	593.10	587.44	5.66	0.00	2,900 ⁶	170	67	<0.50	< 0.50	<1.5	510
09/03/02 ⁴	593.10	586.62	6.48	0.00	1,900 ⁶	<50	12	<0.50	<0.50	<1.5	64
03/29/034	593.10	587.26	5.84	0.00	950 ⁶	<50	3.3	<0.5	<0.5	<1.5	67
09/23/034.7	593.10	586.91	6.19	0.00	57 ⁶	<50	<0.5	<0.5	<0.5	<0.5	12
03/17/047.8	593.10	587.12	5.98	0.00	1,900 ⁶	1,500	310	5	2	<0.5 4	520
09/13/047	593.10	588.22	4.88	0.00	1,300 ⁶	840	260	3	2	1	990
03/11/057	593.10	589.20	3.90	0.00	2,900 ⁶	350	66	1	2 <1	<1	
09/29/057	593.10	585.07	8.03	0.00	2,500 ⁶	740	160	2	1	<1	1,100
03/20/067	593.10	589.47	3.63	0.00	1,200 ⁶	1,400	300	5	1		1,500
08/25/067	593.10	588.30	4.80	0.00	1,300 ⁶	450	82	2	<0.5	2 <0.5	1,600
03/12/077	593.10	585.50	7.60	0.00	10	670	110	1	<0.5	<0.5	1,300
03/21/07	593.10	585.07	8.03	0.00	1,800 ⁶						1,100
09/21/077	593.10	585.20	7.90	0.00	2,100 ⁶	260	18	<0.5	<0.5	<0.5	
03/10/087	593.10	585.69	7.41	0.00	2,100 7,500 ⁶	560	72	-0.5	<0.5	<0.5	1,100
03/15/08	593.10	586.45	6.65	0.00					-0.5		1,100
09/15/087	593.10	585.10	8.00	0.00	5,200 ⁶	760	110	2	0.6	<0.5	 1,100
03/03/097	593.10	585.94	7.16	0.00	1,800 ⁶	1,700	360	5	2	-0.5	900
08/31/097	593.10	585.17	7.93	0.00	2,000 ⁶	2,700	440	11	3	3	900
03/24/107	593.10	589.36	3.74	0.00	1,600 ⁶	2,100	270	7	2	3	930 470
02/28/117	593.10	589.40	3.70	0.00	1,500	2,500	270	7	3	3	250
						_,	210		5	5	250
C-1											
03/25/91	595.82	592.54	3.28	-	-	54	0.7	<0.5	<0.5	2.0	1.24
07/01/91	595.82	592.39	3.43	-	-	730	250	3.0	16	4.8	
09/25/91	595.82	591.67	4.15		-	160	68	1.3	6.1	1.3	
12/23/91	595.82	592.11	3.71			170	70	1.6	3.5	2.4	
03/24/92	595.82	592.80	3.02	-	4	60	39	4.4	3.9	9.1	
06/23/92	595.82	592.06	3.76	<u></u>	-	60	19	1.1	1.1	1.0	-
NOT MONITOR										1.0	

A				Groundw	Chevron Se 6550	ring Data and ervice Station # Moraga Avenu land, California	9-1740 ie	Results			
WELL ID/ DATE	TOC*	GWE	DTW	SPHT	TPH-DRO	TPH-GRO	В	Т	E	X	MTBE
	(ft.)	(msl)	(ft.)	(jî.)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
TRIP BLANK											
03/25/91						<50	<0.5	<0.5	<0.5	<0.5	
07/01/91						<50	<0.5	<0.5	<0.5	< 0.5	
09/25/91						<50	<0.5	<0.5	<0.5	<0.5	
12/23/91						<50	<0.5	<0.5	<0.5	<0.5	
03/24/92						<50	<0.5	<0.5	<0.5	<0.5	
06/23/92						<50	<0.5	<0.5	<0.5	<0.5	
09/30/92						<50	<0.5	<0.5	<0.5	< 0.5	
12/16/92						<50	<0.5	<0.5	<0.5	<0.5	
03/30/93						<50	<0.5	<0.5	<0.5	<1.5	
06/10/93						<50	<0.5	<0.5	<0.5	<1.5	
09/02/93						<50	<0.5	<0.5	<0.5	<1.5	
12/06/93						<50	<0.5	<0.5	<0.5	<0.5	
03/02/94						<50	<0.5	<0.5	<0.5	<0.5	
06/03/94						<50	<0.5	<0.5	< 0.5	<0.5	
09/07/94						<50	<0.5	<0.5	<0.5	<0.5	
12/06/94						<50	<0.5	<0.5	<0.5	<0.5	
03/31/95						<50	<0.5	< 0.5	< 0.5	<0.5	
06/15/95						<50	<0.5	<0.5	< 0.5	<0.5	
09/25/95						<50	<0.5	<0.5	<0.5	<0.5	
12/19/95						<50	<0.5	<0.5	<0.5	<0.5	
03/31/97						<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/23/97						<50	<0.5	<0.5	<0.5	<0.5	<2.5
09/02/97						<50	<0.5	<0.5	<0.5	<0.5	<2.5
12/15/97						<50	<0.5	<0.5	<0.5	<0.5	<2.5
03/10/98						<50	<0.5	<0.5	<0.5	<0.5	<2.5
06/16/98						<50	<0.5	<0.5	<0.5	<0.5	<2.5
08/25/98						<50	<0.5	<0.5	<0.5	<0.5	
12/29/98						<50	<0.5	<0.5	<0.5		<5.0
03/09/99						<50	<0.5			<0.5	<2.0
09/28/99						<50	<0.3 <0.5	<0.5	<0.5	<0.5	<2.5
02/29/00						<50	<0.3 <0.5	<0.5	<0.5	<0.5	<2.5
08/29/00						<30 <50		< 0.5	< 0.5	< 0.5	<5.0
03/27/01							<0.50	< 0.50	< 0.50	< 0.50	<2.5
09/05/01						<50.0	<0.500	<0.500	< 0.500	<0.500	<0.500
03/04/02						<50	<0.50	<0.50	< 0.50	<1.5	<2.5

Table 1
Groundwater Monitoring Data and Analytical Results
Chevron Service Station #9-1740

6550 Moraga Avenue

WELL ID/	TOC*	GWE	DTW	SPHT	TPH-DRO	TPH-GRO	В	Т	E	X	MTBE
DATE	(ft.)	(msl)	(ft.)	(fL)	(pg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
QA											
09/03/02		-			in à Chi	<50	<0.50	<0.50	<0.50	<1.5	<2.5
03/29/03		1.44			-	<50	<0.5	<0.5	<0.5	<1.5	<2.5
09/23/037						<50	<0.5	<0.5	<0.5	<0.5	<0.5
03/19/047	-				-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
09/13/047			-			<50	<0.5	<0.5	<0.5	<0.5	<0.5
03/11/057	-	-				<50	<0.5	<0.5	<0.5	<0.5	<0.5
09/29/057		÷.	-		÷.	<50	<0.5	<0.5	<0.5	<0.5	<0.5
03/20/067		44				<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/25/067	-				-	<50	<0.5	<0.5	<0.5	<0.5	<0.5
03/12/077	-	14 A A A A A A A A A A A A A A A A A A A			- 6÷01	<50	<0.5	<0.5	<0.5	<0.5	<0.5
09/21/077	-	-				<50	<0.5	<0.5	<0.5	<0.5	<0.5
03/10/087						<50	<0.5	<0.5	<0.5	<0.5	<0.5
09/15/087		(.	4			<50	<0.5	<0.5	<0.5	<0.5	<0.5
03/03/097						<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/31/097				-		<50	<0.5	<0.5	<0.5	<0.5	<0.5
DISCONTINUED)									-0.5	-0.5

Table 1 Groundwater Monitoring Data and Analytical Results Chevron Service Station #9-1740 6550 Moraga Avenue Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to August 29, 2000, were compiled from reports prepared by Blaine Tech Services, Inc.

TOC = Top of Casing (ft.) = Feet GWE = Groundwater Elevation (msl) = Mean sea level DTW = Depth to Water SPHT = Separate Phase Hydrocarbon Thickness TPH-D = Total Petroleum Hydrocarbons as Diesel TPH = Total Petroleum Hydrocarbons DRO = Diesel Range Organics GRO = Gasoline Range Organics B = Benzene T = Toluene E = Ethylbenzene X = Xylenes MTBE = Methyl Tertiary Butyl Ether (µg/L) = Micrograms per liter -- = Not Measured/Not Analyzed QA = Quality Assurance/Trip Blank

- * TOC elevations are referenced to msl.
- ** GWE corrected for the presence of Separate Phase Hydrocarbons (SPH), correction factor: [(TOC-DTW)+(SPHTx0.80)].
- ¹ Confirmation run.
- ² ORC installed.
- ³ Laboratory report indicates unidentified hydrocarbons C6-C12.
- ⁴ ORC in well.
- ⁵ Although requested on the Chain of Custody; Laboratory did not perform TPH-D analysis with silica-gel cleanup.
- ⁶ Analyzed with silica gel cleanup.
- ⁷ BTEX and MTBE by EPA Method 8260.
- ⁸ ORC removed.
- ⁹ Laboratory report indicates the observed sample pattern is not typical of #2 fuel/diesel. It elutes in the DRO range later than #2 fuel and is also due to individual peaks eluting in the DRO range.
- ¹⁰ Sample containers were lost during shipping.

Table 2 Groundwater Monitoring Data and Analytical Results Chevron Service Station #9-1740

6550 Moraga Avenue Oakland, California

WELL ID	DATE	Before Purging	
	DALL	mg/L)	After Porging (mg/L)
CA	00/00/00		
C-2	08/29/00	1.97	÷+
	03/27/01	3.60	.
	09/05/01	2.80	2- 4- 01
	03/04/02	3.10	
	09/03/02	2.70	
	03/29/03	2.20	
	09/23/03	0.50	-
C-4	08/29/00	2.11	-
	03/27/01	2.90	
	09/05/01	2.30	- 14 C
	03/04/02	2.90	
	09/03/02	2.10	
	03/29/03	1.90	
	09/23/03	0.40	

EXPLANATIONS:

(mg/L) = Milligrams per liter

-- = Not Measured

Groundwater Analytical Results - Oxygenate Compounds

Chevron Service Station #9-1740

6550 Moraga Avenue Oakland California

				Oakland	, California				
WELL ID	DATE	ETHANOL	ТВА	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
C-2	09/05/01		<100	1,000	<2	240	30	<2	<2
	09/23/03	<50	-	12	14	2		-	
	03/19/04	<50		370					-
	09/13/04	<50		530		-	-	-	
	03/11/05	<50		580	-		.24	20	
	09/29/05	<50		320	-			-	
	03/20/06	<50	-	500					-
	08/25/06	<50		460	14		-		
	03/12/07	<50		110					<u>Q</u> .
	09/21/07	<50		180			-	1	
	03/10/08	<50		170			-	-	÷.
	09/15/08	<50		150				2	
	03/03/09	<50	-	54	1. in the second se	42		-	4
	08/31/09	<50		240				-	-
	03/24/10	-		50	-	-		-	-
	02/28/11	-	-	80		-		-	-
2-3	09/05/01		<100	<2	<2	<2	<2	<2	<2
	03/19/04	<50		2		7		÷	
	09/13/04	SAMPLED ANNU	ALLY			÷.	÷		
	03/11/05	<50	- 1 -1	2	94 C		÷-		
	03/20/06	<50	100	3					-
	03/12/07	<50		2		-			
	03/10/08	<50		3					
	09/15/08	SAMPLED ANNUA	ALLY			-		144	
	03/03/09	<50	5 44 .1	3	-				
	03/24/10			3				-	
	02/28/11		-	3		÷	-		-
-4	09/05/01		<100	520	<2	<2	15	<2	<2
	09/23/03	<50		12		-			
	03/19/04	<50		520	**			-	
	09/13/04	<100		990					
	03/11/05	<100		1,100	1. 1.		-	-	
	09/29/05	<100	-	1,500	i cie		÷+.	-	

Groundwater Analytical Results - Oxygenate Compounds

Chevron Service Station #9-1740

6550 Moraga Avenue

WELL ID	DATE	ETTANOT			THE PARTY OF THE P				
VV. C.B. 1. 14.P.	LANT C	ETHANOL	ТВА	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
C-4 (cont)	03/20/06	<50		1,600					
	08/25/06	<50		1,300		-			-
	03/12/07	<50		1,100	+				
	09/21/07	<50		1,100			÷+-)		-
	03/10/08	<50		1,100					-
	09/15/08	<50	0. 	1,100		-			-
	03/03/09	<100	300	900					
	08/31/09	<50		930		-			-
	03/24/10		100	470	194	cá o			
	02/28/11			250		-		-	

Groundwater Analytical Results - Oxygenate Compounds Chevron Service Station #9-1740 6550 Moraga Avenue 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

1,2-DCA = 1,2-Dichloroethane EDB = 1,2-Dibromoethane (μg/L) = Micrograms per liter -- = Not Analyzed

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

STANDARD OPERATING PROCEDURE -GROUNDWATER SAMPLING

Gettler-Ryan Inc. (GR) field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. All work is performed in accordance with the GR Health & Safety Plan and all client-specific programs. The scope of work and type of analysis to be performed is determined prior to commencing field work.

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, peristaltic or Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging (additional parameters such as dissolved oxygen, oxidation reduction potential, turbidity may also be measured, depending on specific scope of work.). 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 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, as directed by the scope of work. 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.

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#: Site Address: City:	Chevron #9-174 6550 Moraga Av Oakland, CA		Eve	Number: nt Date: npler:		8-11		_ (inclusive) _
Well ID Well Diameter Total Depth Depth to Water Depth to Water w Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	/ 80% Recharge <u>[(</u> Неіс	Check if water $0.17 = 3.5$	Volume Factor (VF) column is les <u>8</u> x3 cas 0.20) + DTW]: ment:	se volume = E	Time Sta Time Sta Time Con Depth to Depth to Hydrocar Visual Co Skimmer Amt Rem Water Re	2"= 0.17 6"= 1.50 ge Volume: mpleted: Product: Water: bon Thickne onfirmation/E / Absorbant oved from S	oss: Description: Sock (circle kimmer: /ell:	_ gal. (2400 hrs) (2400 hrs) ft ft ft ft ft ft ft ft
Start Time (purge): Sample Time/Date Approx. Flow Rate Did well de-water? Time (2400 hr.) <u>\$80 4</u> <u>\$310</u> <u>\$817</u>	: 0830 / 2-22 gpm.	<u>م ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا</u>	S) (Ø	learC on:	Ddor: Y / (1. DTW @ D.O. (mg/L)	Sampling	j: <u>5.</u> 7 ORP (mV)	6

	LABORATORY INFORMATION											
SAMPLE ID	SAMPLE ID (#) CONTAINER REFRIG. PRESERV. TYPE LABORATORY ANALYSES											
C-2	🖉 🗴 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX+MTBE(8260)							
	<pre>ฦ ✓ x 500ml ambers</pre>	YES	NP	LANCASTER	TPH-DRO w/sgc (8015)							
	<u> </u>											
	<u> </u>											

Add/Replaced Plug: ______

Add/Replaced Bolt:

COMMENTS:

Add/Replaced Lock:



WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Site Address: City:	Chevron #9 6550 Morag Oakland, CA	a Avenue	Job Number: Event Date: Sampler:	386507 2-28- Joe		(inclusive)
Well ID Well Diameter Total Depth Depth to Water Depth to Water w Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	C-3 2 ir 18.91 ft 5.35 ft /3.56 /80% Recharge	-	x 0.20) + DTW]: <u>8, 06</u>	2 1"= 0.04 2"= 5 5"= 1.02 6"= 0 ft. Estimated Purge Volu Time Started: Time Complete Depth to Produc Depth to Produc Depth to Vater Hydrocarbon Tr Visual Confirma Skimmer / Abso Amt Removed fi	d: d: tickriess: tion/Description: rbant Sock (circl rom Skimmer: om Well: ;	gal. (2400 hrs) (2400 hrs) ft ft ft ft ft ft ft ft ft
Start Time (purge): Sample Time/Date Approx. Flow Rate Did well de-water? Time (2400 hr.) 0850 0856 0859	e: 09/2/2	<u>2-8-</u> // Water (Color: <u>clpar</u> ent Description: Volume: <u></u>		pling: <u>6</u> , 0 ORP (mV)	02

	LABORATORY INFORMATION											
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES							
C- 3	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX+MTBE(8260)							
<u> </u>	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc (8015)							

24

COMMENTS:

Add/Replaced Lock: _____ Add/Replaced Plug: ____

Add/Replaced Bolt:



WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Site Address:	Chevron #9-1740 6550 Moraga Avenue		Job Number: Event Date:	<u>386507</u> 8-11	(inclusive)
City:	Oakland, CA		Sampler:	Jue	
Well ID	C- 4	D	ate Monitored:	2-28-11	
Well Diameter	2 in.	Volume		1"= 0.04 2"= 0.17	3"= 0.38
Total Depth Depth to Water	$\frac{24.73 \text{ ft.}}{3.70 \text{ ft.}}$	Factor (neck if water column		5"= 1.02 6"= 1.50	12"= 5.80
	The second se			n. Estimated Purge Volume:_	d gal.
Depth to Water w	/ 80% Recharge [(Height of W	ater Column x 0.20) +	dtwj: <u>7,90</u>	_	gui.
Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos Peristaltic Pump QED Bladder Pump Other:	Dis Pre Dis Dis QE Oth	mpling Equipment: posable Bailer essure Bailer crete Bailer istaltic Pump D Bladder Pump er:		Time Started: Time Completed: Depth to Product: Depth to Water: Hydrocarbon Thickne Visual Confirmation/I Skimmer / Absorbant Amt Removed from V Water Removed from V Water Removed: Product Transferred to	Description: Sock (circle one) Skimmer:gal Vell:gal
Approx. Flow Rate	100512-8-11	Weather Cond Water Color: Sediment Des		Love	g: 4.15
Time (2400 hr.) 0940 0948 0955	Volume (gal.) pH -4 <u>6.75</u> <u>8</u> <u>6.70</u> <u>11</u> <u>6.73</u>	Conductivity (μ mhos/cm - μ S) S S 6 S 6 C S 6 C	Temperature (O / F) 16.7 16.9 16.5		ORP (mV)

LABORATORY INFORMATION								
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES			
c- 4	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX+MTBE(8260)			
	7 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sgc (8015)			

COMMENTS:

Add/Replaced Lock: V

Add/Replaced Bolt (3) 4 "

	Chevro	n Ca	lifo	rni	ak	Rec	aic	n	Ar	10	ĺν	sis	s Re	201	Ue	st	IC	hain o	fCu	stor	11
Lancaster Laboratories	53ø(11-	- ø3 cra mt			Ac	xct. #:	120			San	For nple	Lan #	caster	Labor	atori 57 -	88 US	10 05	ily Group #:	005	843	
Facility #:		Statement of the local division of the local	reioje	1	atrix		4		-	and in case				codes		_	\rightarrow	G#123		<u> </u>	
Site Address: 6550 MORAGA AVENUE, (the second s	100000			aurix		Ē	H			Teas	erva		Joges		T	-	Preserva H = HCi	itive Coo T = Thio		
Chevron PM: MTI		AKJ Ki	ernan			_			anup			1	1					$N = HNO_3$	B = NaC	Н	
Consultant/Office: G-R, Inc., 6747 Sierra C	ourt, Suite J, Du	ublin, CA	94568		8 S	Sie			Š	5							ł	$S = H_2SO_4$			ł
Consultant Prj. Mgr.: Deanna L. Harding	(deanna@grinc.	com)			NPDES	Containers			Silica Gei Cleanup									Must meet low	west detec	tion limits	
	Fax #: 925-5				믜	C to	2		Ŋ			B	pot					possible for 8	-	ounds	
Sampler: JOE A JEIM		· [6			ber	96	DGA	HO O		ates	Method	Wei					8021 MTBE Con		260	
			Grab Composite			Oil 🗆 Air Total Number	RTEX + MTRF	TPH 8015 MOD GRO	TPH 8015 MOD DRO DS	8260 full scan	Oxygenates	g	Dissolved Lead Method					Confirm all hit	ts by 8260		
Sample Identification	Date Collected	Time Collected	Grab Com	Soll	Water	Oil 🗆 Air Total Nun	X	E S	18 18	260 ful		Total Lead	BAYOSS					Run oxy Run oxy			9
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Data Package Options (please circle if required QC Summary Type I - Full	EDF/EDD	Relinquis	hegiby:						Ď	ate	Th	me	Rec	eived b	V:				Date	Time	
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Lancaster Laboratories, Inc., 2425 New Hotland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300 Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.



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ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 Prepared for:

Chevron c/o CRA Suite 107 10969 Trade Center Dr Rancho Cordova CA 95670

March 14, 2011

Project: 91740

Submittal Date: 03/02/2011 Group Number: 1235352 PO Number: 91740 Release Number: MTI State of Sample Origin: CA



MAR 1 4 2011

GETTLER-RYAN INC. GENERAL CONTRACTORS

Client Sample Description C-2-W-110228 Grab Water C-3-W-110228 Grab Water C-4-W-110228 Grab Water Lancaster Labs (LLI) # 6219437 6219438 6219439

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

ELECTRONICGettler-Ryan, Inc.COPY TOELECTRONICELECTRONICChevron c/o CRACOPY TOELECTRONICCOPY TOChevron

Attn: Rachelle Munoz Attn: Report Contact Attn: Anna Avina





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Questions? Contact your Client Services Representative Jill M Parker at (717) 656-2300 Ext. 1241

Respectfully Submitted,

Sarah M. Snyder Serior Specialist



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Page 1 of 1

Sample Description: C-2-W-110228 Grab Water LLI Sample # WW 6219437 Facility# 91740 Job# 386507 MTI# 61H-1978 GRD LLI Group # 1235352 6550 Moraga Ave-Oakland T0600100353 C-2 Account # 12099

Chevron c/o CRA

10969 Trade Center Dr

Rancho Cordova CA 95670

Suite 107

Project Name: 91740

Collected: 02/28/2011 08:30 by JA

Submitted: 03/02/2011 09:35 Reported: 03/14/2011 11:04

MA002

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles SW-846	8260B	ug/l	ug/1	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	80	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Vol	latiles SW-846	8015B	ug/l	ug/1	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
GC Ext w/si G	ractable TPH SW-846	8015B	ug/l	ug/1	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1

General Sample Comments

State of California Lab Certification No. 2501 Trip blank vials were not received by the laboratory for this sample group.

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
10943	BTEX/MTBE 8260 Water	SW-846 8260B	1	P110623AA	03/04/2011 00:07	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P110623AA	03/04/2011 00:07	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11062C07A	03/04/2011 19:23	Katrina T	î
01146	GC VOA Water Prep	SW-846 5030B	1	11062C07A	03/04/2011 19:23	Longenecker Katrina T Longenecker	l
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	110610030A	03/08/2011 20:18	Glorines Suarez- Rivera	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	110610030A	03/03/2011 03:00	Sherry L Morrow	1



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Page 1 of 1

Sample Description: C-3-W-110228 Grab Water LLI Sample # WW 6219438 Facility# 91740 Job# 386507 MTI# 61H-1978 GRD LLI Group # 1235352 6550 Moraga Ave-Oakland T0600100353 C-3 Account # 12099

Chevron c/o CRA

10969 Trade Center Dr

Rancho Cordova CA 95670

Suite 107

Project Name: 91740

Collected: 02/28/2011 09:12 by JA

Submitted: 03/02/2011 09:35 Reported: 03/14/2011 11:04

MAO03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS	Volatiles SW-846	8260B	ug/l	ug/l	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	3	0.5	1.
10943	Toluene	108-88-3	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Vol	atiles SW-846	8015B	ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
GC Ext w/Si G	ractable TPH SW-846	8015B	ug/l	ug/l	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	1

General Sample Comments

State of California Lab Certification No. 2501 Trip blank vials were not received by the laboratory for this sample group.

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
10943	BTEX/MTBE 8260 Water	SW-846 8260B	1	P110623AA	03/04/2011 01:30	Kelly E Keller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P110623AA	03/04/2011 01:30	Kelly E Keller	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11062C07A	03/04/2011 19:48	Katrina T	1
01146	GC VOA Water Prep	SW-846 5030B	1	11062C07A	03/04/2011 19:48	Longenecker Katrina T	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	110610030A	03/08/2011 20:35	Longenecker Glorines Suarez-	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	110610030A	03/03/2011 03:00	Rivera Sherry L Morrow	1



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Page 1 of 1

Sample Description: C-4-W-110228 Grab Water LLI Sample # WW 6219439 Facility# 91740 Job# 386507 MTI# 61H-1978 GRD LLI Group # 1235352 6550 Moraga Ave-Oakland T0600100353 C-4 Account # 12099

Chevron c/o CRA Suite 107

10969 Trade Center Dr

Rancho Cordova CA 95670

Project Name: 91740

Collected: 02/28/2011 10:05 by JA

Submitted: 03/02/2011 09:35 Reported: 03/14/2011 11:04

MAO04

CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
8260B	ug/l	ug/l	
71-43-2	270	5	10
100-41-4	3	0.5	1
1634-04-4	250	0.5	1
108-88-3	7	0.5	1
1330-20-7	3	0.5	1
8015B	ug/1	ug/l	
n.a.	2,500	50	1
8015B	ug/l	ug/l	
n.a.	1,500	50	1
	8260B 71-43-2 100-41-4 1634-04-4 108-88-3 1330-20-7 8015B n.a. 8015B	CAS Number Result 8260B ug/l 71-43-2 270 100-41-4 3 1634-04-4 250 108-88-3 7 1330-20-7 3 8015B ug/l n.a. 2,500 8015B ug/l	As Received Result Method Detection Limit 8260B ug/l ug/l 71-43-2 270 5 100-41-4 3 0.5 1634-04-4 250 0.5 108-88-3 7 0.5 1330-20-7 3 0.5 8015B ug/l ug/l n.a. 2,500 50

General Sample Comments

State of California Lab Certification No. 2501 Trip blank vials were not received by the laboratory for this sample group.

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
10943	BTEX/MTBE 8260 Water	SW-846 8260B	1	P110623AA	03/04/2011 01:5	Kelly E Keller	1
10943	BTEX/MTBE 8260 Water	SW-846 8260B	1	P110623AA	03/04/2011 02:2	Kelly E Keller	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P110623AA	03/04/2011 01:5	Kelly E Keller	1
01163		SW-846 5030B	2	P110623AA	03/04/2011 02:20	Kelly E Keller	10
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	11062C07A	03/04/2011 20:1	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	11062C07A	03/04/2011 20:13	1	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	110610030A	03/08/2011 20:53	-	1
11180	Low Vol Ext(W) w/SG	SW-846 3510C	1	110610030A	03/03/2011 03:00		1



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Quality Control Summary

Client Name: Chevron c/o CRA Reported: 03/14/11 at 11:04 AM

Group Number: 1235352

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

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>MDL</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD <u>%REC</u>	LCS/LCSD Limits	RPD	RPD Max
Batch number: P110623AA	Sample numbe	er(s): 621	9437-6219	439				
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 96 100 97 95		79-120 79-120 76-120 79-120 80-120		•
Batch number: 11062C07A TPH-GRO N. CA water C6-C12	Sample numbe N.D.	er(s): 621 50.	9437-62194 ug/l	139 109	100	75-135	9	30
Batch number: 110610030A TPH-DRO CA C10-C28 w/ Si Gel	Sample numbe N.D.	er(s): 621 32.	9437-62194 ug/l	139 108	95	52-126	12	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 <u>%REC</u>	MS/MSD Limits	<u>RPD</u>	RPD <u>MAX</u>	BKG Conc	DUP <u>Conc</u>	DUP <u>RPD</u>	Dup RPD Max
Batch number: P110623AA	Sample	number(s)	: 6219437	-62194	39 UNSP	K: 6219437			
Benzene	97 ~	103	80-126	6	30				
Ethylbenzene	98	104	71-134	7	30				
Methyl Tertiary Butyl Ether	81	79	72-126	1	30				
Toluene	100	106	80-125	5	30				
Xylene (Total)	96	102	79-125	6	30				

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: UST VOCs by 8260B - Water Batch number: P110623AA								
Batch nu	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene				
6219437	97	98	102	94				
6219438	97	98	103	94				
6219439	96	99	102	95				
Blank	96	97	102	94				

*- 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.



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Page 2 of 2

Quality Control Summary

Client Report	Name: Chevron ed: 03/14/11 a	1 C/O CRA 11:04 AM		Group	Number: 1235352	
LCS MS MSD	99 96 96	101 100 99	Surrogate 101 103 103	Quality 97 98 97	Control	
Limits: Analysis	80-116 Name: TPH-GRO N.	77-113	80-113	78-113		······································
Batch nu	Trifluorotoluene-F	ar watte to the				
6219437 6219438 6219439 Blank LCS LCSD	77 80 173* 73 86 84					
Limits: Analysis Batch nu	63-135 Name: TPH-DRO CA mber: 110610030A Orthoterphenyl	C10-C28 w/ Si Gel				
6219437 6219438 6219439 Blank LCS LCSD	93 96 108 92 109 97					
Limits:	59-131	·······			<u> </u>	

*- 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.



Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
С	degrees Celsius	Ĕ	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	Ī	liter(s)
m3	cubic meter(s)	ul	microliter(s)

- < less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- J estimated value -- The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).
- **ppm** parts per million One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.
- ppb parts per billion
- Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

- A TIC is a possible aldol-condensation product
- **B** Analyte was also detected in the blank
- **C** Pesticide result confirmed by GC/MS
- D Compound quantitated on a diluted sample
- E Concentration exceeds the calibration range of the instrument
- N Presumptive evidence of a compound (TICs only)
- P Concentration difference between primary and
- confirmation columns >25%
- U Compound was not detected
- **X,Y,Z** Defined in case narrative

Inorganic Qualifiers

- B Value is <CRDL, but ≥IDL
- E Estimated due to interference
- M Duplicate injection precision not met
- N Spike sample not within control limits
- S Method of standard additions (MSA) used for calculation
- U Compound was not detected
- W Post digestion spike out of control limits
- * Duplicate analysis not within control limits
- + Correlation coefficient for MSA < 0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

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

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

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