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September 13, 2012

Mr. Mark Horne Chevron Environmental Management Company 6101 Bollinger Canyon Road San Ramon, California 94583-5186

Subject: Second Quarter 2012 Groundwater Monitoring and Sampling Report

Former Chevron Service Station No. 20-9335

1225 North 45th Street Seattle, Washington

Dear Mr. Horne:

SAIC Energy, Environment & Infrastructure, LLC (SAIC), on behalf of Chevron Environmental Management Company (CEMC), prepared this letter summarizing the second quarter 2012 groundwater monitoring and sampling event at former Chevron Service Station No. 20-9335 (the site) located in Seattle, Washington (Figure 1).

FIELD ACTIVITIES

Gettler-Ryan Inc. (Gettler-Ryan) conducted the groundwater monitoring and sampling field event on June 20, 2012. Gettler-Ryan collected depth-to-groundwater measurements and checked for the presence of separate-phase hydrocarbons (SPH) in monitoring wells MW-6, MW-7, MW-8, MW-9, and MW-10. SPH were observed in monitoring well MW-7. Groundwater flow is to the southeast at a gradient of approximately 0.007 to 0.003 feet per foot. A potentiometric map is provided on Figure 2.

Groundwater samples were collected from four monitoring wells and submitted under chain of custody (COC) procedures to Eurofins Lancaster Laboratories, Inc. in Lancaster, Pennsylvania for the following analyses:

- Total petroleum hydrocarbons (TPH) as gasoline-range organics by Northwest Method NWTPH-Gx;
- TPH as diesel-range organics and TPH as heavy oil-range organics by Northwest Method NWTPH-Dx extended with silica-gel cleanup;
- Benzene, toluene, ethylbenzene, and total xylenes by United States Environmental Protection Agency (USEPA) Method 8021B; and
- Total Lead by USEPA Method 6020.

Field data sheets and COC documentation are provided in the Gettler-Ryan groundwater monitoring and sampling data package (Attachment A).

RESULTS

Historical groundwater elevation data, SPH thickness data, and laboratory analytical results are summarized in Table 1. The laboratory analysis report is provided as Attachment B. Below is a summary of analytical results.

- SPH were detected in monitoring well MW-7 at a thickness of 0.15 feet, which is consistent with historical data.
- All analytes were below their respective Model Toxic Cleanup Act (MTCA)
 Method A cleanup levels or the laboratory reporting limits in all other wells.

The results of the second quarter 2012 sampling event indicate that petroleum-hydrocarbon constituent concentrations continue to fluctuate above and below MTCA Method A cleanup levels with seasonal changes in groundwater elevation.

Gettler-Ryan will continue to perform groundwater monitoring and sampling on a quarterly basis. If you have any questions or comments, please contact me at (425) 482-3328 or via email at ottemanr@saic.com.

Sincerely,

SAIC Energy, Environment & Infrastructure, LLC

Ruth Otteman, LG

Project Manager

RUTH A. OTTEMAN

Kinga Kozlowska

Environmental Scientist

Enclosures:

Figure 1 – Vicinity Map

Figure 2 – Potentiometric Map

Table 1 – Groundwater Monitoring Data and Analytical Results

Attachment A – Groundwater Monitoring and Sampling Data Package

Attachment B – Laboratory Analysis Report

cc: Mr. Roger Nye – Ecology, Toxics Cleanup Program 3190 160th Ave SE, Bellevue, WA 98008-5452

Mr. Larry Hard – Seattle Housing Authority 120 Sixth Avenue North, Seattle, WA 98109-5003

Ms. Veronica Redstone – Bellwether 1651 Bellevue Avenue, Seattle, WA 98122-2014

Project File

REPORT LIMITATIONS

This technical document was prepared on behalf of Chevron and is intended for its sole use and for use by the local, state or federal regulatory agency that the technical document was sent to by SAIC. Any other person or entity obtaining, using, or relying on this technical document hereby acknowledges that they do so at their own risk, and that SAIC shall have no responsibility or liability for the consequences thereof.

Site history and background information provided in this technical document are based on sources that may include interviews with environmental regulatory agencies and property management personnel and a review of acquired environmental regulatory agency documents and property information obtained from CEMC and others. SAIC has not made, nor has it been asked to make, any independent investigation concerning the accuracy, reliability, or completeness of such information beyond that described in this technical document.

Recognizing reasonable limits of time and cost, this technical document cannot wholly eliminate uncertainty regarding the vertical and lateral extent of impacted environmental media.

Opinions and recommendations presented in this technical document apply only to site conditions and features as they existed at the time of SAIC's site visits or site work and cannot be applied to conditions and features of which SAIC is unaware and has not had the opportunity to evaluate.

All sources of information on which SAIC has relied in making its conclusions (including direct field observations) are identified by reference in this technical document or in appendices attached to this technical document. Any information not listed by reference or in appendices has not been evaluated or relied upon by SAIC in the context of this technical document. The conclusions, therefore, represent our professional opinion based on the identified sources of information.







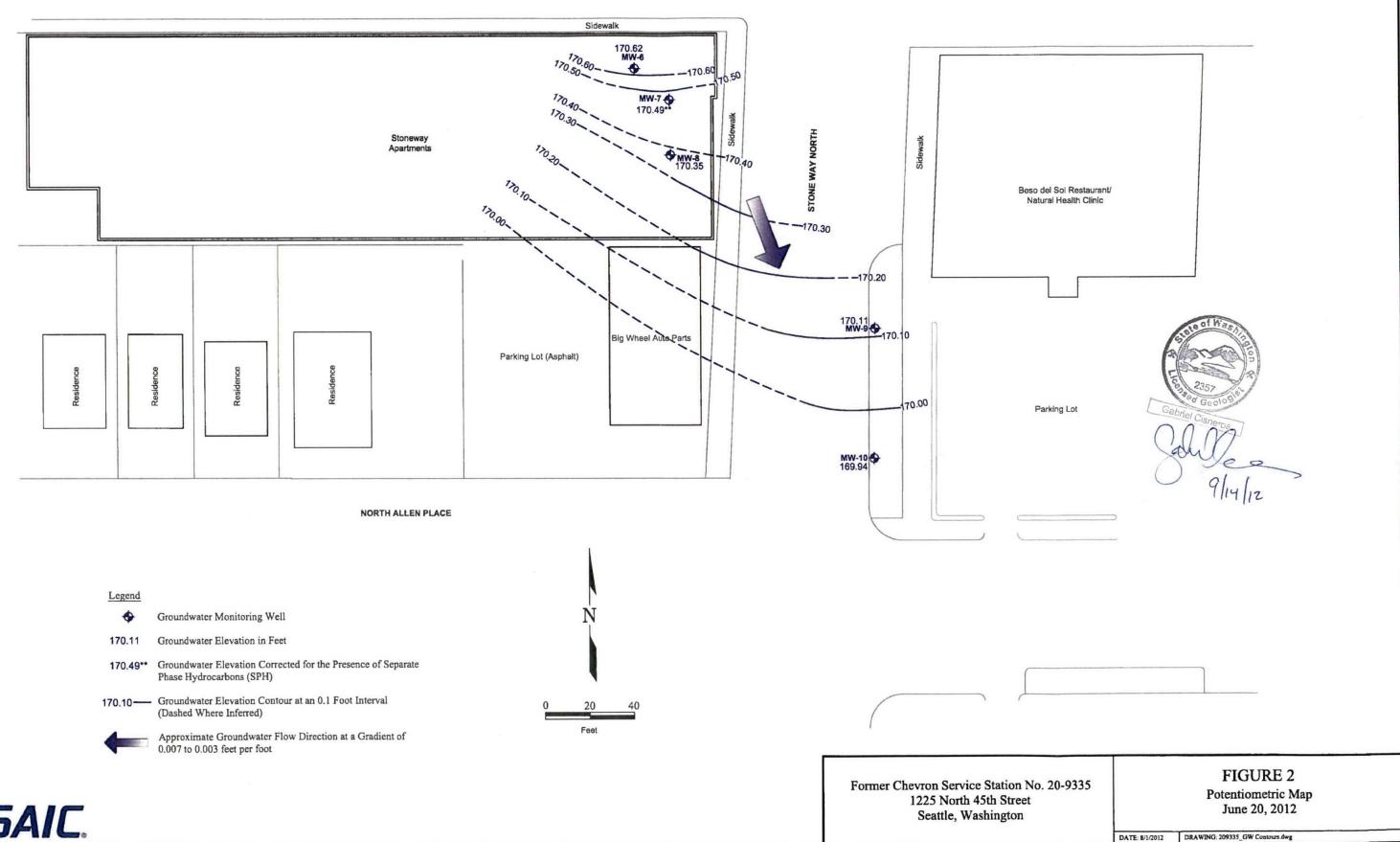
Maps Provided by Seattle.gov



Former Chevron Service Station No. 20-9335 1225 North 45th Street Seattle, Washington FIGURE 1 Vicinity Map

FILE NAME: DATE: 209335 Vicinity Map.dwg 9/13/2012

NORTH 45TH STREET



GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS¹ FORMER CHEVRON SERVICE STATION NO. 20-9335

1225 North 45th Street

Seattle, Washington

Well ID/	Purge	TOC ²	DTP	DTW	SPHT	GWE ³		rations repo				Ethyl-	Total		
Date	Method	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	benzene	Xylenes	MTBE	T. Lead
MW-6							•								
02/09/06		197.18		36.74	0.00	160.44	680	98	1,500	< 0.5	0.7	1.2	37		
05/03/07		197.18		36.74	0.00	160.44	1,000	130	380	29	1	4	30		
06/16/09		197.18	INACCES	SSIBLE											
07/01/09	NP	197.18		27.46	0.00	169.72	270	< 70	<50	< 0.5	< 0.5	< 0.5	<1.5		22.9
12/11/09	NP	197.18		27.55	0.00	169.63	35	<69	< 50	< 0.5	< 0.5	< 0.5	<1.5		0.76
06/09/10	NP	197.18		26.84	0.00	170.34	360	<340	5,900	< 0.5	< 0.5	<0.5	350		13.2
11/19/10	NP	197.18		26.97	0.00	170.21	240	81	750	< 0.5	< 0.5	< 0.5	11		3.7
06/21/11	NP	197.18		25.77	0.00	171.41	270	88	2,400	< 0.5	< 0.5	0.6	9.2		3.2
09/22/11	NP	197.18		25.90	0.00	171.28	<29	<69	660	< 0.5	< 0.5	< 0.5	4.1		3.3
12/09/11	NP	197.18		27.34	0.00	169.84	<29	<69	64	140	0.50	< 0.5	<1.5		0.44
03/30/12	NP	197.18		26.80	0.00	170.38	<30	<69	90	< 0.5	< 0.5	< 0.5	<1.5	()	2.5
06/20/12	NP	197.18		26.56	0.00	170.62	<30	< 70	< 50	< 0.5	< 0.5	< 0.5	<1.5		< 0.034
MW-7															
02/09/06		197.42	37.87	38.17	0.30	159.49									
05/03/07		197.42	26.55	27.80	0.00	169.62									
06/16/09		197.42	INACCES	SSIBLE											
07/01/09 ⁶		197.42	27.39	7	7	7	NOT SAMP	LED DUE TO	THE PRESI	ENCE OF SPI	ł				
12/11/09 ⁶		197.42	27.50	7	7	7	NOT SAMP	LED DUE TO	THE PRESI	ENCE OF SPI	ł				
$06/09/10^6$		197.42	27.03	28.20	1.17	170.16	NOT SAMP	LED DUE TO	THE PRESI	ENCE OF SPI	ł				
11/19/10		197.42	27.08	28.34	1.26	170.09	NOT SAMP	LED DUE TO	THE PRESI	ENCE OF SPI	ł				
06/21/11		197.42		26.12	0.00	171.30	11,000	<1,800	150,000	45	4,800	2,600	18,000		310
09/22/11		197.42		26.25	0.00	171.17	2,000	<340	100,000	29	4,300	1,900	17,000		94.4
12/09/11		197.42	27.45	27.80	0.35	169.90	NOT SAMP	LED DUE TO	THE PRESI	ENCE OF SPI	H				
03/30/12		197.42	27.15	27.35	0.20	170.23	NOT SAMP	LED DUE TO	THE PRESI	ENCE OF SPI	I				
06/20/12		197.42	26.90	27.05	0.15	170.49	NOT SAMP	LED DUE TO	THE PRESI	ENCE OF SPI	ł				
MW-8															
02/09/06		197.35		36.74	0.00	160.61	280	<96	440	< 0.5	1.1	3.3	28		
05/03/07		197.35		36.74	0.00	160.61	940	<200	2,600	< 0.5	< 0.5	< 0.5	< 0.5		
06/16/09			INACCES												
07/01/09	NP	197.35		27.84	0.00	169.51	390	< 700	430	< 0.5	< 0.5	< 0.5	2.2		3.5
12/11/09	NP	197.35		27.91	0.00	169.44	300	<69	<50	< 0.5	< 0.5	< 0.5	<1.5		7.3



GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS¹ FORMER CHEVRON SERVICE STATION NO. 20-9335

1225 North 45th Street

Seattle, Washington

Well ID/	Purge	TOC2	DTP	DTW	SPHT	GWE ³						Ethyl-	Total		
Date	Method	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	benzene	Xylenes	MTBE	T. Lead
MW-8 (co	nt.)														
06/09/10	NP	197.35	1	27.21	0.00	170.14	280	180	350	< 0.5	< 0.5	< 0.5	<1.5		16.5
11/19/10	NP	197.35	1	27.34	0.00	170.01	320	120	94	< 0.5	< 0.5	< 0.5	<1.5		3.4
06/21/11	NP	197.35	1	26.18	0.00	171.17	94	150	54	< 0.5	< 0.5	1.0	<1.5		3.6
09/22/11	NP	197.35	-	26.30	0.00	171.05	<29	<68	140	< 0.5	< 0.5	2.9	1.70		1.8
12/09/11	NP	197.35	-	27.70	0.00	169.65	70	<69	320	< 2.0	<2.0	< 0.5	3.0		0.30
03/30/12	NP	197.35		27.20	0.00	170.15	<30	< 70	2,000	3.0	3.9	45	120		2.9
06/20/12	NP	197.35		27.00	0.00	170.35	<30	< 70	170	0.7	0.7	1.3	2.2		1.8
MW-9															
05/03/07		208.11		36.74	0.00	171.37	<400	< 500	<50	< 0.5	< 0.5	4	18		
06/16/09		208.11		38.72	0.00	169.39			< 50	< 0.5	< 0.5	< 0.5	<1.5		19.3
07/01/09	NP	208.11		38.03	0.00	170.08	<31	<71							
12/11/09	NP	208.11		38.86	0.00	169.25	76	<69	< 50	< 0.5	< 0.5	< 0.5	<1.5		14.5
06/09/10	NP	208.11		38.17	0.00	169.94	42	110	< 50	< 0.5	< 0.5	< 0.5	<1.5		21.2
11/19/10	NP	208.11		38.23	0.00	169.88	<29	130	< 50	< 0.5	< 0.5	< 0.5	<1.5		18.7
06/21/11	NP	208.11		37.15	0.00	170.96	<30	< 70	<50	< 0.5	< 0.5	< 0.5	<1.5		4.7
09/22/11	NP	208.11		37.25	0.00	170.86	<300	< 700	<50	< 0.5	< 0.5	< 0.5	<1.5		12.4
12/09/11	NP	208.11		38.66	0.00	169.45	<29	<68	< 50	< 0.5	< 0.5	< 0.5	<1.5		2.8
03/30/12	NP	208.11		29.60	0.00	178.51	<29	<68	< 50	< 0.5	< 0.5	< 0.5	<1.5		114
06/20/12	NP	208.11		38.00	0.00	170.11	<30	< 70	<50	< 0.5	< 0.5	< 0.5	<1.5		3.8
MW-10															
05/03/07		207.29		36.74	0.00	170.55	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
06/16/09		207.29	INACCES	SSIBLE											
07/01/09	NP	207.29		38.72	0.00	168.57	<30	<69	<50	< 0.5	< 0.5	< 0.5	<1.5		10.9
12/11/09	NP	207.29		35.91	0.00	171.38	49	<69	< 50	< 0.5	< 0.5	< 0.5	<1.5		13.4
06/09/10	NP	207.29		37.48	0.00	169.81	50	88	< 50	< 0.5	< 0.5	< 0.5	<1.5		7.2
11/19/10	NP	207.29		37.53	0.00	169.76	<29	74	< 50	< 0.5	< 0.5	< 0.5	<1.5		18.8
06/21/11	NP	207.29		36.46	0.00	170.83	<31	180	< 50	< 0.5	< 0.5	< 0.5	<1.5		5.7
09/22/11	NP	207.29		36.60	0.00	170.69	<300	< 700	<50	< 0.5	< 0.5	< 0.5	<1.5		6.6
12/09/11	NP	207.29		35.71	0.00	171.58	<29	<69	< 50	< 0.5	< 0.5	< 0.5	<1.5		2.1
03/30/12	NP	207.29		29.80	0.00	177.49	<30	<69	<50	< 0.5	< 0.5	< 0.5	<1.5		110
06/20/12	NP	207.29		37.35	0.00	169.94	<31	<71	<50	< 0.5	< 0.5	< 0.5	<1.5		0.23



GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS¹ FORMER CHEVRON SERVICE STATION NO. 20-9335

1225 North 45th Street

Seattle, Washington

Well ID/	Purge	TOC ²	DTP	DTW	SPHT	GWE ³		trations repo				Ethyl-	Total		
Date	Method	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	benzene	Xylenes	MTBE	T. Lead
MW-1															
10/11/00		97.95		34.50		63.45									
12/16/00		97.95		35.91	0.00	62.04	ND	ND	74.4	ND	ND	ND	ND	ND	ND
03/26/01		97.95		36.54	0.00	61.41	ND	ND	ND	ND	ND	ND	ND	ND	
06/25/01		97.95		36.78	0.00	61.17	<281	<842	<50.0	< 0.500	< 0.500	< 0.500	<1.00		
09/24/01		97.95		37.14	0.00	60.81	<250	< 500	<50.0	< 0.500	< 0.500	< 0.500	<1.00		
12/13/01		97.95		37.25	0.00	60.70	<250	< 500	<80.0	< 0.500	< 0.500	< 0.500	<1.00		
03/08/02	NP	97.95		36.79	0.00	61.16	<250	<750	< 50	< 0.50	< 0.50	< 0.50	<1.5		
05/29/02		97.95		36.44	0.00	61.51	SAMPLED	SEMI-ANNU	ALLY						
09/16/02	NP	97.95		36.71	0.00	61.24	<250	<250	<50	< 0.50	< 0.50	< 0.50	<1.5		
12/05/02		97.95		37.09	0.00	60.86	SAMPLED	SEMI-ANNU	ALLY						
03/04/03	NP	97.95		37.26	0.00	60.69	<250	<250	100	< 0.50	< 0.50	< 0.50	<3.0		
06/03/03		97.95		37.09	0.00	60.86	SAMPLED	SEMI-ANNU	ALLY						
10/27/03		97.95		37.42	0.00	60.53	NOT SAMP	LED DUE TO	O INSUFFICE	ENT WATER					
03/31/04	NP	97.95		37.12	0.00	60.83	<800	<1,000	<50	< 0.5	< 0.5	< 0.5	<1.5		
06/28/04		97.95		37.14	0.00	60.81	SAMPLED	SEMI-ANNU	ALLY						
09/29/04		97.95		37.50	0.00	60.45	NOT SAMP	LED DUE TO	O INSUFFICE	ENT WATER					
01/04/05		97.95		37.61	0.00	60.34	SAMPLED	SEMI-ANNU	ALLY						
ABANDO	NED														
MW-2															
10/11/00		98.70		34.50		64.20									
12/16/00		98.70		36.46	0.00	62.24	1,000	ND	28,100	283	2,560	693	4,020	ND	0.00194
03/26/01		98.70		37.12	0.00	61.58	1,180	ND	17,000	143	1,450	378	2,180	ND/	
06/25/01		98.70		37.37	0.00	61.33	418	<750	11,700	92.3	547	181	1,010		
09/24/01		98.70		37.72	0.00	60.98	4,840	<557	22,100	120	1,380	658	4,100		
12/13/01		98.70		37.89	0.00	60.81	5,540	< 500	84,000	185	3,960	1,590	9,950		
03/08/02		98.70	37.24	38.00	0.76	61.31	NOT SAMP	LED DUE TO	THE PRESI	ENCE OF SPI	I				
05/29/02		98.70	36.81	37.54	0.73	61.74	NOT SAMP	LED DUE TO	THE PRESI	ENCE OF SPI	I				
09/16/02		98.70	37.19	37.61	0.42	61.43	NOT SAMP	LED DUE TO	THE PRESI	ENCE OF SPI	ł				
10/15/02		98.70	37.24	37.68	0.44	61.37									
11/22/02		98.70	37.12	37.63	0.51	61.48									
12/05/02		98.70	37.51	38.10	0.59	61.07	NOT SAMP	LED DUE TO	THE PRESI	ENCE OF SPE	I				



GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS¹ FORMER CHEVRON SERVICE STATION NO. 20-9335

1225 North 45th Street

Seattle, Washington

Well ID/	Purge	TOC ²	DTP	DTW	SPHT	GWE ³		trations repo	- 29			Ethyl-	Total		
Date	Method	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	TPH-DRO	трн-нко	TPH-GRO	Benzene	Toluene	benzene	Xvlenes	MTBE	T. Lead
MW-2 (co		(11.)	(11.)	(11.)	(11.)	(11.)	III-DRO	TI II-IIKO	III-GRO	Benzene	Totache	benzene	Ayienes	MIDE	1. Dead
01/28/03	11.)	98.70	36.77	37.33	0.56	61.82									
02/13/03		98.70	37.44	38.02	0.58	61.14									
03/04/03		98.70				PARKED O									
04/21/03		98.70	37.21	37.78	0.57	61.38									
05/08/03		98.70	37.43	37.94	0.51	61.17									
06/03/03		98.70	37.37	37.91	0.54	61.22	NOT SAMP	LED DUE TO	THE PRES	ENCE OF SPH					
07/06/03		98.70	36.96	37.51	0.55	61.63									
08/18/03		98.70	37.49	38.02	0.53	61.10									
10/27/03		98.70	37.54	39.98	2.44	60.67	NOT SAMP	LED DUE TO	THE PRES	ENCE OF SPH	[
11/17/03		98.70	37.10	37.58	0.48	61.50									
12/31/03		98.70	36.18	38.19	2.01	62.12									
02/09/04		98.70	37.00	37.49	0.49	61.60									
03/04/04		98.70	35.85	37.06	1.21	62.61									
03/31/04		98.70	37.32	39.05	1.73	61.03	NOT SAMP	LED DUE TO	THE PRES	ENCE OF SPH	I				
06/28/04		98.70	37.32	39.05	1.73	61.03	NOT SAMP	LED DUE TO	THE PRES	ENCE OF SPH					
09/11/04		98.70	37.65	39.10	1.45	60.76									
09/29/04		98.70	37.71	39.39	1.68	60.65	NOT SAMP	LED DUE TO	THE PRES	ENCE OF SPH	I				
11/22/04		98.70	36.89	38.16	1.27	61.56									
01/04/05		98.70	37.88	39.80	1.92	60.44	NOT SAMP	LED DUE TO	THE PRES	ENCE OF SPH	I				
01/14/05		98.70	37.49	39.02	1.53	60.90				-					
ABANDO	NED														
MW-3															
10/11/00		98.76		34.00		64.76									
12/16/00		98.76		36.39	0.00	62.37	ND	- ND	ND	ND	0.612	ND	1.95	ND	ND
03/26/01		98.76		37.05	0.00	61.71	ND	ND	ND	ND	ND	ND	ND	ND	
06/25/01		98.76		37.29	0.00	61.47	<250	<750	<50.0	< 0.500	< 0.500	< 0.500	<1.00		
09/24/01		98.76		37.64	0.00	61.12	<250	< 500	<50.0	< 0.500	< 0.500	< 0.500	<1.00		
12/13/01		98.76		37.78	0.00	60.98	<250	< 500	<80.0	< 0.500	< 0.500	< 0.500	<1.00		
03/08/02	NP	98.76		37.28	0.00	61.48	<250	<750	320	< 0.50	0.64	2.1	15		
05/29/02		98.76		36.92	0.00	61.84	SAMPLED	SEMI-ANNU	ALLY						
09/16/02	NP	98.76	-	37.21	0.00	61.55	<250	<250	< 50	< 0.50	< 0.50	< 0.50	<1.5		



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1225 North 45th Street

Seattle, Washington

Well ID/	Purge	TOC ²	DTP	DTW	SPHT	GWE ³						Ethyl-	Total		
Date	Method	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	benzene	Xylenes	MTBE	T. Lead
MW-3 (co	nt.)														
12/05/02		98.76		37.58	0.00	61.18	SAMPLED	SEMI-ANNU	ALLY						
03/04/03	NP	98.76		37.79	0.00	60.97	<250	<250	< 50	< 0.50	< 0.50	< 0.50	<1.5		
06/03/03		98.76		37.68	0.00	61.08	SAMPLED	SEMI-ANNU	ALLY						
10/27/03	NP	98.76		38.00	0.00	60.76	<250	<250	< 50	< 0.5	< 0.5	< 0.5	<1.5		
03/31/04	NP	98.76		37.65	0.00	61.11	<800	<1,000	<50	< 0.5	< 0.5	< 0.5	<1.5		
06/28/04		98.76		37.68	0.00	61.08	SAMPLED	SEMI-ANNU	ALLY						
09/29/04	NP	98.76		38.01	0.00	60.75	<250	<250	< 50	< 0.5	< 0.5	< 0.5	<1.5		
01/04/05		98.76		38.19	0.00	60.57	SAMPLED	SEMI-ANNU	ALLY						
ABANDO	NED														
MW-4															
10/11/00		98.52		35.00		63.52									
12/16/00		98.52		36.35	0.00	62.17	ND	ND	58,200	326	5,520	1,430	8,520	ND	0.0123
03/26/01		98.52		37.00	0.00	61.52	266	ND	27,200	178	2,160	785	4,160	ND	
06/25/01		98.52	-	37.25	0.00	61.27	<250	<750	12,300	69.0	654	416	1,910		
09/24/01		98.52		37.60	0.00	60.92	<250	< 500	4,130	30.1	154	197	684		
12/13/01		98.52	-	37.72	0.00	60.80	<250	< 500	5,490	30.3	175	177	679		
03/08/02	NP	98.52		38.36	0.00	60.16	<250	<750	9,000	< 50	150	170	710		
05/29/02	NP	98.52	-	36.86	0.00	61.66	<250	<750	6,700	22	150	190	780		
08/07/02		98.52		36.92	0.00	61.60									
09/16/02	NP	98.52		37.16	0.00	61.36	<250	<250	7,500	46	230	240	630		
12/05/02	NP	98.52		37.53	0.00	60.99	<250	<250	14,000	73	400	540	1,500		
03/04/03		98.52	36.68	36.71	0.03	61.83	NOT SAMP	LED DUE TO	THE PRESI	ENCE OF SPI	ł				
06/03/03		98.52	36.59	36.63	0.04	61.92	NOT SAMP	LED DUE TO	THE PRESI	ENCE OF SPI	ł				
07/06/03		98.52	36.90	36.93	0.03	61.61									
08/18/03		98.52	36.76	36.80	0.04	61.75									
10/27/03	NP	98.52		37.96	0.00	60.56	<400	< 500	2,200	16	55	76	170		
11/17/03		98.52	36.34	36.37	0.03	62.17									
12/31/03		98.52		36.88	0.00	61.64									
02/09/04		98.52	36.14	36.17	0.03	62.37									
03/04/04		98.52		36.74	0.00	61.78									
03/31/04	NP	98.52		37.59	0.00	60.93	<250	<250	3,900	14	96	110	340		



GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS¹ FORMER CHEVRON SERVICE STATION NO. 20-9335

1225 North 45th Street

Seattle, Washington

Date Method (ft.) (ft.) (ft.) (ft.) TPH-DRO TPH-HRO TPH-GRO Benzene Toluene benzene X MW-4 (cont.) 06/28/04 NP 98.52 37.54 0.00 60.98 <250 <250 1,600 8.5 15 59 09/11/04 98.52 37.78 37.81 0.03 60.73 <	110 - 170 - 110 -	TBE T. Lead
MW-4 (cont.) 06/28/04 NP 98.52 37.54 0.00 60.98 <250 <250 1,600 8.5 15 59 09/11/04 98.52 37.78 37.81 0.03 60.73 09/29/04 NP 98.52 37.86 0.00 60.66 <250 <250 1,500 18 40 76 11/22/04 98.52 36.81 0.00 61.71 01/04/05 NP 98.52 38.11 0.00 60.41 1,600 <250 1,600 10 13 60 01/14/05 98.52 37.58 0.00 60.94	110 - 170 - 110 -	
06/28/04 NP 98.52 37.54 0.00 60.98 <250 <250 1,600 8.5 15 59 09/11/04 98.52 37.78 37.81 0.03 60.73 <td< td=""><td>170 - 110 -</td><td> </td></td<>	170 - 110 -	
09/11/04 98.52 37.78 37.81 0.03 60.73 <	170 - 110 -	
09/29/04 NP 98.52 37.86 0.00 60.66 <250 <250 1,500 18 40 76 11/22/04 98.52 36.81 0.00 61.71 <	170 - 110 -	
11/22/04 98.52 36.81 0.00 61.71 01/04/05 NP 98.52 38.11 0.00 60.41 1,600 <250 1,600 10 13 60 01/14/05 98.52 37.58 0.00 60.94	110 -	
01/04/05 NP 98.52 38.11 0.00 60.41 1,600 <250 1,600 10 13 60 01/14/05 98.52 37.58 0.00 60.94	110 -	
01/14/05 98.52 37.58 0.00 60.94		
ABANDONED		
MW-5		
10/11/00 99.42 34.50 64.92		
12/16/00 99.42 37.18 0.00 62.24 5,080 ND 146,000 ND 15,100 4,160 2	24,100 N	ND 0.0200
03/26/01 99.42 37.91 0.00 61.51 77,900 ND 149,000 256 10,600 4,000 2	24,200 N	1D
06/25/01 99.42 38.14 0.00 61.28 109,000 <18,100 127,000 210 9,580 3,730 2	21,500 -	
09/24/01 99.42 38.40 38.44 0.04 61.01 NOT SAMPLED DUE TO THE PRESENCE OF SPH		
12/13/01 99.42 38.55 38.59 0.04 60.86 NOT SAMPLED DUE TO THE PRESENCE OF SPH		
03/08/02 99.42 37.96 38.46 0.50 61.36 NOT SAMPLED DUE TO THE PRESENCE OF SPH		
05/29/02 99.42 37.60 38.05 0.45 61.73 NOT SAMPLED DUE TO THE PRESENCE OF SPH		
08/07/02 99.42 37.73 38.12 0.39 61.61		
09/16/02 99.42 38.00 38.39 0.39 61.34 NOT SAMPLED DUE TO THE PRESENCE OF SPH		
10/15/02 99.42 38.09 38.47 0.38 61.25		
11/22/02 99.42 37.84 38.26 0.42 61.50		
12/05/02 99.42 38.42 38.78 0.36 60.93 NOT SAMPLED DUE TO THE PRESENCE OF SPH		
01/28/03 99.42 37.88 38.24 0.36 61.47		
02/13/03 99.42 38.33 38.68 0.35 61.02		
03/04/03 99.42 37.54 37.89 0.35 61.81 NOT SAMPLED DUE TO THE PRESENCE OF SPH		
04/21/03 99.42 37.96 38.29 0.33 61.39		
05/08/03 99.42 38.50 38.82 0.32 60.86		
06/03/03 99.42 37.42 37.76 0.34 61.93 NOT SAMPLED DUE TO THE PRESENCE OF SPH		
07/06/03 99.42 37.77 38.11 0.34 61.58	-	
08/18/03 99.42 38.54 38.86 0.32 60.82		
10/27/03 99.42 WELL DRY/OBSTRUCTED		



GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS¹ FORMER CHEVRON SERVICE STATION NO. 20-9335

1225 North 45th Street

Seattle, Washington

Well ID/	Purge	TOC ²	DTP	DTW	SPHT	GWE ³						Ethyl-	Total		
Date	Method	(ft.)	(ft.)	(ft.)	(ft.)	(ft.)	TPH_DRO	TPH-HRO	TPH-CPO	Benzene	Toluene	benzene	Xvlenes	МТВЕ	T. Lead
MW-5 (co		(11.)	(11.)	(11.)	(11.)	(11.)	TITI-DRO	THIRO	IIII-GRO	Bellzene	Totache	Delizene	Aylenes	MIDE	1. Leau
11/17/03	,	99.42	37.87	38.17	0.30	61.49								I I	
12/31/03		99.42	-	RY/OBSTR											
02/09/04		99.42	WELL DE	RY/OBSTR	RUCTED										
03/04/04		99.42	WELL DE	RY/OBSTR	RUCTED					()					
03/31/04		99.42	WELL DE	RY/OBSTR	RUCTED										
06/28/04		99.42	WELL DE	RY/OBSTR	RUCTED					:					
09/11/04		99.42	WELL DE	RY/OBSTR	RUCTED										
09/29/04		99.42	WELL DE	RY/OBSTR	RUCTED	()									
11/22/04		99.42	WELL DE	RY/OBSTR	RUCTED										
01/04/05		99.42	WELL DI	RY/OBSTR	RUCTED										
01/14/05		99.42	WELL DI	RY/OBSTF	RUCTED										
ABANDO!	NED														
TRIP BLA	NK														
12/16/00						()			ND	ND	ND	ND	ND	ND	
03/26/01						()			ND	ND	ND	ND	ND	ND	
06/25/01		-							<50.0	< 0.500	< 0.500	< 0.500	<1.00		
09/24/01									<50.0	< 0.500	< 0.500	< 0.500	<1.00		
12/13/01									<80.0	< 0.500	< 0.500	< 0.500	<1.00		
03/08/02									<50	< 0.50	< 0.50	< 0.50	<1.5		
05/29/02									<50	< 0.50	< 0.50	< 0.50	<1.5		
09/16/02									< 50	< 0.50	< 0.50	< 0.50	<1.5		
12/05/02									< 50	< 0.50	< 0.50	< 0.50	<1.5		
03/04/03									<50	< 0.50	< 0.50	< 0.50	<1.5		
10/27/03									<50	< 0.5	< 0.5	< 0.5	<1.5		
QA															
03/31/04									<50	< 0.5	< 0.5	< 0.5	<1.5		
06/28/04									<50	< 0.5	< 0.5	< 0.5	<1.5		
09/29/04									< 50	< 0.5	< 0.5	< 0.5	<1.5		
01/04/05									<50	< 0.5	< 0.5	< 0.5	<1.5		
06/16/09									<50	< 0.5	< 0.5	< 0.5	<1.5		
07/01/09									<50	< 0.5	< 0.5	< 0.5	<1.5		
12/11/09									< 50	< 0.5	< 0.5	< 0.5	<1.5		



GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS¹ FORMER CHEVRON SERVICE STATION NO. 20-9335

1225 North 45th Street

Seattle, Washington

Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC ² (ft.)	DTP (ft.)	DTW (ft.)	SPHT (ft.)	GWE ³ (ft.)	TPH-DRO	трн-нго	TPH-GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	МТВЕ	T. Lead
QA (cont.)															
06/09/10									< 50	< 0.5	< 0.5	< 0.5	<1.5		
11/19/10									< 50	< 0.5	< 0.5	< 0.5	<1.5		
06/21/11									< 50	< 0.5	< 0.5	< 0.5	<1.5		
09/22/11									< 50	< 0.5	< 0.5	< 0.5	<1.5		
12/09/11									< 50	< 0.5	< 0.5	< 0.5	<1.5		
03/30/12									< 50	< 0.5	< 0.5	< 0.5	<1.5		
06/20/12		QA Vials	Not Rece	ived by the	Laborator	y									
			Stand	dard Labora	atory Repor	ting Limits:			50	0.5	0.5	0.5	1.5		0.00100
			N	MTCA Met	hod A Clea	nup Levels:	500	500	800/1,000	5	1,000	700	1,000	20	15
					Curre	nt Method ⁵ :	NWTPH-Dx	+ Extended ⁴		NW	TPH-Gx and	USEPA 8021			USEPA 6020

Abbreviations:

DTP = Depth to Product
DTW = Depth to Water

ND = Not Detected
NP = No Purge

NP = No Purge TPH-DRO = TPH as Diesel-Range Organics

(ft.) = Feet QA = Quality Assurance/Trip Blank
GWE = Groundwater Elevation SPH = Separate Phase Hydrocarbon

QA = Quality Assurance/Trip Blank TPH-GRO = TPH as Gasoline-Range Organics
SPH = Separate Phase Hydrocarbon TPH-HRO = TPH as Heavy Oil-Range Organics

LNAPL = Light Non-Aqueous Phase Liquid SPHT = Separate Phase Hydrocarbon Thickness

USEPA = United States Environmental Protection Agency

MTBE = Methyl Tertiary Butyl Ether T. Lead = Total Lead

μg/L = Micrograms per liter

MTCA = Model Toxics Control Act Cleanup Regulations

TOC = Top of Casing

-- = Not Measured/Not Analyzed

TPH = Total Petroleum Hydrocarbons

Notes:

- 1 Analytical results in bold font indicate concentrations exceed MTCA Method A Cleanup Levels.
- 2 TOC elevations have been surveyed in feet relative to the 1988 North American Vertical Datum. MW-1 through MW-5 TOC Elevation are reference to an arbitrary benchmark of 100 feet.
- 3 When SPH is present, GWE has been corrected using the following formula: GWE = [(TOC DTW) + (SPHT x 0.80)].
- 4 Analyzed with silica-gel cleanup.
- 5 Laboratory analytical methods for historical data may not be consistent with list of current analytical methods. When necessary, consult original laboratory reports to verify methods used.
- 6 Skimmer in well.
- 7 Interface probe could not detect LNAPL/Groundwater Interface, unable to gauge hydrocarbon thickness and calculate corrected GWE.



Attachment A: Groundwater Monitoring and Sampling Data Package

GETTLER-RYAN INC.

TRANSMITTAL

June 26, 2012: G-R #386750

TO:

Ms. Ruth A. Otteman

SAIC

18912 North Creek Parkway, Suite 101

Bothell, WA 98011

FROM:

Deanna L. Harding

Project Coordinator

Gettler-Ryan Inc.

6747 Sierra Court, Suite J

Dublin, California 94568

RE:

Former Chevron Service Station

#209335

1225 North 45th Street

Seattle, Washington

WE HAVE ENCLOSED THE FOLLOWING:

COPIES		DESCRIPTION
·		
VIA PDF		Groundwater Monitoring and Sampling Data Package
•	•	Second Quarter Event of June 20, 2012

COMMENTS:

Pursuant to your request, we are providing you with copies of the above referenced data for your use.

Please provide us the updated historical data prior to the next monitoring and sampling event for our field use.

Please feel free to contact me if you have any comments/questions.

trans/209335

GETTLER-RYAN INC.

			CHEVR	ON - SIT	E CHECK		
	Facility#:	Chevron	#209335		Date: (0-20:12	
	Address:	1225 N. 45	Th Street				·
	City/St.:	Seattle, WA	1				
	Status of S	ite:	REENS	SIDEWA	· × & D	RKING GAR	100
DRUMS:	Please list b	elow ALL DRU	JMS @ site:	i.e., drum de	escription, con	dition, labeling, co	ontents, location
	#	Descri	ption	Condition	Labeling	Contents	Location
		No 0	m's				
WELLS:	Please chec plug, well loc		of ALL WE	LLS @ site:	i.e., well box	condition, gaskets	s, boits, well
Well ID	Gaskets (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Well Plug Y/N	Well Lock Y/N		II Box r/Size/# of Bolts	Other
MW-6	W000	6000	6000	6000	B. No	RR16 x 3	
MW-7	(00D)	(D000)	6000	6000	8 Nho	LR5X3	
MW-8	6000	9000	6000	6000	B W	OPRISX3	
MW-9		6000	<u> </u>	600A	- 8" MOR		
MW-10	<u> </u>	10000	8	6000-Y	- 8" Mor	215 x 3	
	 		<u> </u>			· ·	
	<u> </u>						
		-					
	<u>. </u>	_			 		<u> </u>
							
		-					
	_						
					· · · · · · · · · · · · · · · · · · ·		-
							
	L. <u>.</u>						
Additional Cor	mments/Obse	rvations:			- <u> </u>		
		<u> </u>					
				· · · · · · · · · · · · · · · · · · ·			

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. Purge water is treated by filtering the water through granular activated carbon and is subsequently discharged to the ground surface at the site.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used. 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.

A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.



Client/Facility#:	Chevron #20933	<u>5</u>	Job Number:	386750	
Site Address:	1225 N. 45Th St	reet	Event Date:	6.20.12	(inclusive)
City:	Seattle, WA		Sampler:	19	
Well ID	MW-C	[Date Monitored:	10.20.12	
Well Diameter	2	Volum			
Total Depth	34.20 ft.	Factor	e 3/4"= 0.02 (VF) 4"= 0.66	2 1"= 0.04 2"= 0.17 3 5 5"= 1.02 6"= 1.50 12	5"= 0.38 2"= 5.80
Depth to Water	16.56 ft.	Check if water colum	n is less then 0.50) ft.	
	7.64 XVF	<u> </u>	x3 case volume =	Estimated Purge Volume:	gai.
Depth to Water	w/ 80% Recharge [(Hei	ght of Water Column x 0.20)	- DTWJ:	Time Started:	
Orano Faulta t				Time Completed:	(2400 hrs) (2400 hrs)
Purge Equipment: Disposable Bailer		Sampling Equipment:		Depth to Product:	
Stainless Steel Bailer		Disposable Bailer Pressure Bailer		Depth to Water:	ft
Stack Pump	1	Metal Fitters		Hydrocarbon Thickness	
Suction Pump		Peristaltic Pump		Visual Confirmation/De	scription:
Grundige		QED Bladder Pump		Skimmer / Absorbant S	ock (circle nne)
Peristaltic Pump		Other:		Amt Removed from Ski	
QED Bladder Pump	V		,	Amt Removed from We	ll:gal
Other:				Water Removed:	
				Product Transferred to:	
Start Time (purge Sample Time/Dat Approx. Flow Rat Did well de-water Time (2400 hr.)	te: <u>1246 / 6-24</u> te: gpm	. Sediment De Time: Volur	scription:	Odor: (Y) N MILE Jal. DTW @ Sampling: D.O. ORF (mg/L) (mV	16.56
	\	\rightarrow			
	\	_\	<u> </u>		_/
	<u> </u>			<u> </u>	
		LABORATORY IN	EORMATION		- <u> </u>
SAMPLE ID	(#) CONTAINER REF	RIG. PRESERV. TYPE	LABORATORY	ANALYSES	s
MW- ()		ES HCL		NWTPH-Gx/BTEX(8021)	
		S HCL		NWTPH-Dx w/sgc	
	x 250ml poly Y	ES HNO3	LANCASTER	TOTAL LEAD (6020)	
 	 				· ·
					
		vt .			
COMMENTS:					
				 	
					
Add/Replaced L	ock:	Add/Replaced Plug:	 	Add/Replaced Bolt:	



Client/Facility#:	Chevron #209335		Job Number:	386750	
Site Address:	1225 N. 45Th Street		Event Date:	10.20.12	(inclusive)
City:	Seattle, WA	···	Sampler:	J.P	
Well ID Well Diameter	MW- 7	,	Date Monitored:	6.2012	
Total Depth		Volum		2 1"= 0.04 (2"= 0.17) 3"= 0.	38
Depth to Water	36.85ft. 27.05ft.	Check if water colur	or (VF) 4"= 0.66		80
	W/ 80% Recharge ((Height of	<u> </u>	x3 case volume = + DTW]:	Time Started: 1 316	(2400 hrs)
Disposable Bailer		Disposable Bailer	•	Depth to Product: 26	
Stainless Steel Bailer Stack Pump Suction Pump		Fressure Bailer Vietal Filters		Depth to Water: 2.7. Hydrocarbon Thickness: Visual Confirmation/Descrip	.15 ft tion:
Grundfos		Peristaltio Pump DED Bladder Pump	+-/-	Skining / About and Suck	
Peristaltic Pump	 /	Other:		Amt Removed from Skimme	er: 💋 gal
QED Bladder Pump				Amt Removed from Well:	gal
Other:				Water Removed: Product Transferred to:	Ø Ø
Start Time (purge	\.	Weather Co	nditions:		
Sample Time/Dat		Water Color		Odor: Y / N	
Approx. Flow Rat		Sediment D		Oddi. F / N	
Did well de-water				gal, DTW @ Sampling:	7
Time (2400 hr.)	Volume (gal.) pH	Conductivity (µmhos/cm- µS)	Temperature (C / F	D.O. ORP (mV)	
SAMPLE ID	(#) CONTAINER REFRIG.	LABORATORY IN PRESERV. TYPE	FORMATION LABORATORY	ANALYSES	
MV-	x voa vial YES	HCL	LANCASTER	NWTPH-Gx/BTEX(8021)	
	x 1 Her ambers YES x 250ml poly YES	. HCL		NWTPH-Dx w/sgc	
	A 250/11 poly) RES	HNO3	LANCASTER	TOTAL LEAD (6020)	
- A					
COMMENTS:	SPH				
Add/Replaced Lo	ock: Add	Replaced Plug:	 	Add/Replaced Bolt:	



Client/Facility#	: Cnevron #209	335	Job !	Number:	,386750	
Site Address:	1225 N. 45Th	Street	Even	t Date:	6.20.12	(inclusive)
City:	Seattle, WA		Sam	oler:	.6	
						
Well ID	MW-B		Date Mo	onitored:	16.20.12	
Well Diameter	2		r			_
Total Depth	35.05 ft.		Volume Factor (VF)	3/4"≈ 0.02 4"= 0.66	1"= 0.04 2"= 0.17 3"= 0. 5"= 1.02 6"= 1.50 12"= 5.	
Depth to Water		Check if w	rater column is less			
•	11111				stimated Purge Volume:	gal.
Depth to Water	w/ 80% Recharge [(Height of Water Colu	mn x 0.20) + DTW]:			
					Time Started:	(2400 hrs) (2400 hrs)
Purise Equipments	\	Sampling i			Depth to Product:	(2400 fils)
Disposable Bailer	<u> </u>	Disposable			Depth to Water:	ft
Stainless Steel Bail	 	Pressure Ba	iler	 	Hydrocarbon Thickness:	
Stack Pump		Metal Filters			Visual Confirmation/Descrip	
Section Pump		Peristaltic P				
Grundfos	/	QED Bladde	r Pump	· · · · · · · · · · · · · · · · · · ·	Skimmer / Absorbant Sock (circle one)
Peristaltic Pump	/	Other:	 		Amt Removed from Skimme	r:gai
QED Bladder Pump					Amt Removed from Well:	gat
Other:					Water Removed: Product Transferred to:	<u>}</u>
					Floduce translated to	
Sample Time/Da Approx. Flow Ra Did well de-wate Time (2400 hr.)	ate:g	ph Condu	diment Description Volume: Volume: Temperor Com-us) TORY INFORM	gerature F)	Odor: (Y) N NALLO INE OPEY - DPAN al. DTW @ Sampling: Z D.O. ORP (mg/L) (mV)	
SAMPLE ID	(#) CONTAINER			RATORY	ANALYSES	
MW-	🥏 x voa vial				WTPH-GwBTEX(8021)	
	Zx 1 liter ambers				WTPH-Dx w/sgc	
	x 250ml poly	YES H	NO3 LANC	ASTER T	OTAL LEAD (6020)	
	<u> </u>					
		<u>_: </u>				
COMMENTS:	<u> </u>		· · · · · · · · · · · ·			
Add/Replaced	Lock	Add/Penlace	1 Plug:		Add/Replaced Bolt:	
		· mar i schierce	- · ·············	′	Julia vehiaren Doll	



Client/Facility#:	Chevron #20933	5	Job Number:	386750	
Site Address:	1225 N. 45Th Str	eet	Event Date:	6.20.12	— (inclusive)
City:	Seattle, WA	; 	Sampler:	a.P	_ (
·····		-			
Well ID	<u> MW- q</u>		Date Monitored:	6.2012	
Well Diameter	2				-
Total Depth	44.10 ft.	Volum Factor			
Depth to Water	30,00 ft.	Check if water colum	n is less then 0.50) ft.	
	XVF		x3 case volume =	Estimated Purge Volume:	gal.
Depth to Water	w/ 80% Recharge [(Heig	ht of Water Column x 0.20)	DTW]:	Time Started:	
Burgo Coulomont.				Time Completed:	(2400 hrs) (2400 hrs)
Purge Equipment: Disposable Bailer	~ .	Sampling Equipment:		Depth to Product:	
Stainless Steel Baile	_ } ———	Disposable Bailer	<u></u>	Depth to Water:	ft
Stack Pump	"I - /1	Pressure Bailer	·	Hydrocarbon Thickness:	<u>π</u>
Suction Pump	/ -/-/-	Metal Filters Peristaltic Pump		Visual Confirmation/Descripti	on:
Grundfos	/ / 	QED Bladder Pump		Chini and the first of the state of the stat	
Peristaltic Pump		Other:	 	Skimmer / Absorbant Sock (c Amt Removed from Skimmer	ircle one)
QED Bladder Pump		<u> </u>		Amt Removed from Well:	gal
Other:				Water Removed:	gai
				Product Transferred to:	
Start Time (purge): (D)(Q)	Weather Cor	ditional	2	
Sample Time/Da				DUNNY	
Approx. Flow Ra				Odor: Y	
Did well de-water		Sediment De		YOUTE	
Did Well de-Walei	ir <u>No</u> ii yes, i		ne:	gal. DTW @ Sampling:	200
Time	Volume	Conductivity	Temperature	D.O. ORP	
(2400 hr.)	(gal.)	(pmhos/cm_us/	(C) F) /	(mg/L) (mV)	
<u> </u>	6.4	6 4.385	Tiur 2	\cdot	
					·/ \
					/ \
					
					
SAMPLE ID	(#) CONTAINER REF	LABORATORY IN RIG. PRESERV. TYPE	LABORATORY	ANALYSES	
MW- 9	う x voa vial YE			NWTPH-GWBTEX(8021)	
	2 x 1 liter ambers YE			NWTPH-Dx w/sgc	
	x 250ml poly YE	S HNO3	LANCASTER	TOTAL LEAD (6020)	
· ·					
		 			
<u> </u>			·		
COMMENTS	1 1 1 1 1 1 1 1	<u> </u>		 	
COMMENTS:	12. LONGVE				 -
		<u> </u>		<u>,</u>	·
					
Add/Replaced L	.ock: <u>K</u>	Add/Replaced Plug:	K	Add/Replaced Bolt:	·



Glient/Facility#:	Chevion #2	09333	<u></u>	Job Number:	386750	
Site Address:	1225 N. 45T	h Street		Event Date:	w.20.12	(inclusive)
City:	Seattle, WA			Sampler:	. 0	(
				- Campion.		
Well (D	MW-co			Date Monitored:	4 0 4 10	
Well Diameter	2	_		—————	6.20.12	
Total Depth	44.60 H		Volum	me 3/4"= 0.0 or (VF) 4"= 0.8		0.38
Depth to Water	37.36 ft		<u>المصدي</u> Check if water colur			5.80
op to 1141.91	7.16	<u>.</u>			= Estimated Purge Volume:	1
Depth to Water v	w/ 80% Recharge		Vater Column x 0.20)	+ DTIÁI: -		The second secon
•	, , , , , , , , , , , , , , , , , , ,	- Kr. e. g	, , , , , , , , , , , , , , , , , , ,		Time Started:	(2400 hrs)
Purge Equipment:		s	ampling Equipment	:	Time Completed:	
Disposable Bailer) 	D	isposable Bailer	& &	Depth to Product: Depth to Water:	π ft
Stainless Steel Bailer	· \	Р	ressure Bailer		Hydrocarbon Thickness:	
Stack Pump	<u> </u>	M	letal Filters		Visual Confirmation/Descr	
Sudion Fump		P	eristattic Pump		visqui Osimimanoji Desci	ipuon.
Grundtos		Q	ED Bladder Pump		Skimmer / Absorbant Soci	(circle one)
Periolaltic Pump		\ 0	ther:		Amt Removed from Skimm	
QED Bladder Pump	IZ	1			Amt Removed from Well:_	gaf
Other:					Water Removed:	
<u> </u>					Product Transferred to:	
Sample Time/Dat Approx. Flow Rat Did well de-water Time (2400 hr.)	e:	_gpm. 'yes, Time: _{pH}	Sediment D	Temperature	gal. DTW @ Sampling: _2 D.O. ORP (mg/L) (mV)	57.35
À		6.47		44.6		<u> </u>
/ \	/\	_			/	
'		/ 	/		<u> </u>	-
						_
			ABORATORY II	NFORMATION	•	
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY		
MW- 10	2 x voa vial		HCL		NWTPH-Gx/BTEX(8021)	
ļ	2 x 1 liter ambers	YES	HCL	LANCASTER	NWTPH-Dx w/sgc	
	x 250ml poly	YES	HNO3	LANCASTER	TOTAL LEAD (6020)	
ļ	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·			
	 				<u> </u>	
-	· · ·	· ·		 		·
COMMENTS:	P. 620	KET				
	<u>. </u>				 · 	
Add/Replaced Lo	ock:	Add/l	Replaced Plug: _	-	Add/Replaced Bolt:	 -

Chevron Northwest Region Analysis Request/Chain of Custody

For Lancaster Laboratories use only



Where quality is a science.						λι. π.	-			_ 00	ai i i pae	· · · _	-							SCR#:	. 0	-
											A	naiy	808	Rec	ques	ted		P-C				1
Facility #: SS#209335-OML G-R#386	750			T	Matri	x						rese		tion	Coc	les				Preserva	live Cod	es
Site Address: 1225 N. 45th Street, SEAT	ITLE, WA							1			+	H	N	-				-			T = Thios B = NaO	
Chevron PM: MHO Lead		SAICRO	Otte	man	T	Н		thich					8							MANUAL PROPERTY OF THE PERSON	O = Othe	The state of the s
Consultant/Office: G-R, Inc., 6747 Sierra Co			945	68	able		ners	8021 🗆 8260 🗀 Naphth 🗀				9	□ Method ∠		not			la i		☐ J value reporti	The state of the s	
Consultant Prj. Mgr.: Deanna L. Harding (de					□ Potable □ NPDES		onta	8260				ed Rng	Meth		ntificat			10		Must meet low possible for 82		
Consultant Phone #:925-551-7555 Fax #: 925-551-7899							of C	712				Extended Rng.	S.		quantification					8021 MTBE Cont	irmation	
Sampler: 1 12 YNE										nates		可萨	Sign							Confirm MTBE		
	on SAR:			osit	_	Air	Nun	MEB	Scar	Эхуде	PHG	PHO	otal	¥	HH			113		☐ Confirm higher ☐ Confirm all hits	by 8260	
Sample Identification	Date Collected	Time Collected	Grab	Composite	Water	Oil	Total Number of Containers	BTEX + MEBE	8260 full scan	Oxygenates	7	ALL TPHO CENTRAL	Lead T	VPHÆPH	NWTPH H HCID					Run oxy		
	6.24.12		Y		7		7	*			X									Comments / R	emarks	
11W. 6	1	1744	*	+	×		6	X			×	×	×						-			
S AMIA		1200 1duct	X	+	×		6	×			×	×	×						+	Please forward	d the leh re	aute
man 100		11100	X	+	X		6	x			×	X	×		200					directly to the I	ead Cons	CONTRACTOR OF THE PARTY OF THE
		, Y																		and c	c: G-R.	
																					1	
				+																		
				+	-	H													-			
				上		Ц																
Turnaround Time Requested (TAT) (please circ		Relinqui	shed b	y: (X	1)				Date 14	200	Time		Recei	ived	by:				Date	Time
STD. TAT 72 hour 48 hour 24 hour 4 day 5 day		Relinqu	shed by	y:						1	Date		Time	T	Rece	ived	by:				Date	Time
Data Package Options (please circle if required)	EDF/ED	D Relinqui	shed b	y:						1	Date		Time	1	Recei	ived	by:		1315		Date	Time
Type VI (Raw Data) DISK / EDD				by Commercial Carrier: FedEx Other					-	Received by: Date Time			Time									
DiskOther.		Temper	ature U	pon R	ecelpt				o°					(Custo	ody S	eals	Inte	act?	Yes No		

Attachment B: Laboratory Analysis Report



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ANALYTICAL RESULTS

Prepared by:

Prepared for:

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

Chevron 6001 Bollinger Canyon Road L4310 San Ramon CA 94583

July 06, 2012

Project: 209335

Submittal Date: 06/23/2012 Group Number: 1317932 PO Number: 0015103600 Release Number: HORNE State of Sample Origin: WA

Client Sample Description	Lancaster Labs (LLI) #
MW-6 Grab Water Sample	6699567
MW-8 Grab Water Sample	6699568
MW-9 Grab Water Sample	6699569
MW-10 Grab Water Sample	6699570

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

ELECTRONIC

SAIC c/o Gettler-Ryan

Attn: Rachelle Munoz

COPY TO

ELECTRONIC

COPY TO

SAIC

Attn: Jamalyn Green

ELECTRONIC COPY TO

SAIC

Attn: Ruth Otteman

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Respectfully Submitted,

fill M. Parker
Senior Specialist

(717) 556-7262



Lancaster Laboratories

Analysis Report

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Page 1 of 1

Sample Description: MW-6 Grab Water Sample

Facility# 209335 Job# 386750 1225 N. 45th Street - Seattle, WA

LLI Group # 1317932 # 11260

LLI Sample # WW 6699567

Account

Project Name: 209335

Collected: 06/20/2012 12:40

by JP

Chevron

6001 Bollinger Canyon Road

Submitted: 06/23/2012 09:30 Reported: 07/06/2012 13:00

L4310

San Ramon CA 94583

45S06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Vo	latiles ECY 9	7-602 NWTPH-Gx	ug/l	ug/l	
08274	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Vo	latiles SW-84	6 8021B	ug/l	ug/l	
02102	Benzene	71-43-2	N.D.	0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1
02102	Total Xylenes	1330-20-7	N.D.	1.5	1
GC Pe	troleum ECY 9	7-602 NWTPH-Dx	ug/l	ug/l	
Hydro	carbons w/Si modif	ied			
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	30	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	70	1
The	reverse surrogate, capric ac	cid, is present at <	1%.		
Metal	s SW-84	6 6020	ug/l	ug/l	
06035	Lead	7439-92-1	N.D.	0.034	1

General Sample Comments

State of Washington Lab Certification No. C259 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 Ana	alysis Record
-----------------------	---------------

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Ti	me	Analyst	Dilution Factor
08274	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH- Gx	1	12181B53A	07/03/2012	18:32	Marie D John	1
02102	Method 8021 Water Master	SW-846 8021B	1	12181B53A	07/03/2012	18:32	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12181B53A	07/03/2012	18:32	Marie D John	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	121810006A	07/03/2012	15:57	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	121810006A	06/30/2012	06:25	JoElla L Rice	1
06035	Lead	SW-846 6020	1	121776050004A	06/29/2012	13:01	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	121776050004	06/25/2012	23:00	Annamaria Stipkovits	1



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Page 1 of 1

Sample Description: MW-8 Grab Water Sample

 LLI Sample # WW 6699568 LLI Group # 1317932 Account # 11260

Project Name: 209335

Collected: 06/20/2012 12:00

Submitted: 06/23/2012 09:30

Reported: 07/06/2012 13:00

by JP

Chevron

6001 Bollinger Canyon Road

L4310

1431

San Ramon CA 94583

45S08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Vo	latiles ECY 97	-602 NWTPH-Gx	ug/l	ug/l	
08274	NWTPH-Gx water C7-C12	n.a.	170	50	1
GC Vo	latiles SW-846	8021B	ug/l	ug/l	
02102	Benzene	71-43-2	0.7	0.5	1
02102	Ethylbenzene	100-41-4	1.3	0.5	1
02102	Toluene	108-88-3	0.7	0.5	1
02102	Total Xylenes	1330-20-7	2.2	1.5	1
GC Pe	troleum ECY 97	-602 NWTPH-Dx	ug/l	ug/l	
Hydro	carbons w/Si modifi	ed			
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	30	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	70	1
The	reverse surrogate, capric aci	d, is present at .	<1%.		
Metal	SW-846	6020	ug/l	ug/l	
06035	Lead	7439-92-1	1.8	0.034	1

General Sample Comments

State of Washington Lab Certification No. C259

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	alysis Name Method		Method Trial		Batch#	Analysis Date and Ti	me	Analyst	Dilution Factor
08274	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH- Gx	1	12181B53A	07/03/2012	18:59	Marie D John	1		
02102	Method 8021 Water Master	SW-846 8021B	1	12181B53A	07/03/2012	18:59	Marie D John	1		
01146	GC VOA Water Prep	SW-846 5030B	1	12181B53A	07/03/2012	18:59	Marie D John	1		
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	121810006A	07/03/2012	16:20	Christine E Dolman	1		
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	121810006A	06/30/2012	06:25	JoElla L Rice	1		
06035	Lead	SW-846 6020	1	121776050004A	06/29/2012	13:03	Choon Y Tian	1		
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	121776050004	06/25/2012	23:00	Annamaria Stipkovits	1		



Lancaster Laboratories

Analysis Report

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Page 1 of 1

Sample Description: MW-9 Grab Water Sample

 LLI Group # 1317932 Account # 11260

LLI Sample # WW 6699569

Project Name: 209335

Collected: 06/20/2012 10:40

Submitted: 06/23/2012 09:30

Reported: 07/06/2012 13:00

by JP

Chevron

6001 Bollinger Canyon Road

L4310

San Ramon CA 94583

45S09

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Vo	latiles H	CY 97-602	NWTPH-Gx	ug/l	ug/l	
08274	NWTPH-Gx water C7-C12		n.a.	N.D.	50	1
GC Vo	latiles S	W-846 802	1B	ug/l	ug/l	
02102	Benzene		71-43-2	N.D.	0.5	1
02102	Ethylbenzene		100-41-4	N.D.	0.5	1
02102	Toluene		108-88-3	N.D.	0.5	1
02102	Total Xylenes		1330-20-7	N.D.	1.5	1
GC Pe	troleum I	CY 97-602	NWTPH-Dx	ug/l	ug/l	
Hydro	carbons w/Si	nodified				
12005	DRO C12-C24 w/Si Gel		n.a.	N.D.	30	1
12005	HRO C24-C40 w/Si Gel		n.a.	N.D.	70	1
The	reverse surrogate, cap	ric acid, is	present at <	1%.		
Metal	s S	SW-846 602	0	ug/l	ug/l	
06035	Lead		7439-92-1	3.8	0.034	1

General Sample Comments

State of Washington Lab Certification No. C259 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	nalysis Name Method		Batch#	Analysis Date and Ti	me	Analyst	Dilution Factor
08274	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	12181B53A	07/03/2012	19:25	Marie D John	1
02102	Method 8021 Water Master	SW-846 8021B	1	12181B53A	07/03/2012	19:25	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12181B53A	07/03/2012	19:25	Marie D John	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	121810006A	07/03/2012	16:43	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	121810006A	06/30/2012	06:25	JoElla L Rice	1
06035	Lead	SW-846 6020	1	121776050004A	06/29/2012	13:05	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	121776050004	06/25/2012	23:00	Annamaria Stipkovits	1



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Page 1 of 1

Sample Description: MW-10 Grab Water Sample

Facility# 209335 Job# 386750 1225 N. 45th Street - Seattle, WA LLI Sample # WW 6699570 LLI Group # 1317932 # 11260 Account

Project Name: 209335

Collected: 06/20/2012 11:10

by JP

6001 Bollinger Canyon Road

L4310

Submitted: 06/23/2012 09:30 Reported: 07/06/2012 13:00

San Ramon CA 94583

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Vo	latiles ECY 97	-602 NWTPH-Gx	ug/l	ug/l	
08274	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Vo	latiles SW-846	8021B	ug/l	ug/l	
02102	Benzene	71-43-2	N.D.	0.5	1
02102	Ethylbenzene	100-41-4	N.D.	0.5	1
02102	Toluene	108-88-3	N.D.	0.5	1
02102	Total Xylenes	1330-20-7	N.D.	1.5	1
GC Pe	troleum ECY 97	-602 NWTPH-Dx	ug/l	ug/l	
Hydro	carbons w/Si modifi	ed			
12005	DRO C12-C24 w/Si Gel	n.a.	N.D.	31	1
12005	HRO C24-C40 w/Si Gel	n.a.	N.D.	71	1
The	reverse surrogate, capric aci	d, is present at «	<1%.		
Metal	s SW-846	6020	ug/l	ug/l	
06035	Lead	7439-92-1	0.23	0.034	1

General Sample Comments

State of Washington Lab Certification No. C259

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 Ti	me	Analyst	Dilution Factor
08274	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH- Gx	1	12181B53A	07/03/2012	19:52	Marie D John	1
02102	Method 8021 Water Master	SW-846 8021B	1	12181B53A	07/03/2012	19:52	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	12181B53A	07/03/2012	19:52	Marie D John	1
12005	NWTPH-Dx water w/ 10g Si Gel	ECY 97-602 NWTPH- Dx modified	1	121810006A	07/03/2012	17:06	Christine E Dolman	1
12007	NW Dx water w/ 10g column	ECY 97-602 NWTPH- Dx 06/97	1	121810006A	06/30/2012	06:25	JoElla L Rice	1
06035	Lead	SW-846 6020	1	121806050002A	06/29/2012	15:39	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	121806050002	06/28/2012	23:00	Annamaria Stipkovits	1



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Page 1 of 2

Quality Control Summary

Client Name: Chevron

Group Number: 1317932

Reported: 07/06/12 at 01:00 PM

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank MDL	Report <u>Units</u>	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 12181B53A	Sample numbe	r(s): 669	9567-6699	570				
Benzene	N.D.	0.5	ug/l	105		80-120		
Ethylbenzene	N.D.	0.5	ug/l	105		80-120		
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	91	91	75-135	0	30
Toluene	N.D.	0.5	ug/l	105		80-120		
Total Xylenes	N.D.	1.5	ug/l	107		80-120		
Batch number: 121810006A	Sample numbe	r(s): 669	9567-6699	570				
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	69	75	50-120	9	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 121776050004A	Sample numbe	r(s): 669	9567-6699	569				
Lead	N.D.	0.034	ug/l	106		90-115		
Batch number: 121806050002A	Sample numbe	r(s): 669	9570					
Lead	N.D.	0.034	ug/l	100		90-115		

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 %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD
Batch number: 12181B53A	Sample	number(s)	: 6699567	-66995	70 UNSI	PK: P706747	,		
Benzene	200 (2)	100 (2)	80-130	7	30				
Ethylbenzene	25*	100	80-133	30	30				
Toluene	109	109	80-133	0	30				
Total Xylenes	97	107	80-132	7	30				
Batch number: 121776050004A	Sample	number(s)	: 6699567	-66995	69 UNSI	PK: P696536	BKG: P696	536	
Lead	104	104	83-120	0	20	0.17	0.16	9 (1)	20
Batch number: 121806050002A	Sample	number(s)	: 6699570	UNSPK	: P7034	109 BKG: P7	03409		
Lead	101	101	83-120	0	20	5.4	5.3	1	20

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.

*- 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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Quality Control Summary

Client Name: Chevron

Group Number: 1317932

Reported: 07/06/12 at 01:00 PM

Surrogate Quality Control

Analysis Name: Method 8021 Water Master Batch number: 12181B53A

	Trifluorotoluene-P	Trifluorotoluene-F	
6699567	85	72	
6699568	86	71	
6699569	86	72	
6699570	86	71	
Blank	84	73	
LCS	86	88	
LCSD		88	
MS	94		
MSD	91		
Limits:	51-120	63-135	

Analysis Name: NWTPH-Dx water w/ 10g Si Gel

Batch number: 121810006A

Orthoterphenyl

6699567	15
6699568	68
6699569	69
6699570	79
Blank	76
LCS	78
LCSD	85

CCOOFCE

Limits: 50-150

*- 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.

Chevron Northwest Region Analysis Request/Chain of Custody

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Lancaster Laboratories Where quality is a science.					Acc	ct. #: _	116	DK	0	Sa	Fo mple	افيا r 2):#	ncasi O	82	151	atori	98 ys	e on	nly	scr#	<u> </u>		
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3468 Rev. 8/6/01



Lancaster

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	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
μg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	Ĺ	liter(s)
m3	cubic meter(s)	μL	microliter(s)
		pg/L	picogram/liter

- 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

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.

Data Qualifiers:

C - result confirmed by reanalysis.

J - estimated value - The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

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

Analytical test results 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.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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