



**CONESTOGA-ROVERS
& ASSOCIATES**

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February 13, 2015

Reference No. 061992

Ms. Maureen Sanchez
Department of Ecology
Northwest Regional Office
3190 160th Avenue Southeast
Bellevue, Washington 98008

Re: Third Quarter 2014 Groundwater Monitoring and Sampling Report
Former Tidewater Site
Phillips 66 Site 5173
Chevron Site 301233
2800 Martin Luther King Junior Way South
Seattle, Washington
DOE Case 42746846; VCP No. NW2612

Dear Ms. Sanchez,

Conestoga-Rovers & Associates (CRA) is submitting this *Third Quarter 2014 Groundwater Monitoring and Sampling Report* for the site referenced above (Figure 1) on behalf of Phillips 66 Company and Chevron Environmental Management Company. Groundwater monitoring and sampling was performed by Blaine Tech Services, Inc. (BTS). BTS's field forms are presented as Attachment A. Eurofins Lancaster Laboratory Environmental, LLCs' *Analytical Results* report is included as Attachment B. A summary of previous site investigations is included as Attachment C. A site map is presented on Figure 2.

RESULTS OF THIRD QUARTER 2014 EVENT

On August 28 and 29, 2014, BTS monitored and sampled the site wells per the established schedule. Results of the current monitoring event indicate the following.

- | | |
|-------------------------------------|--------------------------------------|
| • Groundwater Flow Direction | Southwest (Figure 3) |
| • Hydraulic Gradient | 0.009-0.04 |
| • Approximate Depth to Water | 10 to 15 feet below grade |
| • Approximate Groundwater Elevation | 46 to 50.5 feet above mean sea level |

Current and historical groundwater monitoring and sampling data are presented in Table 1 and current concentration data are presented below in Table A and on Figure 4.

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TABLE A: GROUNDWATER ANALYTICAL DATA

Well ID	TPHg ($\mu\text{g}/\text{L}$)	TPHd ($\mu\text{g}/\text{L}$)	TPHo ($\mu\text{g}/\text{L}$)	Benzene ($\mu\text{g}/\text{L}$)	Toluene ($\mu\text{g}/\text{L}$)	Ethylbenzene ($\mu\text{g}/\text{L}$)	Total Xylenes ($\mu\text{g}/\text{L}$)
MTCA Method A Cleanup Levels	800/1000*	500	500	5	1000	700	1000
MW-1	<50	<28	<66	<0.5	<0.5	<0.5	<0.5
MW-1 (DUP)	<50	<29	<67	<0.5	<0.5	<0.5	<0.5
MW-2	440	270	<66	<0.5	<0.5	<0.5	<0.5
MW-3	2,800	170	<66	<0.5	<0.5	34	34
MW-4	<50	<28	<66	<0.5	<0.5	<0.5	<0.5
MW-5	3,900	360	<66	<0.5	0.9 J	34	65
MW-6	<50	59 J	120 J	<0.5	<0.5	<0.5	<0.5
MW-7	<50	<28	<66	<0.5	<0.5	<0.5	<0.5
MW-8	11,000	500	<67	<0.5	0.8 J	170	590
MW-9	<50	44 J	<67	<0.5	<0.5	<0.5	<0.5
MW-10	<50	90 J	<67	<0.5	<0.5	<0.5	<0.5
MW-11	580	<29	<67	<0.5	<0.5	<0.5	<0.5
MW-13	<50	41 J	<66	<0.5	<0.5	<0.5	<0.5

Bold Indicates concentration exceed MTCA Method A cleanup level
 * TPHg Cleanup Level for wells containing benzene is 800 $\mu\text{g}/\text{L}$; otherwise cleanup level is 1,000 $\mu\text{g}/\text{L}$.
 $\mu\text{g}/\text{L}$ micrograms per liter
 TPHg total petroleum hydrocarbons as gasoline
 TPHd total petroleum hydrocarbons as diesel
 TPHo total petroleum hydrocarbons as oil
 J Estimated value

CONCLUSIONS AND RECOMMENDATIONS

The results of ongoing groundwater monitoring and sampling at the site indicate:

- TPHg concentrations exceeded the Washington State Ecology (Ecology) Model Toxics Control Act (MTCA) Method A cleanup level in groundwater wells MW-3, MW-5, and MW-8, with the highest concentration detected at MW-8 (Figure 5).
- TPHd concentrations did not exceed the MTCA Method A cleanup level in groundwater (Figure 6).
- TPHo concentrations were below MTCA Method A cleanup levels in all wells.



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- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations were below MTCA Method A cleanup levels in all wells.

CRA recommends continuing quarterly monitoring and sampling to further evaluate concentration trends over time.

ANTICIPATED FUTURE ACTIVITIES

Groundwater Monitoring

BTS will monitor and sample site wells per the established schedule. The fourth quarter 2014 event was performed in December 2014. CRA will submit a groundwater monitoring and sampling report approximately 90 days following receipt of laboratory analytical results.

Remedial Investigation/Feasibility Study (RI/FS) Work Plan

CRA submitted a RI/FS Work Plan to the Department of Ecology in November 2013, and began implementation of the work plan in June 2014. The proposed monitoring wells and soil borings outside the former station building have been installed, and the remaining work, including two borings inside the building and an aquifer potability pumping test are expected to be completed in the first quarter 2015.



**CONESTOGA-ROVERS
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February 3, 2015

Reference No. 061992

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Please contact Matthew Davis (253) 573-1218 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

A handwritten signature in black ink that reads "Matthew Davis".

Matthew Davis

MD/aa/11

Encl.

Figure 1	Vicinity Map
Figure 2	Site Plan
Figure 3	Groundwater Elevations and Contour Map
Figure 4	Groundwater Concentration Map
Figure 5	TPHg Isoconcentration Contour Map
Figure 6	TPHd Isoconcentration Contour Map

Table 1 Groundwater Monitoring and Sampling Data

Attachment A	Monitoring Data Package
Attachment B	Laboratory Analytical Report
Attachment C	Summary of Previous Investigations

cc: Ms. Jillian Holloway, Chevron (*electronic copy*)
 Mr. Ed Ralston, Phillips 66 (*electronic copy*)
 Thom Morin, Environmental Partners, Inc. (*electronic copy*)

FIGURES

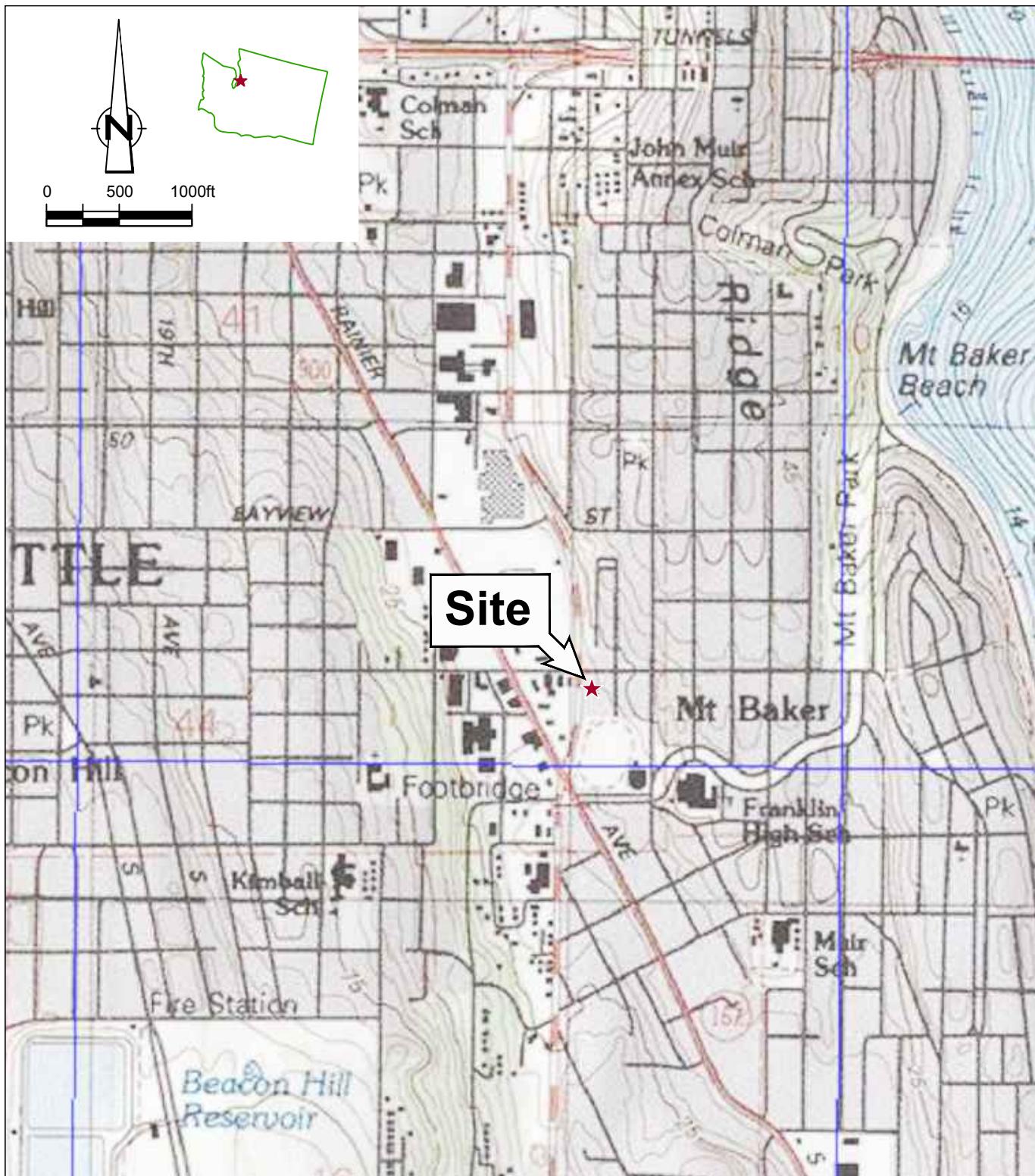
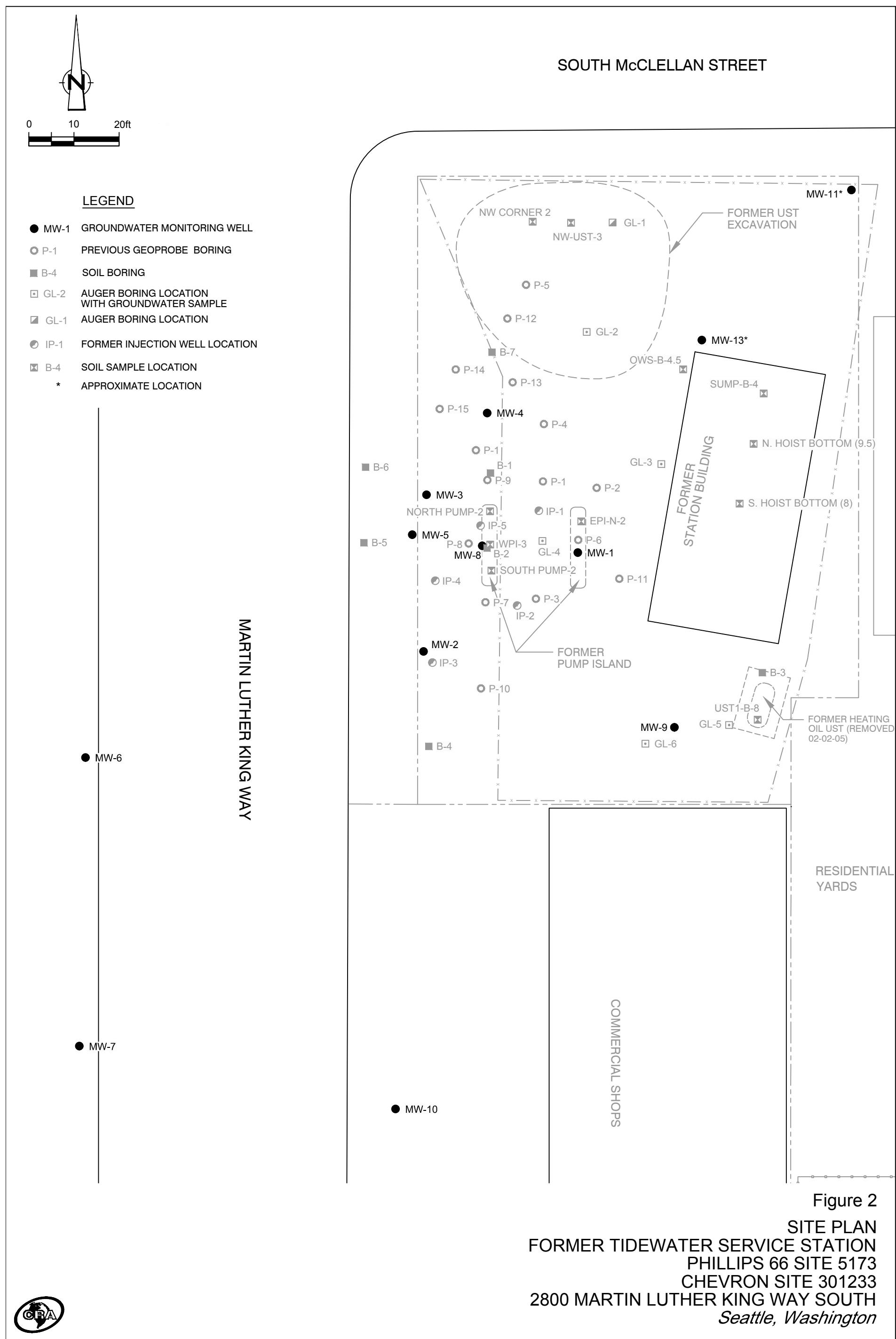
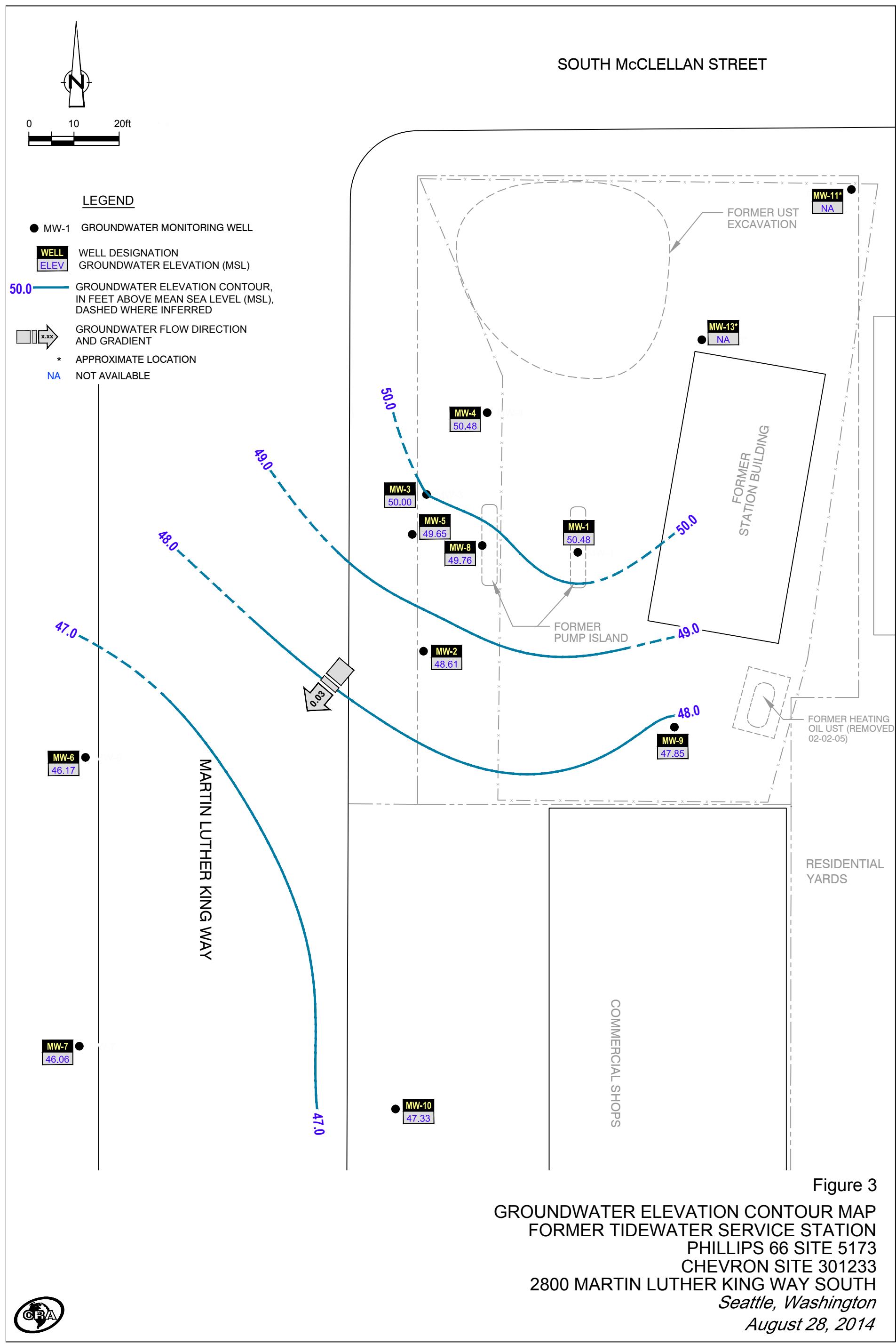
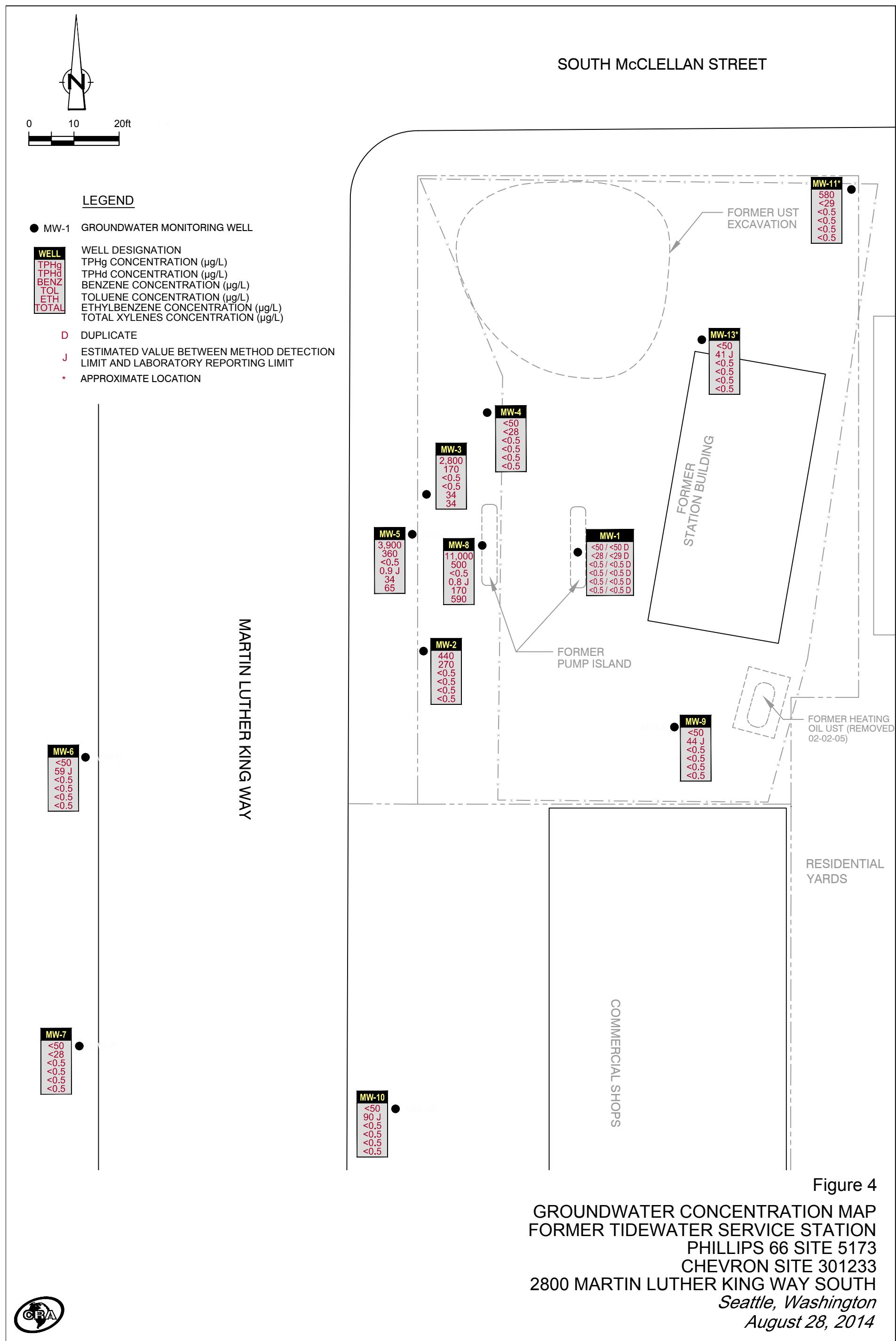


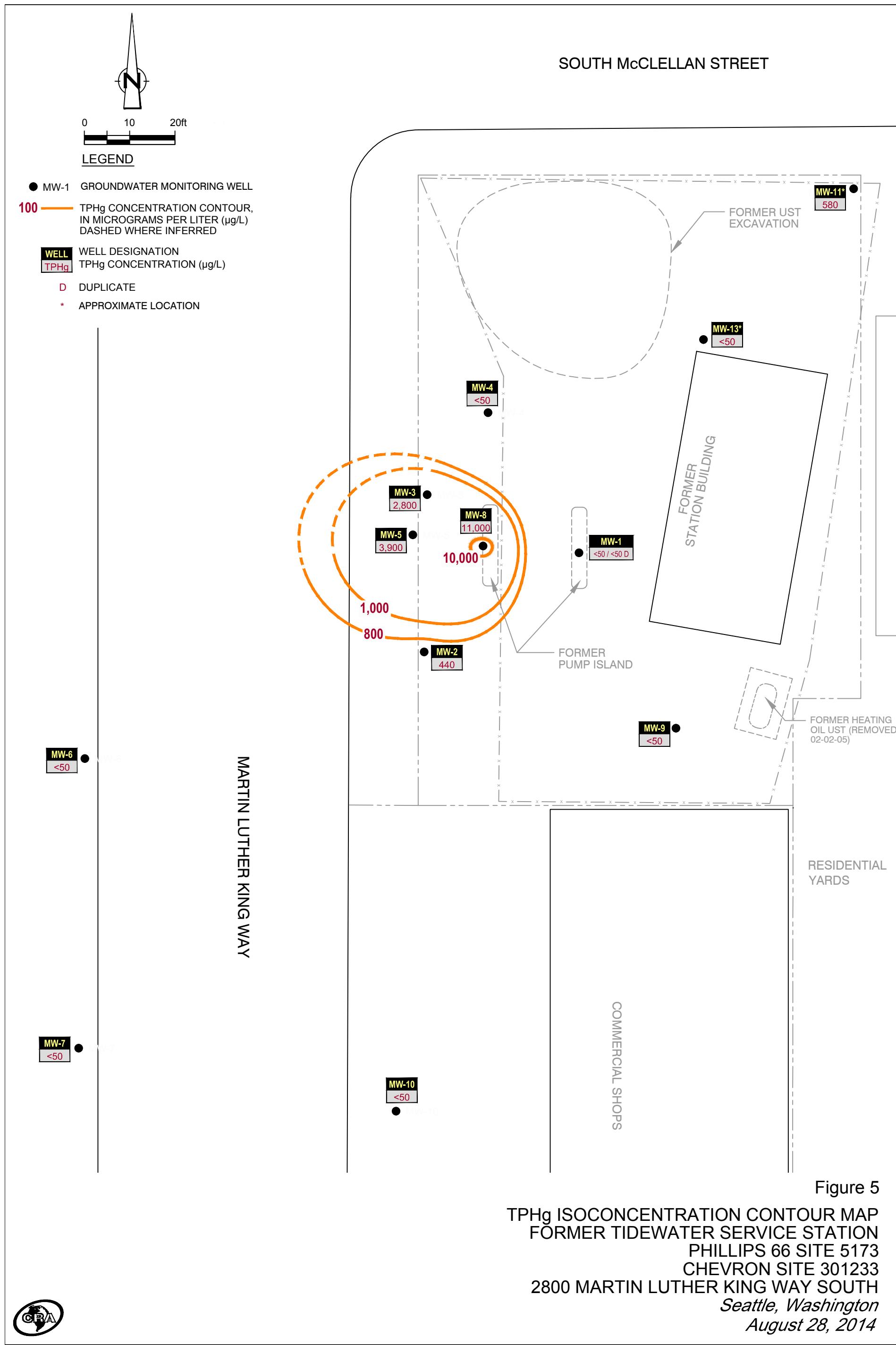
Figure 1
VICINITY MAP
FORMER TIDEWATER SERVICE STATION
PHILLIPS 66 SITE 5173
CHEVRON SITE 301233
2800 MARTIN LUTHER KING WAY SOUTH
Seattle, Washington

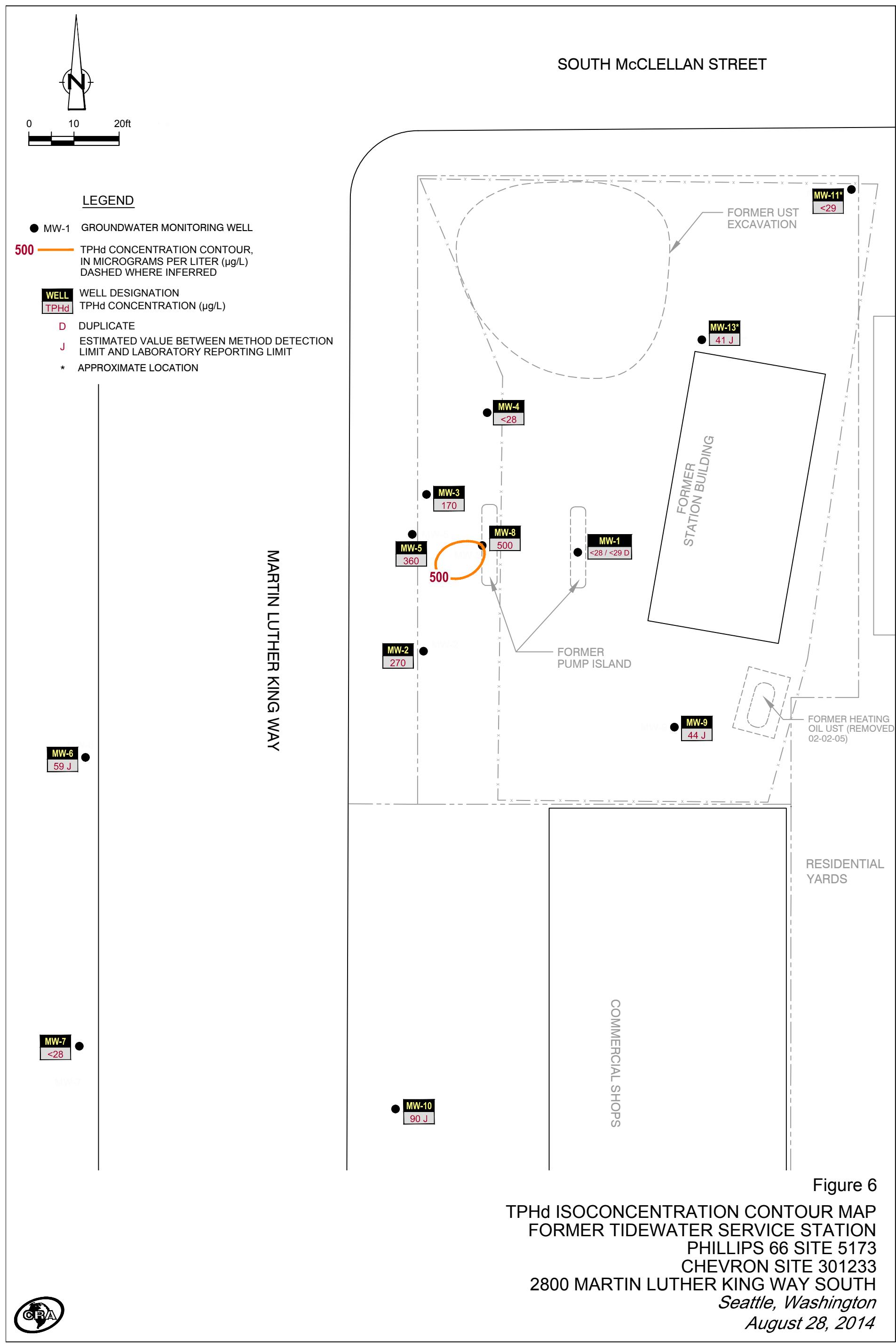












TABLE

TABLE 1

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**SUMMARY OF GROUNDWATER MONITORING DATA
FORMER TIDEWATER SERVICE STATION
PHILLIPS 66 SITE 5173
CHEVRON SITE 301233
2800 MARTIN LUTHER KING JUNIOR WAY SOUTH
SEATTLE, WASHINGTON**

Location	Date	HYDROCARBONS						PRIMARY VOCs													
		TOC	DTW	GWE	TPH-GRO	TPH-DRO	TPH-HRO	B	T	E	X	EDB	E/DC	MTBE	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	N-Propylbenzene	Isopropylbenzene	Lead (Total)	cPAHs
	Units	ft	ft	ft-amsl	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-1	08/19/2005	97.92	13.01	84.91	ND	-	-	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	
MW-1	10/27/2005	97.92	12.62	85.30	ND	-	-	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	
MW-1	12/27/2005	97.92	-	-	ND	-	-	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	
MW-1	01/12/2006	97.92	9.03	88.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-1	03/02/2006	97.92	10.56	87.36	ND	-	-	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	
MW-1	06/28/2006	97.92	12.42	85.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-1	12/01/2006	97.92	9.33	88.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-1	12/06/2006	97.92	9.72	88.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-1	02/28/2007	97.92	11.04	86.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-1	03/07/2007	97.92	11.14	86.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-1	04/11/2007	97.92	11.06	86.86	ND	-	-	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	
MW-1	11/12/2009	97.92	11.08	86.84	<50	-	-	<1.0	<1.0	<1.0	<3.0	-	-	-	-	-	-	-	-	-	
MW-1	08/30/2011 ³	97.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-1	12/15/2011 ³	97.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-1	02/06/2012	62.35	9.84	52.51	260	430	620	<0.5	41	3	18	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	
MW-1	05/30/2012	62.35	10.63	51.72	<50	35	170	<0.5	<0.7	<0.8	<0.8	<1	<1	<0.5	<1	<1	<1	<1	<1	1.7	
MW-1	08/08/2012	62.35	11.36	50.99	<50	<29 ⁴	<67 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.32	
MW-1	12/05/2012	62.35	9.51	52.84	<50	<29 ⁴	<69 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	27.7	
MW-1	02/26/2013	62.35	10.62	51.73	<50	<30 ⁴	<71 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.42	
MW-1	05/23/2013	62.35	11.14	51.21	<50	<29 ⁴	<67 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	1.7	
MW-1	08/29/2013	62.35	12.10	50.25	<50	<29 ⁴	<67 ⁴	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.42	
MW-1	11/13/2013	62.35	11.79	50.56	<50	<32 ⁴	<74 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.15	
MW-1	03/19/2014	62.35	8.69	53.66	<50	<29 ⁴	<67 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.20	
MW-1	05/27/2014	62.35	9.98	52.37	<50	<28 ⁴	<66 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.10	
MW-1 DUP	08/28/2014	62.35	11.87	50.48	<50	<28	<66	<0.5	<1	<1	<1	<1	<1	0.40 J <0.0095							
MW-1 DUP	08/28/2014	62.35	11.87	50.48	<50	<29	<67	<0.5	<1	<1	<1	<1	<1	0.31 J <0.0094							

TABLE 1

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**SUMMARY OF GROUNDWATER MONITORING DATA
FORMER TIDEWATER SERVICE STATION
PHILLIPS 66 SITE 5173
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2800 MARTIN LUTHER KING JUNIOR WAY SOUTH
SEATTLE, WASHINGTON**

Location	Date	HYDROCARBONS						PRIMARY VOCs													
		TOC	DTW	GWE	TPH-GRO	TPH-DRO	TPH-HRO	B	T	E	X	EDB	E/DC	MTBE	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	N-Propylbenzene	Isopropylbenzene	Lead (Total)	cPAHs
	Units	ft	ft	ft-amsl	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-2	08/19/2005	96.25	13.02	83.23	2,000	-	-	ND	10	81	91	-	-	-	-	-	-	-	-	-	
MW-2	10/27/2005	96.25	13.62	82.63	2,300	-	-	ND	ND	89	93	-	-	-	-	-	-	-	-	-	
MW-2	12/27/2005	96.25	-	-	820	-	-	ND	ND	21	66	-	-	-	-	-	-	-	-	-	
MW-2	01/12/2006	96.25	5.77	90.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-2	03/02/2006	96.25	11.82	84.43	1,300	-	-	ND	3.9	23	50	-	-	-	-	-	-	-	-	-	
MW-2	04/13/2006	96.25	13.06	83.19	470	-	-	ND	1.4	6.9	15	-	-	-	-	-	-	-	-	-	
MW-2	06/28/2006	96.25	12.40	83.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-2	09/11/2006	96.25	13.64	82.61	580	-	-	ND	1.6	2.9	6.2	-	-	-	-	-	-	-	-	-	
MW-2	12/01/2006	96.25	10.65	85.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-2	12/06/2006	96.25	10.20	86.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-2	01/12/2007	96.25	11.06	85.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-2	02/12/2007	96.25	-	-	1,400	-	-	1.4	3.5	16	13	-	-	-	-	-	-	-	-	-	
MW-2	02/28/2007	96.25	11.65	84.60	1,200	-	-	2	4	18	60	-	-	-	-	-	-	-	-	-	
MW-2	03/07/2007	96.25	11.43	84.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-2	04/11/2007	96.25	11.07	85.18	1,200	-	-	ND	3	11	63	-	-	-	-	-	-	-	-	-	
MW-2	11/12/2009	96.25	12.35	83.90	455	-	-	<1.0	<1.0	<1.0	<3.0	-	-	-	-	-	-	-	-	-	
MW-2	08/31/2011	60.72	11.96	48.76	960	590	-	1	<0.7	1	6	<1	<1	<0.5	<1	<1	<1	59	24	-	
MW-2	12/15/2011	60.72	11.53	49.19	750	30	-	1	<0.7	1	<1.6	<1	<1	<0.5	<1	<1	<1	60	25	-	
MW-2	02/06/2012	60.72	10.26	50.46	780	390	-	1	2	<0.8	<1.6	<1	<1	<0.5	<1	<1	<1	55	22	-	
MW-2	05/30/2012	60.72	10.83	49.89	480	210	<67	0.8	<0.7	<0.8	<0.8	<1	<1	<0.5	<1	<1	<1	47	21	3.8	
MW-2	08/08/2012	60.72	11.95	48.77	670	160 ⁴	<67 ⁴	0.9	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<1	<1	<1	48	24	8.3	-
MW-2	12/05/2012	60.72	10.61	50.11	590	250 ⁴	<73 ⁴	2	<0.5	3	11	<0.5	<0.5	<0.5	<1	<1	<1	37	17	13.1	-
MW-2	02/26/2013	60.72	10.57	50.15	770	150 ⁴	<68 ⁴	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	39	19	0.19	-
MW-2	05/23/2013	60.72	11.15	49.57	470	200 ⁴	<66 ⁴	0.7	<0.5	<0.5	3	<0.5	<0.5	<0.5	<1	<1	<1	46	21	0.12	-
MW-2	08/29/2013	60.72	12.11	48.61	740	200 ⁴	<67 ⁴	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	36	17	0.36	-
MW-2	11/13/2013	60.72	11.69	49.03	700	160 ⁴	<67 ⁴	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	48	21	0.14	-
MW-2	03/18/2014	60.72	10.31	50.41	870	180 ⁴	<66 ⁴	0.9	<0.5	3	2	<0.5	<0.5	<0.5	<1	<1	<1	39	19	0.90	-

TABLE 1

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**SUMMARY OF GROUNDWATER MONITORING DATA
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CHEVRON SITE 301233
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SEATTLE, WASHINGTON**

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	Units	ft	ft	ft-amsl	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-2	05/27/2014	60.72	10.25	50.47	370	300 ⁴	<66 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	23	9	0.42	-	
MW-2	08/28/2014	60.72	12.11	48.61	440	270	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	19	10	0.44 J	<0.0095	
MW-3	08/19/2005	97.43	12.72	84.71	44,000	-	-	4.1	18	780	3,600	-	-	-	-	-	-	-	-	-	
MW-3	12/27/2005	97.43	13.42	84.01	17,000	-	-	ND	38	580	3,000	-	-	-	-	-	-	-	-	-	
MW-3	12/28/2005	-	-	-	6,600	-	-	5	22	200	1,100	-	-	-	-	-	-	-	-	-	
MW-3	01/12/2006	97.43	8.84	88.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-3	03/02/2006	97.43	10.90	86.53	22,000	-	-	ND	26	450	4,200	-	-	-	-	-	-	-	-	-	
MW-3	04/13/2006	97.43	11.92	85.51	33,000	-	-	ND	3	700	3,100	-	-	-	-	-	-	-	-	-	
MW-3	06/28/2006	97.43	12.17	85.26	53,000	-	-	ND	17	530	2,600	-	-	-	-	-	-	-	-	-	
MW-3	08/13/2006	97.43	13.91	83.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-3	09/11/2006	97.43	13.77	83.66	14,000	-	-	ND	5.6	180	1,100	-	-	-	-	-	-	-	-	-	
MW-3	10/13/2006	97.43	-	1,400	-	-	ND	1	26	98	-	-	-	-	-	-	-	-	-	-	
MW-3	11/17/2006	97.43	10.56	86.87	48,000	-	-	ND	34	490	4,100	-	-	-	-	-	-	-	-	-	
MW-3	12/01/2006	97.43	9.78	87.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-3	12/06/2006	97.43	10.01	87.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-3	01/12/2007	97.43	10.90	86.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-3	02/12/2007	97.43	-	-	36,000	-	-	ND	10	280	1,800	-	-	-	-	-	-	-	-	-	
MW-3	02/28/2007	97.43	11.12	86.31	22,000	-	-	ND	6	200	1,400	-	-	-	-	-	-	-	-	-	
MW-3	03/07/2007	97.43	11.17	86.26	21,000	-	-	ND	18	170	1,000	-	-	-	-	-	-	-	-	-	
MW-3	04/11/2007	97.43	11.04	86.39	19,000	-	-	ND	6	110	1,100	-	-	-	-	-	-	-	-	-	
MW-3	11/12/2009	97.43	11.98	85.45	71.7	-	-	ND	<1.0	<1.0	<3.0	-	-	-	-	-	-	-	-	-	
MW-3	08/31/2011	61.81	12.10	49.71	7,400	370	<68	<1.0	<1	190	554	<2	<2	<1	67	1,300	330	140	47	-	
MW-3	12/15/2011	61.81	11.38	50.43	5,400	<29	<67	<0.5	<0.7	120	400	<1	<1	<0.5	50	950	210	110	37	-	
MW-3	02/06/2012	61.81	10.33	51.48	6,300	1,200	<68	<1	<1	130	523	<2	<2	<1	49	870	190	74	27	-	
MW-3	05/30/2012	61.81	10.87	50.94	7,400	520	<66	<1	<1	160	660	<2	<2	<1	66	1,100	220	100	38	1.1	
MW-3	08/07/2012	61.81	11.42	50.39	8,100	290 ⁴	<67 ⁴	<1	<1	140	610	<1	<1	<1	71	830	140	86	33	0.98	-

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**SUMMARY OF GROUNDWATER MONITORING DATA
FORMER TIDEWATER SERVICE STATION
PHILLIPS 66 SITE 5173
CHEVRON SITE 301233
2800 MARTIN LUTHER KING JUNIOR WAY SOUTH
SEATTLE, WASHINGTON**

Location	Date	HYDROCARBONS						PRIMARY VOCs													
		TOC	DTW	GWE	TPH-GRO	TPH-DRO	TPH-HRO	B	T	E	X	EDB	E/DC	MTBE	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	N-Propylbenzene	Isopropylbenzene	Lead (Total)	cPAHs
	Units	ft	ft	ft-amsl	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-3	12/06/2012	61.81	9.91	51.90	6,700	290 ⁴	<69 ⁴	<0.5	<0.5	160	480	<0.5	<0.5	<0.5	75	860	160	100	41	0.36	-
MW-3	02/27/2013	61.81	10.88	50.93	9,500	510 ⁴	<66 ⁴	<0.5	<0.5	190	620	<0.5	<0.5	<0.5	73	1,200	240	130	51	0.70	-
MW-3	05/23/2013	61.81	11.00	50.81	5,800	240 ⁴	<67 ⁴	<0.5	<0.5	160	550	<0.5	<0.5	<0.5	82	1,200	170	130	45	2.6	-
MW-3	08/30/2013	61.81	12.04	49.77	4,300	260 ⁴	<70 ⁴	<0.5	<0.5	54	190	<0.5	<0.5	<0.5	33	680	52	81	33	0.26	-
MW-3	11/13/2013	61.81	11.59	50.22	3,100	120 ⁴	<67 ⁴	<0.5	<0.5	33	120	<0.5	<0.5	<0.5	20	440	23	86	31	0.30	-
MW-3	03/19/2014	61.81	9.20	52.61	6,300	180 ⁴	<66 ⁴	<0.5	<0.5	100	410	<0.5	<0.5	<0.5	49	790	99	82	35	1.2	-
MW-3	05/27/2014	61.81	10.58	51.23	8,700	210 ⁴	<66 ⁴	<1	<1	180	460	<1	<1	<1	54	1,600	65	170	63	0.65	-
MW-3	08/29/2014	61.81	11.81	50.00	2,800	170	<66	<0.5	<0.5	34	34	<0.5	<0.5	<0.5	9	370	11	61	27	0.20 J	<0.0096
MW-4	06/28/2006	98.36	12.40	85.96	ND	-	-	ND	ND	ND	-	-	-	-	-	-	-	-	-	-	-
MW-4	12/01/2006	98.36	9.90	88.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	12/06/2006	98.36	10.21	88.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	02/28/2007	98.36	11.43	86.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	03/07/2007	98.36	11.49	86.87	ND	-	-	ND	ND	ND	-	-	-	-	-	-	-	-	-	-	-
MW-4	04/11/2007	98.36	11.27	87.09	ND	-	-	ND	ND	ND	-	-	-	-	-	-	-	-	-	-	-
MW-4	11/12/2009	98.36	11.82	86.54	<50	-	-	<1.0	<1.0	<1.0	<3.0	-	-	-	-	-	-	-	-	-	-
MW-4	08/31/2011	62.75	12.42	50.33	<50	<29	<68	<0.5	<0.7	<0.8	<0.8	<2	<2	<0.5	<1	<1	<1	<1	<1	<1	-
MW-4	12/15/2011	62.75	11.69	51.06	<50	<29	<67	<0.5	<0.7	<0.8	<1.6	<1	<1	<0.5	<1	<1	<1	<1	<1	<1	-
MW-4	02/06/2012	62.75	10.50	52.25	<50	55	<67	<0.5	<0.7	<0.8	<1.6	<2	<2	<0.5	<1	<1	<1	<1	<1	<1	-
MW-4	05/30/2012	62.75	11.11	51.64	<50	<29	<67	<0.5	<0.7	<0.8	<0.8	<1	<1	<0.5	<1	<1	<1	<1	<1	1.8	0.007248
MW-4	08/07/2012	62.75	11.76	50.99	<50	<29 ⁴	<68 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.34	-
MW-4	12/05/2012	62.75	10.19	52.56	<50	<32 ⁴	<75 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	4.0	-
MW-4	02/26/2013	62.75	11.15	51.60	<50	<28 ⁴	<66 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.16	-
MW-4	05/23/2013	62.75	11.35	51.40	<50	<29 ⁴	<67 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.74	-
MW-4	08/29/2013	62.75	12.41	50.34	<50	<29 ⁴	<67 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.085	-
MW-4	11/13/2013	62.75	11.98	50.77	<50	<31 ⁴	<73 ⁴	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.085	-
MW-4	03/18/2014	62.75	9.29	53.46	<50	<29 ⁴	<67 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.14	-

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**SUMMARY OF GROUNDWATER MONITORING DATA
FORMER TIDEWATER SERVICE STATION
PHILLIPS 66 SITE 5173
CHEVRON SITE 301233
2800 MARTIN LUTHER KING JUNIOR WAY SOUTH
SEATTLE, WASHINGTON**

Location	Date	HYDROCARBONS						PRIMARY VOCs													
		TOC	DTW	GWE	TPH-GRO	TPH-DRO	TPH-HRO	B	T	E	X	EDB	E/DC	MTBE	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	N-Propylbenzene	Isopropylbenzene	Lead (Total)	cPAHs
	Units	ft	ft	ft-amsl	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-4	05/27/2014	62.75	10.89	51.86	<50	<28 ⁴	<66 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<0.085	-	
MW-4	08/28/2014	62.75	12.27	50.48	<50	<28	<66	<0.5	<1	<1	<1	<1	0.14 J	<0.0095							
MW-5	06/28/2006	97.20	12.09	85.11	21,000	-	-	ND	14	290	920	-	-	-	-	-	-	-	-	-	
MW-5	09/11/2006	97.20	13.63	83.57	2,500	-	-	ND	ND	34	60	-	-	-	-	-	-	-	-	-	
MW-5	11/17/2006	97.20	10.57	86.63	23,000	-	-	ND	52	450	1,700	-	-	-	-	-	-	-	-	-	
MW-5	12/01/2006	97.20	9.75	87.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-5	01/12/2007	97.20	10.85	86.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-5	02/12/2007	97.20	-	-	37,000	-	-	ND	33	1,600	2,800	-	-	-	-	-	-	-	-	-	
MW-5	02/28/2007	97.20	11.05	86.15	29,000	-	-	ND	24	550	1,800	-	-	-	-	-	-	-	-	-	
MW-5	03/07/2007	97.20	11.11	86.09	42,000	-	-	11	24	740	2,500	-	-	-	-	-	-	-	-	-	
MW-5	04/11/2007	97.20	10.96	86.24	65,000	-	-	ND	79	850	4,000	-	-	-	-	-	-	-	-	-	
MW-5	11/12/2009	97.20	12.10	85.10	2,340	-	-	1	36	<1.0	125	-	-	-	-	-	-	-	-	-	
MW-5	08/31/2011	61.66	12.80	48.86	3,100	770	<67	2	1	72	124	<1	<1	<0.5	120	130	18	210	78	-	
MW-5	12/15/2011	61.66	11.41	50.25	1,900	66	<67	1	0.9	24	33	<1	<1	<0.5	81	43	3	120	43	-	
MW-5	02/06/2012	61.66	10.54	51.12	1,200	34	<68	0.8	<0.7	12	43	<1	<1	<0.5	37	31	6	55	21	-	
MW-5	05/30/2012	61.66	10.91	50.75	260	54	<66	<0.5	<0.7	3	7	<1	<1	<0.5	12	4	<1	24	9	0.48	
MW-5	08/07/2012	61.66	11.39	50.27	610	190 ⁴	<66 ⁴	<0.5	<0.5	11	22	<0.5	<0.5	<0.5	21	33	12	32	13	5.1	-
MW-5	12/06/2012	61.66	9.74	51.92	170	40 ⁴	<76 ⁴	<0.5	<0.5	2	8	<0.5	<0.5	<0.5	8	3	<1	12	4	0.17	-
MW-5	02/27/2013	61.66	11.03	50.63	790	170 ⁴	<69 ⁴	<0.5	0.6	7	12	<0.5	<0.5	<0.5	25	9	1	42	19	0.76	-
MW-5	05/23/2013	61.66	10.90	50.76	360	64 ⁴	<67 ⁴	<0.5	<0.5	4	6	<0.5	<0.5	<0.5	25	4	<1	34	13	0.80	-
MW-5	08/30/2013	61.66	12.19	49.47	3,200	340 ⁴	<69 ⁴	0.7	1	49	89	<0.5	<0.5	<0.5	92	92	16	160	59	1.2	-
MW-5	11/14/2013	61.66	11.64	50.02	2,000	240 ⁴	<75 ⁴	0.7	0.7	19	14	<0.5	<0.5	<0.5	54	6	<1	130	44	0.31	-
MW-5	03/19/2014	61.66	9.21	52.45	1,700	110 ⁴	<67 ⁴	<0.5	<0.5	34	150	<0.5	<0.5	<0.5	26	170	27	52	19	0.17	-
MW-5	05/28/2014	61.66	10.62	51.04	570	100 ⁴	<67 ⁴	<0.5	<0.5	8	26	<0.5	<0.5	<0.5	9	16	6	41	14	0.16	-
MW-5	08/28/2014	61.66	12.01	49.65	3,900	360	<66	<0.5	0.9 J	34	65	<0.5	<0.5	<0.5	36	65	15	170	61	0.49 J	<0.0095

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**SUMMARY OF GROUNDWATER MONITORING DATA
FORMER TIDEWATER SERVICE STATION
PHILLIPS 66 SITE 5173
CHEVRON SITE 301233
2800 MARTIN LUTHER KING JUNIOR WAY SOUTH
SEATTLE, WASHINGTON**

Location	Date	HYDROCARBONS						PRIMARY VOCs													
		TOC	DTW	GWE	TPH-GRO	TPH-DRO	TPH-HRO	B	T	E	X	EDB	E/DC	MTBE	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	N-Propylbenzene	Isopropylbenzene	Lead (Total)	cPAHs
	Units	ft	ft	ft-amsl	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-6	08/31/2011	58.03	12.33	45.70	<50	44	<67	<0.5	<0.7	<0.8	<0.8	<1	<1	<0.5	1	<1	<1	<1	<1	-	-
MW-6	12/15/2011	58.03	12.09	45.94	<50	<29	<67	<0.5	<0.7	<0.8	<1.6	<1	<1	<0.5	<1	<1	<1	<1	<1	-	-
MW-6	02/06/2012	58.03	11.80	46.23	<50	<29	<68	<0.5	<0.7	<0.8	<1.6	<1	<1	<0.5	<1	<1	<1	<1	<1	-	-
MW-6	05/30/2012	58.03	12.03	46.00	<50	<29	<68	<0.5	<0.7	<0.8	<0.8	<1	<1	<0.5	<1	<1	<1	<1	<1	2.5	-
MW-6	08/07/2012	58.03	12.21	45.82	<50	<28 ⁴	<66 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.15	-
MW-6	12/06/2012	58.03	11.60	46.43	<50	<31 ⁴	<73 ⁴	<0.5	<0.5	1	6	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	1.1	-
MW-6	02/27/2013	58.03	11.77	46.26	<50	<30 ⁴	<70 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.68	-
MW-6	05/24/2013	58.03	11.91	46.12	<50	<30 ⁴	<70 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.20	-
MW-6	08/29/2013	58.03	12.21	45.82	<50	<28 ⁴	<66 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.087	-
MW-6	11/14/2013	58.03	12.12	45.91	<50	<29 ⁴	<67 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.15	-
MW-6	03/18/2014	58.03	11.38	46.65	<50	<29 ⁴	<68 ⁴	4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.97	-
MW-6	05/28/2014	58.03	11.87	46.16	<50	<28 ⁴	<66 ⁴	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	30.5	-
MW-6	08/29/2014	58.03	11.86	46.17	<50	59 J	120 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	24.4	<0.0095
MW-7	08/31/2011	56.96	11.15	45.81	<50	<29	<67	<0.5	<0.7	<0.8	<0.8	<1	<1	<0.5	<1	<1	<1	<1	<1	-	-
MW-7	12/15/2011	56.96	10.93	46.03	<50	45	89	<0.5	<0.7	<0.8	<1.6	<1	<1	<0.5	<1	<1	<1	<1	<1	-	-
MW-7	02/06/2012	56.96	10.75	46.21	<50	<29	<68	<0.5	2	<0.8	<1.6	<1	<1	<0.5	<1	<1	<1	<1	<1	-	-
MW-7	05/30/2012	56.96	10.93	46.03	<50	37	160	<0.5	<0.7	<0.8	<0.8	<1	<1	<0.5	<1	<1	<1	<1	<1	13.8	0.097
MW-7	08/07/2012	56.96	11.70	45.26	<50	<28 ⁴	<66 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	31.7	-
MW-7	12/06/2012	56.96	10.46	46.50	<50	<29 ⁴	<67 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	40.3	-
MW-7	02/27/2013	56.96	10.69	46.27	<50	<29 ⁴	<68 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	76.5	-
MW-7	05/24/2013	56.96	10.81	46.15	<50	<31 ⁴	<72 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	1.9	-
MW-7	08/29/2013	56.96	11.05	45.91	<50	<29 ⁴	<67 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	2.9	-
MW-7	11/14/2013	56.96	10.96	46.00	<50	<29 ⁴	<67 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	22.7	-
MW-7	03/18/2014	56.96	10.39	46.57	<50	<29 ⁴	<68 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	79.3	-
MW-7	05/28/2014	56.96	10.78	46.18	<50	<29 ⁴	<67 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	9.7	-
MW-7	08/29/2014	56.96	10.90	46.06	<50	<28	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	40.9	<0.0095

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**SUMMARY OF GROUNDWATER MONITORING DATA
FORMER TIDEWATER SERVICE STATION
PHILLIPS 66 SITE 5173
CHEVRON SITE 301233
2800 MARTIN LUTHER KING JUNIOR WAY SOUTH
SEATTLE, WASHINGTON**

Location	Date	HYDROCARBONS						PRIMARY VOCs													
		TOC	DTW	GWE	TPH-GRO	TPH-DRO	TPH-HRO	B	T	E	X	EDB	E/DC	MTBE	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	N-Propylbenzene	Isopropylbenzene	Lead (Total)	cPAHs
Units	ft	ft	ft-amsl	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-8	08/31/2011	61.71	12.01	49.70	4,400	240	<67	<0.5	<0.7	41	442	<1	<1	<0.5	33	500	130	26	11	-	-
MW-8	12/15/2011	61.71	11.25	50.46	8,100	96	<67	<0.5	<0.7	79	880	<1	<1	<0.5	72	900	230	46	20	-	-
MW-8	02/06/2012	61.71	10.00	51.71	13,000	290	<69	<1	<1	110	1,280	<2	<2	<1	89	1,400	450	36	18	-	-
MW-8	05/30/2012	61.71	10.69	51.02	9,500	700	<68	<1	<1	110	1,300	<2	<2	<1	96	1,100	310	59	28	7.1	0.007324
MW-8 DUP	05/30/2012	61.71	10.69	51.02	10,000	450	<66	<1	<1	110	1,300	<2	<2	<1	93	1,300	340	58	27	5.3	0.007248
MW-8	08/08/2012	61.71	11.30	50.41	9,300	290 ⁴	<66 ⁴	<1	<1	92	850	<1	<1	<1	73	910	190	49	22	3.4	-
MW-8 DUP	08/08/2012	61.71	11.30	50.41	11,000	240 ⁴	<66 ⁴	<1	<1	83	710	<1	<1	<1	67	680	140	44	20	3.6	-
MW-8	12/05/2012	61.71	9.61	52.10	13,000	2,600 ⁴	200 ⁴	<0.5	0.8	95	1,100	<0.5	<0.5	<0.5	93	1,400	380	61	27	27.6	-
MW-8 DUP	12/05/2012	61.71	9.61	52.10	12,000	2,600 ⁴	240 ⁴	<0.5	0.8	91	1,100	<0.5	<0.5	<0.5	91	1,400	360	58	26	27.4	-
MW-8	02/26/2013	61.71	10.71	51.00	12,000	780 ⁴	<70 ⁴	<0.5	0.6	100	800	<0.5	<0.5	<0.5	86	1,200	280	63	29	5.2	-
MW-8 DUP	02/26/2013	61.71	10.71	51.00	11,000	540 ⁴	<69 ⁴	<0.5	0.6	100	770	<0.5	<0.5	<0.5	72	1,100	280	60	29	5.3	-
MW-8	05/23/2013	61.71	10.87	50.84	6,800	380 ⁴	<68 ⁴	<0.5	<0.5	87	700	<0.5	<0.5	<0.5	86	1,200	190	62	25	4.0	-
MW-8 DUP	05/23/2013	61.71	10.87	50.84	7,000	380 ⁴	<68 ⁴	<0.5	0.5	100	810	<0.5	<0.5	<0.5	94	1,300	240	73	29	3.5	-
MW-8	08/29/2013	61.71	12.00	49.71	6,600	340 ⁴	<66 ⁴	<0.5	<0.5	60	450	<0.5	<0.5	<0.5	49	680	110	47	20	2.1	-
MW-8 DUP	08/30/2013	61.71	12.00	49.71	3,500	220 ⁴	<66 ⁴	<0.5	<0.5	47	350	<0.5	<0.5	<0.5	39	510	83	45	18	1.2	-
MW-8	11/14/2013	61.71	11.52	50.19	8,900	390 ⁴	<67 ⁴	<0.5	0.5	79	740	<0.5	<0.5	<0.5	67	1,000	180	65	26	3.1	-
MW-8 DUP	11/14/2013	61.71	11.52	50.19	8,000	320 ⁴	<67 ⁴	<0.5	0.6	81	760	<0.5	<0.5	<0.5	66	1,100	180	65	27	3.2	-
MW-8	03/19/2014	61.71	8.73	52.98	8,400	2,400 ⁴	<67 ⁴	<0.5	<0.5	33	370	<0.5	<0.5	<0.5	57	800	250	28	12	12.6	-
MW-8 DUP	03/19/2014	61.71	8.73	52.98	8,800	2,200 ⁴	110 ⁴	<0.5	<0.5	42	480	<0.5	<0.5	<0.5	66	960	280	40	17	10.5	-
MW-8	05/28/2014	61.71	10.41	51.30	5,600	860 ⁴	<67 ⁴	<0.5	<0.5	50	270	<0.5	<0.5	<0.5	39	740	130	24	13	3.9	-
MW-8 DUP	05/28/2014	61.71	10.41	51.30	5,900	910 ⁴	<67 ⁴	<0.5	<0.5	67	330	<0.5	<0.5	<0.5	59	750	190	41	19	4.2	-
MW-8	08/28/2014	61.71	11.95	49.76	11,000	500	<67	<0.5	0.8 J	170	590	<0.5	<0.5	<0.5	70	1,200	180	110	44	1.6	<0.0095
MW-9	08/31/2011	62.58	14.29	48.29	<50	78	<68	<0.5	<0.7	<0.8	<0.8	<1	<1	<0.5	<1	<1	<1	<1	-	-	-
MW-9	12/15/2011	62.58	13.01	49.57	<50	<29	<67	<0.5	<0.7	<0.8	<1.6	<1	<1	<0.5	<1	<1	<1	<1	-	-	-
MW-9	02/06/2012	62.58	12.04	50.54	66	<300	<700 ¹	<0.5	<0.7	<0.8	<1.6	<1	<1	<0.5	<1	<1	<1	<1	-	-	-

TABLE 1

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**SUMMARY OF GROUNDWATER MONITORING DATA
FORMER TIDEWATER SERVICE STATION
PHILLIPS 66 SITE 5173
CHEVRON SITE 301233
2800 MARTIN LUTHER KING JUNIOR WAY SOUTH
SEATTLE, WASHINGTON**

Location	Date	HYDROCARBONS						PRIMARY VOCs													
		TOC	DTW	GWE	TPH-GRO	TPH-DRO	TPH-HRO	B	T	E	X	EDB	E/DC	MTBE	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	N-Propylbenzene	Isopropylbenzene	Lead (Total)	cPAHs
	Units	ft	ft	ft-amsl	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-9	05/30/2012	52.58	12.53	40.05	66	<29	<67	<0.5	<0.7	<0.8	<0.8	<1	<1	<0.5	<1	<1	<1	<1	0.31	0.007248	
MW-9	08/08/2012	62.58	13.37	49.21	<50	<29 ⁴	<67 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	0.87	-	
MW-9	12/05/2012	62.58	12.05	50.53	<50	39 ⁴	<69 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	0.33	-	
MW-9	02/26/2013 ⁵	62.58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-9	05/24/2013	62.58	13.05	49.53	100	<29 ⁴	<68 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	0.24	-	
MW-9	08/29/2013	62.58	14.77	47.81	<50	51 ⁴	<66 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<0.085	-	
MW-9	11/13/2013	62.58	13.41	49.17	120	<29 ⁴	<67 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	0.087	-	
MW-9	03/18/2014	62.58	12.07	50.51	96	37 ⁴	<66 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	0.087	-	
MW-9	05/27/2014	62.58	12.97	49.61	64	50 ⁴	<67 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	0.092	-	
MW-9	08/28/2014	62.58	14.73	47.85	<50	44 J	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	0.12 J	<0.0095	
MW-10	08/31/2011	58.96	11.94	47.02	<50	260	100	2	<0.7	<0.8	<0.8	<1	<1	<0.5	<1	<1	<1	<1	-	-	
MW-10	12/15/2011	58.96	11.13	47.83	51	<28	<66	3	<0.7	<0.8	0.8	<1	<1	<0.5	<1	<1	<1	2	<1	-	-
MW-10	02/06/2012	58.96	10.44	48.52	<50 ²	<29	<68	1	<0.7	<0.8	<1.6	<1	<1	<0.5	<1	<1	<1	3	1	-	-
MW-10	05/30/2012	58.96	10.77	48.19	<50	74	<66	<0.5	<0.7	<0.8	<0.8	<1	<1	<0.5	<1	<1	<1	<1	0.46	0.007248	
MW-10 DUP	05/30/2012	58.96	10.77	48.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.49	-	
MW-10	08/07/2012	58.96	11.41	47.55	110	130 ⁴	<68 ⁴	1	<0.5	<0.5	1	<0.5	<0.5	<0.5	<1	<1	<1	10	4	<0.034	-
MW-10	12/06/2012	58.96	11.31	47.65	130	220 ⁴	<72 ⁴	3	0.6	<0.5	4	<0.5	<0.5	<0.5	<1	<1	<1	24	10	0.28	-
MW-10	02/27/2013	58.96	10.49	48.47	<50	71 ⁴	<69 ⁴	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	2	<1	<0.073	-
MW-10	05/24/2013	58.96	10.94	48.02	<50	<29 ⁴	<67 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<0.073	-
MW-10	08/30/2013	58.96	12.13	46.83	<50	57 ⁴	<66 ⁴	0.8	<0.5	<0.5	1	<0.5	<0.5	<0.5	<1	<1	<1	3	1	0.10	-
MW-10	11/13/2013	58.96	11.76	47.20	210	50 ⁴	<67 ⁴	2	<0.5	<0.5	3	<0.5	<0.5	<0.5	<1	1	<1	13	5	0.39	-
MW-10	03/18/2014	58.96	11.29	47.67	520	190 ⁴	<66 ⁴	2	0.7	<0.5	6	<0.5	<0.5	<0.5	<1	<1	<1	40	20	<0.085	-
MW-10	05/27/2014	58.96	10.14	48.82	<50	74 ⁴	<67 ⁴	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	2	<1	0.11	-
MW-10	08/29/2014	58.96	11.63	47.33	<50	90 J	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	0.43 J	<0.0096	
MW-11	08/28/2014	-	11.23	-	580	<29	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	0.22 J	<0.0096	

TABLE 1

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**SUMMARY OF GROUNDWATER MONITORING DATA
FORMER TIDEWATER SERVICE STATION
PHILLIPS 66 SITE 5173
CHEVRON SITE 301233
2800 MARTIN LUTHER KING JUNIOR WAY SOUTH
SEATTLE, WASHINGTON**

Location	Date	HYDROCARBONS					PRIMARY VOCs															
		TOC	DTW	GWE	TPH-GRO	TPH-DRO	TPH-HRO	B	T	E	X	EDB	E/DC	MTBE	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	N-Propylbenzene	Isopropylbenzene	Lead (Total)	cPAHs	
		Units	ft	ft	ft-amsl	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-13	08/28/2014	-	10.10	-	<50	41 J	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	1.7	<0.0095		
Trip Blank	08/08/2012	-	-	-	<50	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	-	-		
Trip Blank	12/05/2012	-	-	-	<50	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	-	-		
Trip Blank	02/26/2013	-	-	-	<50	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	-	-		
Trip Blank	05/23/2013	-	-	-	<50	-	-	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-		
Trip Blank	08/29/2013	-	-	-	<50	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	-	-		
Trip Blank	11/13/2013	-	-	-	<50	-	-	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-		
Trip Blank	03/19/2014	-	-	-	<50	-	-	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-		
Trip Blank	05/27/2014	-	-	-	<50	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	-	-		
Trip Blank	08/28/2014	-	-	-	<50	-	-	<0.5	<1	<1	<1	<1	-	-								

Abbreviations and Notes

TOC = Top of casing

DTW = Depth to water

GWE = Groundwater elevation

(ft-amsl) = Feet above mean sea level

ft = Feet

µg/L = Micrograms per liter

TPH-GRO = Total petroleum hydrocarbons - gasoline range organics

TPH-DRO = Total petroleum hydrocarbons - diesel range organics

TPH-HRO = Total petroleum hydrocarbons - oil range organics

VOCS = Volatile organic compounds

B = Benzene

T = Toluene

E = Ethylbenzene

TABLE 1

**SUMMARY OF GROUNDWATER MONITORING DATA
FORMER TIDEWATER SERVICE STATION
PHILLIPS 66 SITE 5173
CHEVRON SITE 301233
2800 MARTIN LUTHER KING JUNIOR WAY SOUTH
SEATTLE, WASHINGTON**

Location	Date	HYDROCARBONS						PRIMARY VOCs														
		TOC	DTW	GWE	TPH-GRO	TPH-DRO	TPH-HRO	B	T	E	X	EDB	EDC	MTBE	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	N-Propylbenzene	Isopropylbenzene	Lead (Total)	cPAHs	
Units	ft	ft	ft-amsl	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L

X = Xylene's (Total)

Xylenes = o-xylene + m,p-xylene

BTEX = Benzene, toluene, ethylbenzene, and xylenes analyzed by EPA Method 8260B; except the April 25, 1990 sample from EW-1 analyzed by EPA Method 8020

EDB = 1,2 Dibromoethane analyzed by EPA Method 8011

EDC = 1,2 Dichloroethane analyzed by EPA Method 8260B

MTBE = Methyl tert butyl ether

cPAHs = Carcinogenic Polycyclic Aromatic Hydrocarbons analyzed by EPA Method 8270c Selective Ion Monitoring

Total Lead analyzed by EPA Method 6020

- = Not available / not applicable.I286

<x = Not detected above laboratory method detection limit.

1 Reporting limits were raised due to interference from the sample matrix. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

2 A preserved vial was submitted for analysis. However, the pH at the time of analysis was 4.

3 Well not sampled - well not found.

4 Analysis with silica-gel cleanup.

5 Inaccessible.

ATTACHMENT A

MONITORING DATA PACKAGE

WELL GAUGING DATA

Project # 140828-LB Date 8/28/14 Client CRA

Site CRA-C TIDEWATER SEATTLE

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
Mw-1	0837	2					11.87	22.49		
Mw-2	0849	2					12.11	21.29		
Mw-3	0901	2					11.81	20.05		
Mw-4	0824	2					12.27	19.08		
Mw-5	0857	1					12.01	19.10		
Mw-6	0801	2					11.86	19.70		
Mw-7	0756	2					10.90	19.29		
Mw-8	0830	2					11.95	19.77		
Mw-9	0843	2					14.73	23.60		
Mw-10	0810	2					11.63	19.91		
Mw-11	0915	2					11.23	19.43		
Mw-13	0819	2					10.10	17.91	V	

LOW FLOW WELL MONITORING DATA SHEET

Project #:	140828-2B1	Client:	CRA
Sampler:	LB	Gauging Date:	8/28/14
Well I.D.:	MKL-1	Well Diameter (in.) :	(C) 3 4 6 8 _____
Total Well Depth (ft.) :	22.49	Depth to Water (ft.) :	11.87
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSF 555

Purge Method: 2" Grundfos Pump

Peristaltic Pump

Bladder Pump

Sampling Method: Dedicated Tubing

New Tubing

Other

Start Purge Time: 1215

Flow Rate: 300 ml/min

Pump Depth: 17.5'

Did well dewater? Yes No

Amount actually evacuated: 3L

Sampling Time: 123)

Sampling Date: 8/20/14

Sample I.D.: M_{n-1}

Laboratory: Lancaster

Analyzed for:

~~TPH-G~~ BTEX MTBE ~~TPH-D~~)

Other

Equipment Blank I.D.:

Time

Duplicate I.D.: Dr. v

LOW FLOW WELL MONITORING DATA SHEET

Project #:	140828-LB1	Client:	CRA
Sampler:	LB	Gauging Date:	8/28/14
Well I.D.:	MW-2	Well Diameter (in.) :	② 3 4 6 8
Total Well Depth (ft.) :	21.29	Depth to Water (ft.) :	12.11
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PAC	Grade	Flow Cell Type: YSF 556

Purge Method: 2" Grundfos Pump

Peristaltic Pump

Bladder Pump

Sampling Method: Dedicated Tubing

New Tubing

Other

Start Purge Time: 1355

Flow Rate: 200 ml/min

Pump Depth: 17'

Did well dewater? Yes No

Amount actually evacuated: 3L

Sampling Time: 144

Sampling Date: 8/28/14

Sample I.D.: MW-7

Laboratory: Lancaster

Analyzed for:

TPH-G BTEX MTBE TPH-D

Other: *see cor*

Equipment Blank LD:

Time

Duplicate LD:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	140828-LB1	Client:	CRA
Sampler:	LB	Gauging Date:	8/28/14
Well I.D.:	MW-3	Well Diameter (in.) :	2 3 4 6 8
Total Well Depth (ft.) :	20.05	Depth to Water (ft.) :	11.81
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PWT	Grade	Flow Cell Type: YSI 566

Purge Method: 2" Grundfos Pump

Sampling Method: Dedicated Tubing

Peristaltic Pump

New Tubing

Bladder Pump

Other _____

Start Purge Time: 0531

Flow Rate: 200 ml/min

Pump Depth: 16'

Did well dewater? Yes No

Amount actually evacuated: 32

Sampling Time: 0847

Sampling Date: 8/29/14

Sample I.D.: MCR-3

Laboratory: LANGASTER

Analyzed for: TPH-G BTEX MTBE TPH-D

Other See Cai

Equipment Blank LD:

Time

Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	140828-LB1	Client:	CRA
Sampler:	LB	Gauging Date:	8/28/14
Well I.D.:	MW-4	Well Diameter (in.) :	(<input checked="" type="radio"/>) 3 4 6 8 _____
Total Well Depth (ft.) :	19.08	Depth to Water (ft.) :	12.27
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PXG	Grade	Flow Cell Type: YSI 555

Purge Method: 2" Grundfos Pump

~~Peristaltic Pump~~

Bladder Pump

Sampling Method: Dedicated Tubing

New Tubing

Other _____

Start Purge Time: 1047

Flow Rate: 200 mL/min

Pump Depth: 16'

Did well dewater? Yes No

Amount actually evacuated: 36

Sampling Time: 1058

Sampling Date: 8/29/14

Sample I.D.: 44-14

Laboratory: WACO

Analyzed for:

~~TPH-G BTEX MTBE TPH-D~~

Other: *CZP CZC*

Equipment Blank I.D.:

Time

Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 140828-LBI	Client: CRA
Sampler: LB	Gauging Date: 8/28/14
Well I.D.: MW-5	Well Diameter (in.): <input checked="" type="radio"/> 3 4 6 8 <input checked="" type="radio"/>
Total Well Depth (ft.): 19.10	Depth to Water (ft.): 12.61
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC	Grade
	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump

Peristaltic Pump

Bladder Pump

Sampling Method: Dedicated Tubing

New Tubing

Other _____

Start Purge Time: 14:37

Flow Rate: 200 mL/min

Pump Depth: 16

Did well dewater? Yes No

Amount actually evacuated: 32

Sampling Time: 1448

Sampling Date: 8/28/14

Sample I.D.: MW-5

Laboratory: Lancaster

Analyzed for: TPH-G BTEX MTBE TPH-D

Other: See C.R.

Equipment Blank I.D.:

Duplicate I.D.:

Blaine Tech Service

@ Time

Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	140828-LB1	Client:	CRA
Sampler:	LB	Gauging Date:	8/26/14
Well I.D.:	MW-6	Well Diameter (in.) :	① 3 4 6 8
Total Well Depth (ft.) :	19.70	Depth to Water (ft.) :	14.86
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YES 556

Purge Method: 2" Grundfos Pump

Sampling Method: Dedicated Tubing

Peristaltic Pump

New Tubing

Bladder Pump

Other _____

Start Purge Time: 09/3

Flow Rate: 200 mL/min

Pump Depth: 16'

Did well dewater? Yes No

Amount actually evacuated: 32

Sampling Time: 0929

Sampling Date: 8/28/14

Sample I.D.: Myc G

Laboratory: Lancaster

Analyzed for: TPH-G BTEX MTBE TPH-D

~~Other:~~ Spec car

Equipment Blank I.D.:

@ Time

Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	140828-LB	Client:	CRA
Sampler:	LB	Gauging Date:	8/28/14
Well I.D.:	MW-7	Well Diameter (in.) :	② 3 4 6 8
Total Well Depth (ft.) :	19.79	Depth to Water (ft.) :	10.90
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PYC	Grade	Flow Cell Type: YES 850

Purge Method: 2" Grundfos Pump

Peristaltic Pump

Bladder Pump

Sampling Method: Dedicated Tubing

New Tubing

Other

Start Purge Time: 0951

Flow Rate: 200 mL/min

Pump Depth: 15.5'

Did well dewater? Yes No

Amount actually evacuated: 3 /

Sampling Time: 1007

Sampling Date: 8/28/14

Sample I.D.: Mw-7

Laboratory: LANCASTER

Analyzed for:

~~TPH-G~~ BTEX MTBE ~~TPH-D~~

Other: *see cov.*

Equipment Blank I.D.:

Time

Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	140828-LB1	Client:	CRA
Sampler:	LB	Gauging Date:	8/28/14
Well I.D.:	MW-8	Well Diameter (in.) :	(2) 3 4 6 8
Total Well Depth (ft.) :	19.77	Depth to Water (ft.) :	11.95
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PNG	Grade	Flow Cell Type: YSI 666

Purge Method: 2" Grundfos Pump

Peristaltic Pump

Bladder Pump

Sampling Method: Dedicated Tubing

New Tubing

Other

Start Purge Time: 1120

Flow Rate: 200 ml/min

Pump Depth: 16'

Did well dewater? Yes No

Amount actually evacuated: 3,

Sampling Time: 1136

Sampling Date: 8/28/14

Sample I.D.: Mw-8

Laboratory: Lancaster

Analyzed for:

TPH-G RTEX MTBE TPHD

Others see see

Equipment Blank I.D.:

Time

Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	140828 - LB1	Client:	CRA
Sampler:	L3	Gauging Date:	8/28/14
Well I.D.:	MW-9	Well Diameter (in.) :	<input checked="" type="radio"/> 3 4 6 8 _____
Total Well Depth (ft.) :	23.60	Depth to Water (ft.) :	14.73
Depth to Free Product:	Thickness of Free Product (feet):		
Referenced to:	PYC	Grade	Flow Cell Type: YSI 566

Purge Method: 2" Grundfos Pump

Peristaltic Pump

Bladder Pump

Sampling Method: Dedicated Tubing

New Tubing

Other

Start Burner Time: 13P

Flow Rate:

zero set length

Pump Depth: 19.5'

Did well dewater? Yes No

Amount actually evacuated: 3,

Sampling Time: 1333

Sampling Date: 8/28/14

Sample I.D.: Mw-9

Laboratory: Lancaster

Analyzed for:

~~ГРН-С~~ ~~ГРН-Д~~ МТВЕ ~~ГРН-С~~

~~Other~~ See C or

Equipment Blank ID:

@ Time

Duplicate LDs:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	140828-LB	Client:	CPA
Sampler:	LB	Gauging Date:	8/28/14
Well I.D.:	MW-10	Well Diameter (in.) :	2 3 4 6 8
Total Well Depth (ft.) :	19.91	Depth to Water (ft.) :	11.63
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: VSZ 556

Purge Method: 2" Grundfos Pump

~~Peristaltic Pump~~

Bladder Pump

Sampling Method: Dedicated Tubing

New Tubing

Other

Start Purge Time: 1029

Flow Rate: 300 ml/min

Pump Depth: 16'

Did well dewater? Yes No

Amount actually evacuated: 31

Sampling Time: 1044

Sampling Date: 8/29/14

Sample I.D.: MW-10

Laboratory: 1 Aspirated

Analyzed for

KPH-G BTEX MTBE KPH-D

Other ~~see~~ ~~cos.~~

Equipment Blank I.D.:

@ Time

Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	140828-LB1	Client:	CRA
Sampler:	LB	Gauging Date:	8/29/14
Well I.D.:	MW-11	Well Diameter (in.) :	(<input checked="" type="radio"/>) 3 4 6 8 _____
Total Well Depth (ft.) :	19.43	Depth to Water (ft.) :	11.23
Depth to Free Product:	Thickness of Free Product (feet):		
Referenced to:	PVG	Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump

Peristaltic Pump

Bladder Pump

Sampling Method: Dedicated tubing

New Tubing

Other

Start Purge Time: 0921

Flow Rate: 200 mL/min Pump Depth: 10 cm

15.5'

Did well dewater? Yes No

Amount actually evacuated: 3,

Sampling Time: 0937

Sampling Date: 8/26/14

Sample I.D.: Mix-11

Laboratory: Lancaster

Analyzed for: TPH-G BTX MTBE TPH-D

Other: See car

Equipment Blank I.D.:

@ Time

Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	140828-LB1	Client:	CRA
Sampler:	LB	Gauging Date:	8/26/14
Well I.D.:	MW-13	Well Diameter (in.) :	(2) 3 4 6 8
Total Well Depth (ft.) :	17.91	Depth to Water (ft.) :	10.10
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YES NO

Purge Method: 2" Grundfos Pump

Peristaltic Pump

Bladder Pump

Sampling Method: Dedicated Tubing

New Tsubing

Other

Start Purge Time: 1003

Flow Rate: ~~300 ml/min~~

Pump Depth: 14.5'

Did well dewater? Yes No

Amount actually evacuated: 3 /

Sampling Time: 1019

Sampling Date: 8/28/14

Sample I.D.: Mv-13

Laboratory: Lawrence

Analyzed for:

TPH-G BTEX MTBE TPH-DE

Other EFTs can

Equipment Blank I.D. :

Time

Duplicate ID:

WELLHEAD INSPECTION FORM

Client: CRA

Site: CRA C TIDEWATER SEATL

Date: 8/28/14

Job #: 140828-LB

Technician: L. BURES

Page 1 of 1

NOTES:

TEST EQUIPMENT CALIBRATION LOG

SPH or Purge Water Drum Log

Client: CRA
 Site Address: 2801 MARTIN LUTHER KING JR Way S, Seattle, WA

STATUS OF DRUM(S) UPON ARRIVAL

Date	8/28/14					
Number of drum(s) empty:	0					
Number of drum(s) 1/4 full:	0					
Number of drum(s) 1/2 full:	0					
Number of drum(s) 3/4 full:	0					
Number of drum(s) full:	10					
Total drum(s) on site:	10					
Are the drum(s) properly labeled?	YES					
Drum ID & Contents:	N/A					
If any drum(s) are partially or totally filled, what is the first use date:	N/A					

- If you add any SPH to an empty or partially filled drum, drum must have at least 20 gals. of Purgewater or DI Water.
- If drum contains SPH, the drum MUST be steel AND labeled with the appropriate label.
- All BTS drums MUST be labeled appropriately.

STATUS OF DRUM(S) UPON DEPARTURE

Date	8/29/14					
Number of drums empty:	0					
Number of drum(s) 1/4 full:	0					
Number of drum(s) 1/2 full:	1					
Number of drum(s) 3/4 full:	0					
Number of drum(s) full:	10					
Total drum(s) on site:	11					
Are the drum(s) properly labeled?	YES					
Drum ID & Contents:	N/A					

LOCATION OF DRUM(S)

Describe location of drum(s): SEE MAP

FINAL STATUS

Number of new drum(s) left on site this event	1					
Date of inspection:	8/29/14					
Drum(s) labelled properly:	YES					
Logged by BTS Field Tech:	LB					
Office reviewed by:						

ATTACHMENT B

LABORATORY ANALYTICAL REPORT

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Conestoga-Rovers & Associates
Suite 190
20818 44th Ave W
Lynnwood WA 98036

September 11, 2014

Project: 301233 Tidewater Seattle

Submittal Date: 08/30/2014
Group Number: 1499956
PO Number: 4071016
State of Sample Origin: WA

Client Sample Description

GW-301233-082814-LB-MW-1 Grab Groundwater
GW-301233-082814-LB-MW-2 Grab Groundwater
GW-301233-082814-LB-MW-3 Grab Groundwater
GW-301233-082814-LB-MW-4 Grab Groundwater
GW-301233-082814-LB-MW-5 Grab Groundwater
GW-301233-082814-LB-MW-6 Grab Groundwater
GW-301233-082814-LB-MW-7 Grab Groundwater
GW-301233-082814-LB-MW-8 Grab Groundwater
GW-301233-082814-LB-MW-8 MS Grab Groundwater
GW-301233-082814-LB-MW-8 MSD Grab Groundwater
GW-301233-082814-LB-MW-9 Grab Groundwater
GW-301233-082814-LB-MW-10 Grab Groundwater
GW-301233-082814-LB-MW-11 Grab Groundwater
GW-301233-082814-LB-MW-13 Grab Groundwater
GW-301233-082814-LB-DUP Grab Groundwater
Trip Blank Water

Lancaster Labs (LL) #

7583666
7583667
7583668
7583669
7583670
7583671
7583672
7583673
7583674
7583675
7583676
7583677
7583678
7583679
7583680
7583681

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

ELECTRONIC	CRA	Attn: Edwin Turner
COPY TO		
ELECTRONIC	Conestoga-Rovers & Associates	Attn: Jeffrey Cloud
COPY TO		
ELECTRONIC	Conestoga-Rovers & Associates	Attn: Matt Davis
COPY TO		
ELECTRONIC	Chevron	Attn: Anna Avina
COPY TO		
ELECTRONIC	Chevron c/o CRA	Attn: Report Contact



Lancaster Laboratories
Environmental

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

COPY TO
ELECTRONIC CRA
COPY TO

Attn: Chevron GWRT

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: GW-301233-082814-LB-MW-1 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583666
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 12:31 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-1

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	
10335	Acetone	67-64-1	N.D.	6	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	12	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1

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Sample Description: GW-301233-082814-LB-MW-1 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583666
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 12:31 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	6	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	6	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	0.9 J	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0095	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0095	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0095	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0095	1
08357	Chrysene	218-01-9	N.D.	0.0095	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0095	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0095	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.0095	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.0095	1
08357	Naphthalene	91-20-3	N.D.	0.028	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
Metals SW-846 6020					
06035	Lead	7439-92-1	0.40 J	0.082	1

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

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

Sample Description: GW-301233-082814-LB-MW-1 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583666
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 12:31 by LB

Conestoga-Rovers & Associates

Suite 190

Submitted: 08/30/2014 08:45

20818 44th Ave W

Reported: 09/11/2014 18:05

Lynnwood WA 98036

MLK-1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
					Date	Time		
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142461AA	09/03/2014	11:48	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y142461AA	09/03/2014	11:48	Sarah A Guill	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14246WAE026	09/05/2014	04:27	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14246WAE026	09/04/2014	09:00	Katheryne V Sponheimer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14245A20A	09/03/2014	18:21	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14245A20A	09/03/2014	18:21	Marie D Beamenderfer	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	142450005A	09/04/2014	13:48	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	142450005A	09/02/2014	18:50	Samantha L Bronder	1
06035	Lead	SW-846 6020	1	142466050006A	09/09/2014	19:42	Maria A Orrs	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	142466050006	09/04/2014	10:00	Micaela L Dishong	1

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Sample Description: GW-301233-082814-LB-MW-2 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583667
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 14:11 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-2

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	
10335	Acetone	67-64-1	N.D.	6	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	2 J	1	1
10335	sec-Butylbenzene	135-98-8	3 J	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	Isopropylbenzene	98-82-8	10	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	19	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1

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Sample Description: GW-301233-082814-LB-MW-2 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583667
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 14:11 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0095	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0095	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0095	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0095	1
08357	Chrysene	218-01-9	N.D.	0.0095	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0095	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0095	1
08357	1-Methylnaphthalene	90-12-0	0.077	0.0095	1
08357	2-Methylnaphthalene	91-57-6	0.024 J	0.0095	1
08357	Naphthalene	91-20-3	0.19	0.028	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	440	50	1
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	270	28	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
Metals SW-846 6020					
06035	Lead	7439-92-1	0.44 J	0.082	1

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

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

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Sample Description: GW-301233-082814-LB-MW-2 Grab Groundwater
 MLK Tidewater Site
 2800 Martin Luther King Jr Way - Seattle, WA

 LL Sample # WW 7583667
 LL Group # 1499956
 Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 14:11 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Submitted: 08/30/2014 08:45

Lynnwood WA 98036

Reported: 09/11/2014 18:05

MLK-2

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142461AA	09/03/2014 12:09	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y142461AA	09/03/2014 12:09	Sarah A Guill	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14246WAE026	09/05/2014 05:00	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14246WAE026	09/04/2014 09:00	Katheryne V Sponheimer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14245A20A	09/03/2014 19:15	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14245A20A	09/03/2014 19:15	Marie D Beamenderfer	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	142450005A	09/04/2014 14:32	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	142450005A	09/02/2014 18:50	Samantha L Bronder	1
06035	Lead	SW-846 6020	1	142466050006A	09/09/2014 19:44	Maria A Orrs	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	142466050006	09/04/2014 10:00	Micaela L Dishong	1

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Sample Description: GW-301233-082814-LB-MW-3 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583668
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2014 08:47 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-3

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	
10335	Acetone	67-64-1	N.D.	6	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	8	1	1
10335	sec-Butylbenzene	135-98-8	8	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	2	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	34	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	Isopropylbenzene	98-82-8	27	1	1
10335	p-Isopropyltoluene	99-87-6	3	J	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	9	1	1
10335	n-Propylbenzene	103-65-1	61	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1

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Sample Description: GW-301233-082814-LB-MW-3 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583668
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2014 08:47 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	370	10	10
10335	1,3,5-Trimethylbenzene	108-67-8	11	1	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	28	0.5	1
10335	o-Xylene	95-47-6	6	0.5	1
10335	Xylene (Total)	1330-20-7	34	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0096	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0096	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0096	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0096	1
08357	Chrysene	218-01-9	N.D.	0.0096	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0096	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0096	1
08357	1-Methylnaphthalene	90-12-0	4.3	0.0096	1
08357	2-Methylnaphthalene	91-57-6	0.94	0.0096	1
08357	Naphthalene	91-20-3	7.8	0.029	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	2,800	50	1
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	170	28	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
Metals SW-846 6020					
06035	Lead	7439-92-1	0.20 J	0.082	1

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

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



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Sample Description: GW-301233-082814-LB-MW-3 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583668
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2014 08:47 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-3

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142461AA	09/03/2014 12:30	Sarah A Guill	1
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142471AA	09/04/2014 10:36	Sarah A Guill	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y142461AA	09/03/2014 12:30	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y142471AA	09/04/2014 10:36	Sarah A Guill	10
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14246WAE026	09/05/2014 11:08	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14246WAE026	09/04/2014 09:00	Katheryne V Sponheimer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14246A53A	09/04/2014 17:55	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14246A53A	09/04/2014 17:55	Marie D Beamenderfer	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	142450005A	09/04/2014 14:54	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	142450005A	09/02/2014 18:50	Samantha L Bronder	1
06035	Lead	SW-846 6020	1	142466050006A	09/09/2014 19:49	Maria A Orrs	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	142466050006	09/04/2014 10:00	Micaela L Dishong	1

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Sample Description: GW-301233-082814-LB-MW-4 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583669
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 10:58 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-4

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	
10335	Acetone	67-64-1	N.D.	6	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1



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Sample Description: GW-301233-082814-LB-MW-4 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583669
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 10:58 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0095	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0095	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0095	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0095	1
08357	Chrysene	218-01-9	N.D.	0.0095	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0095	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0095	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.0095	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.0095	1
08357	Naphthalene	91-20-3	N.D.	0.028	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
Metals SW-846 6020					
06035	Lead	7439-92-1	0.14 J	0.082	1

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

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

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Sample Description: GW-301233-082814-LB-MW-4 Grab Groundwater
 MLK Tidewater Site
 2800 Martin Luther King Jr Way - Seattle, WA

 LL Sample # WW 7583669
 LL Group # 1499956
 Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 10:58 by LB Conestoga-Rovers & Associates
 Suite 190

Submitted: 08/30/2014 08:45 20818 44th Ave W

Reported: 09/11/2014 18:05 Lynnwood WA 98036

MLK-4

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142461AA	09/03/2014	12:51	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y142461AA	09/03/2014	12:51	Sarah A Guill	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14246WAE026	09/05/2014	11:41	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14246WAE026	09/04/2014	09:00	Katheryne V Sponheimer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14245A20A	09/03/2014	17:54	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14245A20A	09/03/2014	17:54	Marie D Beamenderfer	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	142450005A	09/04/2014	15:15	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	142450005A	09/02/2014	18:50	Samantha L Bronder	1
06035	Lead	SW-846 6020	1	142466050006A	09/09/2014	19:51	Maria A Orrs	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	142466050006	09/04/2014	10:00	Micaela L Dishong	1

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Sample Description: GW-301233-082814-LB-MW-5 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583670
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 14:48 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-5

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	
10335	Acetone	67-64-1	N.D.	6	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	14	1	1
10335	sec-Butylbenzene	135-98-8	11	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	34	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	Isopropylbenzene	98-82-8	61	1	1
10335	p-Isopropyltoluene	99-87-6	2	J	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	36	1	1
10335	n-Propylbenzene	103-65-1	170	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1

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Sample Description: GW-301233-082814-LB-MW-5 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583670
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 14:48 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	0.9 J	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	65	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	15	1	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	59	0.5	1
10335	o-Xylene	95-47-6	6	0.5	1
10335	Xylene (Total)	1330-20-7	65	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0095	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0095	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0095	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0095	1
08357	Chrysene	218-01-9	N.D.	0.0095	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0095	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0095	1
08357	1-Methylnaphthalene	90-12-0	20	0.19	20
08357	2-Methylnaphthalene	91-57-6	10	0.19	20
08357	Naphthalene	91-20-3	46	0.57	20
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	3,900	50	1
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	360	28	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
Metals SW-846 6020					
06035	Lead	7439-92-1	0.49 J	0.082	1

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

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

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Sample Description: GW-301233-082814-LB-MW-5 Grab Groundwater
 MLK Tidewater Site
 2800 Martin Luther King Jr Way - Seattle, WA

 LL Sample # WW 7583670
 LL Group # 1499956
 Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 14:48 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Submitted: 08/30/2014 08:45

Lynnwood WA 98036

Reported: 09/11/2014 18:05

MLK-5

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142461AA	09/03/2014	13:12	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y142461AA	09/03/2014	13:12	Sarah A Guill	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14246WAE026	09/05/2014	12:15	Mark A Clark	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14246WAE026	09/10/2014	03:29	Mark A Clark	20
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14246WAE026	09/04/2014	09:00	Katheryne V Sponheimer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14246A53A	09/04/2014	18:22	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14246A53A	09/04/2014	18:22	Marie D Beamenderfer	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	142450005A	09/04/2014	15:37	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	142450005A	09/02/2014	18:50	Samantha L Bronder	1
06035	Lead	SW-846 6020	1	142466050006A	09/09/2014	19:32	Maria A Orrs	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	142466050006	09/04/2014	10:00	Micaela L Dishong	1

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Sample Description: GW-301233-082814-LB-MW-6 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583671
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2014 09:29 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-6

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	
10335	Acetone	67-64-1	N.D.	6	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1

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Sample Description: GW-301233-082814-LB-MW-6 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583671
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2014 09:29 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-6

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0095	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0095	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0095	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0095	1
08357	Chrysene	218-01-9	N.D.	0.0095	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0095	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0095	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.0095	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.0095	1
08357	Naphthalene	91-20-3	N.D.	0.028	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	59	J 29	1
02211	HRO C24-C40 w/Si Gel	n.a.	120	J 67	1
Metals SW-846 6020					
06035	Lead	7439-92-1	24.4	0.082	1

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

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

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Sample Description: GW-301233-082814-LB-MW-6 Grab Groundwater
 MLK Tidewater Site
 2800 Martin Luther King Jr Way - Seattle, WA

 LL Sample # WW 7583671
 LL Group # 1499956
 Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2014 09:29 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Submitted: 08/30/2014 08:45

Lynnwood WA 98036

Reported: 09/11/2014 18:05

MLK-6

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142461AA	09/03/2014	13:33	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y142461AA	09/03/2014	13:33	Sarah A Guill	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14246WAE026	09/05/2014	12:49	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14246WAE026	09/04/2014	09:00	Katheryne V Sponheimer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14245A20A	09/03/2014	15:12	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14245A20A	09/03/2014	15:12	Marie D Beamenderfer	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	142450005A	09/04/2014	15:59	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	142450005A	09/02/2014	18:50	Samantha L Bronder	1
06035	Lead	SW-846 6020	1	142466050006A	09/09/2014	19:53	Maria A Orrs	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	142466050006	09/04/2014	10:00	Micaela L Dishong	1

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Sample Description: GW-301233-082814-LB-MW-7 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583672
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2014 10:07 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-7

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	
10335	Acetone	67-64-1	N.D.	6	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	1 J	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1

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Sample Description: GW-301233-082814-LB-MW-7 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583672
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2014 10:07 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-7

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	2	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0095	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0095	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0095	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0095	1
08357	Chrysene	218-01-9	N.D.	0.0095	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0095	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0095	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.0095	1
08357	2-Methylnaphthalene	91-57-6	0.015 J	0.0095	1
08357	Naphthalene	91-20-3	N.D.	0.028	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	N.D.	28	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
Metals SW-846 6020					
06035	Lead	7439-92-1	40.9	0.082	1

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

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

Sample Description: GW-301233-082814-LB-MW-7 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583672
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2014 10:07 by LB

Conestoga-Rovers & Associates

Suite 190

Submitted: 08/30/2014 08:45

20818 44th Ave W

Reported: 09/11/2014 18:05

Lynnwood WA 98036

MLK-7

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
					Date	Time		
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142461AA	09/03/2014	13:54	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y142461AA	09/03/2014	13:54	Sarah A Guill	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14246WAE026	09/05/2014	13:22	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14246WAE026	09/04/2014	09:00	Katheryne V Sponheimer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14245A20A	09/03/2014	17:27	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14245A20A	09/03/2014	17:27	Marie D Beamenderfer	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	142450005A	09/04/2014	14:10	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	142450005A	09/02/2014	18:50	Samantha L Bronder	1
06035	Lead	SW-846 6020	1	142466050006A	09/09/2014	19:55	Maria A Orrs	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	142466050006	09/04/2014	10:00	Micaela L Dishong	1

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Sample Description: GW-301233-082814-LB-MW-8 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583673
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 11:36 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-8

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	
10335	Acetone	67-64-1	N.D.	6	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	20	1	1
10335	sec-Butylbenzene	135-98-8	12	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	3	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	170	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	Isopropylbenzene	98-82-8	44	1	1
10335	p-Isopropyltoluene	99-87-6	9	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	70	1	1
10335	n-Propylbenzene	103-65-1	110	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1

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Sample Description: GW-301233-082814-LB-MW-8 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583673
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 11:36 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-8

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	0.8 J	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	1,200	10	10
10335	1,3,5-Trimethylbenzene	108-67-8	180	1	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	460	0.5	1
10335	o-Xylene	95-47-6	130	0.5	1
10335	Xylene (Total)	1330-20-7	590	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0095	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0095	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0095	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0095	1
08357	Chrysene	218-01-9	N.D.	0.0095	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0095	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0095	1
08357	1-Methylnaphthalene	90-12-0	30	0.19	20
08357	2-Methylnaphthalene	91-57-6	35	0.19	20
08357	Naphthalene	91-20-3	68	0.57	20
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	11,000	250	5
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	500	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
Metals SW-846 6020					
06035	Lead	7439-92-1	1.6	0.082	1

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

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



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Sample Description: GW-301233-082814-LB-MW-8 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583673
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 11:36 by LB

Conestoga-Rovers & Associates
Suite 190

Submitted: 08/30/2014 08:45

20818 44th Ave W

Reported: 09/11/2014 18:05

Lynnwood WA 98036

MLK-8

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142461AA	09/03/2014 14:15	Sarah A Guill	1
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142461AA	09/03/2014 15:18	Sarah A Guill	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y142461AA	09/03/2014 14:15	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y142461AA	09/03/2014 15:18	Sarah A Guill	10
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14246WAE026	09/06/2014 09:10	Mark A Clark	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14246WAE026	09/10/2014 04:02	Mark A Clark	20
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14246WAE026	09/04/2014 09:00	Katheryne V Sponheimer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14245A20B	09/05/2014 12:10	Marie D Beamenderfer	5
01146	GC VOA Water Prep	SW-846 5030B	1	14245A20B	09/05/2014 12:10	Marie D Beamenderfer	5
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	142450023A	09/04/2014 23:37	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	142450023A	09/03/2014 09:30	David S Schrum	1
06035	Lead	SW-846 6020	1	142466050006A	09/09/2014 20:21	Maria A Orrs	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	142466050006	09/04/2014 10:00	Micaela L Dishong	1

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Sample Description: GW-301233-082814-LB-MW-8 MS Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583674
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 11:36 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-8

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	
10335	Acetone	67-64-1	120	6	1
10335	Benzene	71-43-2	22	0.5	1
10335	Bromobenzene	108-86-1	19	1	1
10335	Bromochloromethane	74-97-5	20	1	1
10335	Bromodichloromethane	75-27-4	21	0.5	1
10335	Bromoform	75-25-2	15	0.5	1
10335	Bromomethane	74-83-9	13	0.5	1
10335	2-Butanone	78-93-3	130	3	1
10335	n-Butylbenzene	104-51-8	39	1	1
10335	sec-Butylbenzene	135-98-8	33	1	1
10335	tert-Butylbenzene	98-06-6	20	1	1
10335	Carbon Disulfide	75-15-0	21	1	1
10335	Carbon Tetrachloride	56-23-5	22	0.5	1
10335	Chlorobenzene	108-90-7	20	0.5	1
10335	Chloroethane	75-00-3	14	0.5	1
10335	Chloroform	67-66-3	23	0.5	1
10335	Chloromethane	74-87-3	22	0.5	1
10335	2-Chlorotoluene	95-49-8	20	1	1
10335	4-Chlorotoluene	106-43-4	20	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	22	2	1
10335	Dibromochloromethane	124-48-1	19	0.5	1
10335	1,2-Dibromoethane	106-93-4	20	0.5	1
10335	Dibromomethane	74-95-3	20	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	20	1	1
10335	1,3-Dichlorobenzene	541-73-1	20	1	1
10335	1,4-Dichlorobenzene	106-46-7	20	1	1
10335	Dichlorodifluoromethane	75-71-8	19	0.5	1
10335	1,1-Dichloroethane	75-34-3	23	0.5	1
10335	1,2-Dichloroethane	107-06-2	22	0.5	1
10335	1,1-Dichloroethene	75-35-4	21	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	25	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	19	0.5	1
10335	1,2-Dichloropropane	78-87-5	23	0.5	1
10335	1,3-Dichloropropane	142-28-9	20	0.5	1
10335	2,2-Dichloropropane	594-20-7	20	0.5	1
10335	1,1-Dichloropropene	563-58-6	24	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	19	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	19	0.5	1
10335	Ethylbenzene	100-41-4	190	0.5	1
10335	Hexachlorobutadiene	87-68-3	16	2	1
10335	2-Hexanone	591-78-6	72	3	1
10335	Isopropylbenzene	98-82-8	64	1	1
10335	p-Isopropyltoluene	99-87-6	29	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	17	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	75	3	1
10335	Methylene Chloride	75-09-2	21	2	1
10335	Naphthalene	91-20-3	85	1	1
10335	n-Propylbenzene	103-65-1	120	1	1
10335	Styrene	100-42-5	24	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	20	0.5	1



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Sample Description: GW-301233-082814-LB-MW-8 MS Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583674
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 11:36 by LB

Conestoga-Rovers & Associates
Suite 190

Submitted: 08/30/2014 08:45

20818 44th Ave W
Lynnwood WA 98036

Reported: 09/11/2014 18:05

MLK-8

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10335	1,1,2,2-Tetrachloroethane	79-34-5	18	0.5	1
10335	Tetrachloroethene	127-18-4	21	0.5	1
10335	Toluene	108-88-3	22	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	17	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	18	1	1
10335	1,1,1-Trichloroethane	71-55-6	19	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	27	0.5	1
10335	Trichloroethene	79-01-6	23	0.5	1
10335	Trichlorofluoromethane	75-69-4	19	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	18	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	500 E	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	200	1	1
10335	Vinyl Chloride	75-01-4	20	0.5	1
10335	m+p-Xylene	179601-23-1	480	0.5	1
10335	o-Xylene	95-47-6	150	0.5	1
10335	Xylene (Total)	1330-20-7	630	0.5	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	17,000	250	5
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	1,900	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1

General Sample Comments

State of Washington Lab Certification No. C457

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
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142461AA	09/03/2014 14:36	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y142461AA	09/03/2014 14:36	Sarah A Guill	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14245A20B	09/05/2014 12:32	Marie D Beamenderfer	5
01146	GC VOA Water Prep	SW-846 5030B	1	14245A20B	09/05/2014 12:32	Marie D Beamenderfer	5
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	142450023A	09/04/2014 23:58	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	142450023A	09/03/2014 09:30	David S Schrum	1

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Sample Description: GW-301233-082814-LB-MW-8 MSD Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583675
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 11:36 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-8

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	
10335	Acetone	67-64-1	120	6	1
10335	Benzene	71-43-2	23	0.5	1
10335	Bromobenzene	108-86-1	20	1	1
10335	Bromochloromethane	74-97-5	20	1	1
10335	Bromodichloromethane	75-27-4	21	0.5	1
10335	Bromoform	75-25-2	16	0.5	1
10335	Bromomethane	74-83-9	13	0.5	1
10335	2-Butanone	78-93-3	130	3	1
10335	n-Butylbenzene	104-51-8	40	1	1
10335	sec-Butylbenzene	135-98-8	33	1	1
10335	tert-Butylbenzene	98-06-6	21	1	1
10335	Carbon Disulfide	75-15-0	22	1	1
10335	Carbon Tetrachloride	56-23-5	23	0.5	1
10335	Chlorobenzene	108-90-7	21	0.5	1
10335	Chloroethane	75-00-3	15	0.5	1
10335	Chloroform	67-66-3	24	0.5	1
10335	Chloromethane	74-87-3	23	0.5	1
10335	2-Chlorotoluene	95-49-8	21	1	1
10335	4-Chlorotoluene	106-43-4	21	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	22	2	1
10335	Dibromochloromethane	124-48-1	19	0.5	1
10335	1,2-Dibromoethane	106-93-4	20	0.5	1
10335	Dibromomethane	74-95-3	20	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	20	1	1
10335	1,3-Dichlorobenzene	541-73-1	20	1	1
10335	1,4-Dichlorobenzene	106-46-7	20	1	1
10335	Dichlorodifluoromethane	75-71-8	19	0.5	1
10335	1,1-Dichloroethane	75-34-3	21	0.5	1
10335	1,2-Dichloroethane	107-06-2	22	0.5	1
10335	1,1-Dichloroethene	75-35-4	22	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	25	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	22	0.5	1
10335	1,2-Dichloropropane	78-87-5	23	0.5	1
10335	1,3-Dichloropropane	142-28-9	20	0.5	1
10335	2,2-Dichloropropane	594-20-7	21	0.5	1
10335	1,1-Dichloropropene	563-58-6	25	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	20	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	20	0.5	1
10335	Ethylbenzene	100-41-4	180	0.5	1
10335	Hexachlorobutadiene	87-68-3	17	2	1
10335	2-Hexanone	591-78-6	73	3	1
10335	Isopropylbenzene	98-82-8	63	1	1
10335	p-Isopropyltoluene	99-87-6	29	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	20	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	76	3	1
10335	Methylene Chloride	75-09-2	21	2	1
10335	Naphthalene	91-20-3	83	1	1
10335	n-Propylbenzene	103-65-1	120	1	1
10335	Styrene	100-42-5	24	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	21	0.5	1



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Sample Description: GW-301233-082814-LB-MW-8 MSD Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583675
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 11:36 by LB

Conestoga-Rovers & Associates
Suite 190

Submitted: 08/30/2014 08:45

20818 44th Ave W
Lynnwood WA 98036

Reported: 09/11/2014 18:05

MLK-8

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10335	1,1,2,2-Tetrachloroethane	79-34-5	18	0.5	1
10335	Tetrachloroethene	127-18-4	22	0.5	1
10335	Toluene	108-88-3	23	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	18	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	19	1	1
10335	1,1,1-Trichloroethane	71-55-6	19	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	28	0.5	1
10335	Trichloroethene	79-01-6	24	0.5	1
10335	Trichlorofluoromethane	75-69-4	19	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	18	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	520	E	1
10335	1,3,5-Trimethylbenzene	108-67-8	190	1	1
10335	Vinyl Chloride	75-01-4	20	0.5	1
10335	m+p-Xylene	179601-23-1	460	0.5	1
10335	o-Xylene	95-47-6	140	0.5	1
10335	Xylene (Total)	1330-20-7	600	0.5	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	17,000	250	5
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	2,100	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1

General Sample Comments

State of Washington Lab Certification No. C457

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
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142461AA	09/03/2014 14:57	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y142461AA	09/03/2014 14:57	Sarah A Guill	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14245A20B	09/05/2014 12:54	Marie D Beamenderfer	5
01146	GC VOA Water Prep	SW-846 5030B	1	14245A20B	09/05/2014 12:54	Marie D Beamenderfer	5
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	142450023A	09/05/2014 00:20	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	142450023A	09/03/2014 09:30	David S Schrum	1

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Sample Description: GW-301233-082814-LB-MW-9 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583676
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 13:33 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-9

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	
10335	Acetone	67-64-1	N.D.	6	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	89	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1

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Sample Description: GW-301233-082814-LB-MW-9 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583676
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 13:33 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK-9

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	71	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	41	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	8	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0095	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0095	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0095	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0095	1
08357	Chrysene	218-01-9	N.D.	0.0095	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0095	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0095	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.0095	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.0095	1
08357	Naphthalene	91-20-3	0.046 J	0.028	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	44 J	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
Metals SW-846 6020					
06035	Lead	7439-92-1	0.12 J	0.082	1

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

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

Sample Description: GW-301233-082814-LB-MW-9 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583676
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 13:33 by LB

Conestoga-Rovers & Associates

Suite 190

Submitted: 08/30/2014 08:45

20818 44th Ave W

Reported: 09/11/2014 18:05

Lynnwood WA 98036

MLK- 9

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
					Date	Time		
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142461AA	09/03/2014	15:39	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y142461AA	09/03/2014	15:39	Sarah A Guill	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14246WAE026	09/06/2014	09:44	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14246WAE026	09/04/2014	09:00	Katheryne V Sponheimer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14245A20A	09/03/2014	12:56	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14245A20A	09/03/2014	12:56	Marie D Beamenderfer	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	142450023A	09/04/2014	22:09	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	142450023A	09/03/2014	09:30	David S Schrum	1
06035	Lead	SW-846 6020	1	142466050006A	09/09/2014	19:56	Maria A Orrs	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	142466050006	09/04/2014	10:00	Micaela L Dishong	1

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Sample Description: GW-301233-082814-LB-MW-10 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583677
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2014 10:44 by LB

Conestoga-Rovers & Associates

Suite 190

Submitted: 08/30/2014 08:45

20818 44th Ave W

Reported: 09/11/2014 18:05

Lynnwood WA 98036

MLK10

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	
10335	Acetone	67-64-1	N.D.	6	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	0.6 J	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1

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Sample Description: GW-301233-082814-LB-MW-10 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583677
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2014 10:44 by LB

Conestoga-Rovers & Associates

Suite 190

Submitted: 08/30/2014 08:45

20818 44th Ave W

Reported: 09/11/2014 18:05

Lynnwood WA 98036

MLK10

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	
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	17	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	SW-846 8270C SIM		ug/l	ug/l	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0096	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0096	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0096	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0096	1
08357	Chrysene	218-01-9	N.D.	0.0096	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0096	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0096	1
08357	1-Methylnaphthalene	90-12-0	0.13	0.0096	1
08357	2-Methylnaphthalene	91-57-6	0.065	0.0096	1
08357	Naphthalene	91-20-3	0.053 J	0.029	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	90 J	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
Metals	SW-846 6020		ug/l	ug/l	
06035	Lead	7439-92-1	0.43 J	0.082	1

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

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

Sample Description: GW-301233-082814-LB-MW-10 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583677
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2014 10:44 by LB

Conestoga-Rovers & Associates

Suite 190

Submitted: 08/30/2014 08:45

20818 44th Ave W

Reported: 09/11/2014 18:05

Lynnwood WA 98036

MLK10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
					Date	Time		
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142461AA	09/03/2014	16:00	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y142461AA	09/03/2014	16:00	Sarah A Guill	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14246WAE026	09/06/2014	10:18	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14246WAE026	09/04/2014	09:00	Katheryne V Sponheimer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14245A20A	09/03/2014	13:24	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14245A20A	09/03/2014	13:24	Marie D Beamenderfer	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	142450023A	09/05/2014	00:42	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	142450023A	09/03/2014	09:30	David S Schrum	1
06035	Lead	SW-846 6020	1	142466050006A	09/09/2014	19:58	Maria A Orrs	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	142466050006	09/04/2014	10:00	Micaela L Dishong	1

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Sample Description: GW-301233-082814-LB-MW-11 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583678
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 09:37 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK11

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	
10335	Acetone	67-64-1	N.D.	6	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	2	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	15	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1

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Sample Description: GW-301233-082814-LB-MW-11 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583678
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 09:37 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	1,200	5	10
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	38	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	0.6	J	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0096	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0096	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0096	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0096	1
08357	Chrysene	218-01-9	N.D.	0.0096	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0096	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0096	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.0096	1
08357	2-Methylnaphthalene	91-57-6	0.012	J	1
08357	Naphthalene	91-20-3	0.041	J	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	580	50	1
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	N.D.	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
Metals SW-846 6020					
06035	Lead	7439-92-1	0.22	J	0.082

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

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

Sample Description: GW-301233-082814-LB-MW-11 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583678
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 09:37 by LB

Conestoga-Rovers & Associates

Suite 190

Submitted: 08/30/2014 08:45

20818 44th Ave W

Reported: 09/11/2014 18:05

Lynnwood WA 98036

MLK1 1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
					Date	Time		
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142461AA	09/03/2014	16:21	Sarah A Guill	1
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142471AA	09/04/2014	10:57	Sarah A Guill	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y142461AA	09/03/2014	16:21	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y142471AA	09/04/2014	10:57	Sarah A Guill	10
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14246WAE026	09/06/2014	10:52	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14246WAE026	09/04/2014	09:00	Katheryne V Sponheimer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14245A20A	09/03/2014	13:51	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14245A20A	09/03/2014	13:51	Marie D Beamenderfer	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	142450023A	09/04/2014	22:31	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	142450023A	09/03/2014	09:30	David S Schrum	1
06035	Lead	SW-846 6020	1	142466050006A	09/09/2014	20:00	Maria A Orrs	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	142466050006	09/04/2014	10:00	Micaela L Dishong	1

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Sample Description: GW-301233-082814-LB-MW-13 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583679
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 10:19 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK13

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	
10335	Acetone	67-64-1	N.D.	6	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	57	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1

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Sample Description: GW-301233-082814-LB-MW-13 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583679
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 10:19 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLK13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	27	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0095	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0095	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0095	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0095	1
08357	Chrysene	218-01-9	N.D.	0.0095	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0095	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0095	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.0095	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.0095	1
08357	Naphthalene	91-20-3	N.D.	0.028	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	41	J 28	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
Metals SW-846 6020					
06035	Lead	7439-92-1	1.7	0.082	1

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

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

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Sample Description: GW-301233-082814-LB-MW-13 Grab Groundwater
 MLK Tidewater Site
 2800 Martin Luther King Jr Way - Seattle, WA

 LL Sample # WW 7583679
 LL Group # 1499956
 Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 10:19 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Submitted: 08/30/2014 08:45

Lynnwood WA 98036

Reported: 09/11/2014 18:05

MLK13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142471AA	09/04/2014	11:19	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y142471AA	09/04/2014	11:19	Sarah A Guill	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14246WAE026	09/06/2014	11:26	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14246WAE026	09/04/2014	09:00	Katheryne V Sponheimer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14245A20A	09/03/2014	14:18	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14245A20A	09/03/2014	14:18	Marie D Beamenderfer	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	142450023A	09/04/2014	23:15	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	142450023A	09/03/2014	09:30	David S Schrum	1
06035	Lead	SW-846 6020	1	142466050006A	09/09/2014	20:02	Maria A Orrs	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	142466050006	09/04/2014	10:00	Micaela L Dishong	1

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Sample Description: GW-301233-082814-LB-DUP Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583680
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLKFD

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	
10335	Acetone	67-64-1	N.D.	6	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	13	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1

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Sample Description: GW-301233-082814-LB-DUP Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583680
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLKFD

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	
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	6	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	6	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	1	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	SW-846 8270C SIM		ug/l	ug/l	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0094	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0094	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0094	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0094	1
08357	Chrysene	218-01-9	N.D.	0.0094	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0094	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0094	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.0094	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.0094	1
08357	Naphthalene	91-20-3	0.049 J	0.028	1
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Petroleum Hydrocarbons w/Si	ECY 97-602 NWTPH-Dx modified		ug/l	ug/l	
02211	DRO C12-C24 w/Si Gel	n.a.	N.D.	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
Metals	SW-846 6020		ug/l	ug/l	
06035	Lead	7439-92-1	0.31 J	0.082	1

General Sample Comments

State of Washington Lab Certification No. C457

Carcinogenic PAHs have been reported for this sample

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

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Sample Description: GW-301233-082814-LB-DUP Grab Groundwater
 MLK Tidewater Site
 2800 Martin Luther King Jr Way - Seattle, WA

 LL Sample # WW 7583680
 LL Group # 1499956
 Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014 by LB

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Submitted: 08/30/2014 08:45

Lynnwood WA 98036

Reported: 09/11/2014 18:05

MLKFD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142461AA	09/03/2014	17:03	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y142461AA	09/03/2014	17:03	Sarah A Guill	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14246WAE026	09/06/2014	12:00	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14246WAE026	09/04/2014	09:00	Katheryne V Sponheimer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14245A20A	09/03/2014	14:45	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14245A20A	09/03/2014	14:45	Marie D Beamenderfer	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	142450023A	09/04/2014	22:53	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	142450023A	09/03/2014	09:30	David S Schrum	1
06035	Lead	SW-846 6020	1	142466050006A	09/09/2014	20:03	Maria A Orrs	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	142466050006	09/04/2014	10:00	Micaela L Dishong	1

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Sample Description: Trip Blank Water
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583681
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLKTB

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	
10335	Acetone	67-64-1	N.D.	6	1
10335	Benzene	71-43-2	N.D.	0.5	1
10335	Bromobenzene	108-86-1	N.D.	1	1
10335	Bromochloromethane	74-97-5	N.D.	1	1
10335	Bromodichloromethane	75-27-4	N.D.	0.5	1
10335	Bromoform	75-25-2	N.D.	0.5	1
10335	Bromomethane	74-83-9	N.D.	0.5	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	N.D.	1	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10335	Chlorobenzene	108-90-7	N.D.	0.5	1
10335	Chloroethane	75-00-3	N.D.	0.5	1
10335	Chloroform	67-66-3	N.D.	0.5	1
10335	Chloromethane	74-87-3	N.D.	0.5	1
10335	2-Chlorotoluene	95-49-8	N.D.	1	1
10335	4-Chlorotoluene	106-43-4	N.D.	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	2	1
10335	Dibromochloromethane	124-48-1	N.D.	0.5	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	0.5	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.5	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10335	1,3-Dichloropropane	142-28-9	N.D.	0.5	1
10335	2,2-Dichloropropane	594-20-7	N.D.	0.5	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	Hexachlorobutadiene	87-68-3	N.D.	2	1
10335	2-Hexanone	591-78-6	N.D.	3	1
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	p-Isopropyltoluene	99-87-6	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	3	1
10335	Methylene Chloride	75-09-2	N.D.	2	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	n-Propylbenzene	103-65-1	N.D.	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.5	1



2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: Trip Blank Water
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7583681
LL Group # 1499956
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/28/2014

Conestoga-Rovers & Associates

Suite 190

20818 44th Ave W

Lynnwood WA 98036

Submitted: 08/30/2014 08:45

Reported: 09/11/2014 18:05

MLKTB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10335	Tetrachloroethene	127-18-4	N.D.	0.5	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	1	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10335	Trichloroethene	79-01-6	N.D.	0.5	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

General Sample Comments

State of Washington Lab Certification No. C457

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
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y142461AA	09/03/2014 17:24	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y142461AA	09/03/2014 17:24	Sarah A Guill	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14245A20A	09/03/2014 12:29	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	14245A20A	09/03/2014 12:29	Marie D Beamenderfer	1

Quality Control Summary

Client Name: Conestoga-Rovers & Associates
Reported: 09/11/14 at 06:05 PM

Group Number: 1499956

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

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: Y142461AA			Sample number(s): 7583666-7583678, 7583680-7583681					
Acetone	N.D.	6.	ug/l	85		55-129		
Benzene	N.D.	0.5	ug/l	104		78-120		
Bromobenzene	N.D.	1.	ug/l	94		80-120		
Bromoform	N.D.	1.	ug/l	98		80-121		
Bromochloromethane	N.D.	0.5	ug/l	92		73-120		
Bromodichloromethane	N.D.	0.5	ug/l	79		61-120		
Bromomethane	N.D.	0.5	ug/l	57		53-130		
2-Butanone	N.D.	3.	ug/l	94		54-133		
n-Butylbenzene	N.D.	1.	ug/l	93		68-120		
sec-Butylbenzene	N.D.	1.	ug/l	95		75-120		
tert-Butylbenzene	N.D.	1.	ug/l	93		80-120		
Carbon Disulfide	N.D.	1.	ug/l	94		58-126		
Carbon Tetrachloride	N.D.	0.5	ug/l	102		74-130		
Chlorobenzene	N.D.	0.5	ug/l	98		80-120		
Chloroethane	N.D.	0.5	ug/l	62		56-120		
Chloroform	N.D.	0.5	ug/l	104		80-122		
Chloromethane	N.D.	0.5	ug/l	93		63-120		
2-Chlorotoluene	N.D.	1.	ug/l	95		80-120		
4-Chlorotoluene	N.D.	1.	ug/l	96		80-120		
1,2-Dibromo-3-chloropropane	N.D.	2.	ug/l	86		56-120		
Dibromochloromethane	N.D.	0.5	ug/l	91		72-120		
1,2-Dibromoethane	N.D.	0.5	ug/l	97		80-120		
Dibromomethane	N.D.	0.5	ug/l	94		80-120		
1,2-Dichlorobenzene	N.D.	1.	ug/l	95		80-120		
1,3-Dichlorobenzene	N.D.	1.	ug/l	94		80-120		
1,4-Dichlorobenzene	N.D.	1.	ug/l	97		80-120		
Dichlorodifluoromethane	N.D.	0.5	ug/l	80		55-127		
1,1-Dichloroethane	N.D.	0.5	ug/l	88		80-120		
1,2-Dichloroethane	N.D.	0.5	ug/l	103		65-135		
1,1-Dichloroethene	N.D.	0.5	ug/l	99		76-124		
cis-1,2-Dichloroethene	N.D.	0.5	ug/l	105		80-120		
trans-1,2-Dichloroethene	N.D.	0.5	ug/l	97		80-120		
1,2-Dichloropropane	N.D.	0.5	ug/l	105		80-120		
1,3-Dichloropropane	N.D.	0.5	ug/l	98		80-120		
2,2-Dichloropropane	N.D.	0.5	ug/l	93		67-124		
1,1-Dichloropropene	N.D.	1.	ug/l	109		80-126		
cis-1,3-Dichloropropene	N.D.	0.5	ug/l	95		80-120		
trans-1,3-Dichloropropene	N.D.	0.5	ug/l	94		76-120		
Ethylbenzene	N.D.	0.5	ug/l	98		79-120		
Hexachlorobutadiene	N.D.	2.	ug/l	85		51-125		
2-Hexanone	N.D.	3.	ug/l	76		57-127		
Isopropylbenzene	N.D.	1.	ug/l	96		80-120		
p-Isopropyltoluene	N.D.	1.	ug/l	94		76-120		

*- 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.

Quality Control Summary

Client Name: Conestoga-Rovers & Associates
Reported: 09/11/14 at 06:05 PM

Group Number: 1499956

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	89		75-120		
4-Methyl-2-pentanone	N.D.	3.	ug/l	75		51-124		
Methylene Chloride	N.D.	2.	ug/l	95		80-120		
Naphthalene	N.D.	1.	ug/l	86		47-126		
n-Propylbenzene	N.D.	1.	ug/l	100		80-120		
Styrene	N.D.	1.	ug/l	95		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.5	ug/l	97		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.5	ug/l	91		70-120		
Tetrachloroethene	N.D.	0.5	ug/l	100		80-120		
Toluene	N.D.	0.5	ug/l	102		80-120		
1,2,3-Trichlorobenzene	N.D.	1.	ug/l	89		68-123		
1,2,4-Trichlorobenzene	N.D.	1.	ug/l	91		73-120		
1,1,1-Trichloroethane	N.D.	0.5	ug/l	87		66-126		
1,1,2-Trichloroethane	N.D.	0.5	ug/l	94		80-120		
Trichloroethene	N.D.	0.5	ug/l	103		80-120		
Trichlorofluoromethane	N.D.	0.5	ug/l	81		58-135		
1,2,3-Trichloropropane	N.D.	1.	ug/l	91		76-120		
1,2,4-Trimethylbenzene	N.D.	1.	ug/l	96		80-120		
1,3,5-Trimethylbenzene	N.D.	1.	ug/l	97		80-120		
Vinyl Chloride	N.D.	0.5	ug/l	84		63-120		
m+p-Xylene	N.D.	0.5	ug/l	99		80-120		
o-Xylene	N.D.	0.5	ug/l	97		80-120		
Xylene (Total)	N.D.	0.5	ug/l	98		80-120		
Batch number: Y142471AA			Sample number(s): 7583668, 7583678-7583679					
Acetone	N.D.	6.	ug/l	80	80	55-129	0	30
Benzene	N.D.	0.5	ug/l	101	104	78-120	3	30
Bromobenzene	N.D.	1.	ug/l	93	95	80-120	2	30
Bromochloromethane	N.D.	1.	ug/l	98	99	80-121	2	30
Bromodichloromethane	N.D.	0.5	ug/l	89	90	73-120	1	30
Bromoform	N.D.	0.5	ug/l	76	78	61-120	2	30
Bromomethane	N.D.	0.5	ug/l	60	59	53-130	1	30
2-Butanone	N.D.	3.	ug/l	89	89	54-133	0	30
n-Butylbenzene	N.D.	1.	ug/l	89	92	68-120	3	30
sec-Butylbenzene	N.D.	1.	ug/l	91	93	75-120	3	30
tert-Butylbenzene	N.D.	1.	ug/l	89	92	80-120	3	30
Carbon Disulfide	N.D.	1.	ug/l	77	89	58-126	15	30
Carbon Tetrachloride	N.D.	0.5	ug/l	98	100	74-130	2	30
Chlorobenzene	N.D.	0.5	ug/l	96	99	80-120	2	30
Chloroethane	N.D.	0.5	ug/l	68	65	56-120	4	30
Chloroform	N.D.	0.5	ug/l	101	103	80-122	2	30
Chloromethane	N.D.	0.5	ug/l	94	96	63-120	3	30
2-Chlorotoluene	N.D.	1.	ug/l	93	95	80-120	2	30
4-Chlorotoluene	N.D.	1.	ug/l	94	97	80-120	2	30
1,2-Dibromo-3-chloropropane	N.D.	2.	ug/l	77	81	56-120	5	30
Dibromochloromethane	N.D.	0.5	ug/l	88	90	72-120	1	30
1,2-Dibromoethane	N.D.	0.5	ug/l	95	97	80-120	3	30
Dibromomethane	N.D.	0.5	ug/l	93	94	80-120	1	30
1,2-Dichlorobenzene	N.D.	1.	ug/l	94	95	80-120	1	30
1,3-Dichlorobenzene	N.D.	1.	ug/l	92	95	80-120	3	30
1,4-Dichlorobenzene	N.D.	1.	ug/l	94	98	80-120	3	30
Dichlorodifluoromethane	N.D.	0.5	ug/l	80	81	55-127	1	30
1,1-Dichloroethane	N.D.	0.5	ug/l	106	108	80-120	2	30
1,2-Dichloroethane	N.D.	0.5	ug/l	103	104	65-135	0	30
1,1-Dichloroethene	N.D.	0.5	ug/l	89	94	76-124	5	30
cis-1,2-Dichloroethene	N.D.	0.5	ug/l	102	104	80-120	2	30

*- 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.

Quality Control Summary

Client Name: Conestoga-Rovers & Associates
Reported: 09/11/14 at 06:05 PM

Group Number: 1499956

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
trans-1,2-Dichloroethene	N.D.	0.5	ug/l	89	90	80-120	1	30
1,2-Dichloropropane	N.D.	0.5	ug/l	101	104	80-120	3	30
1,3-Dichloropropane	N.D.	0.5	ug/l	97	98	80-120	1	30
2,2-Dichloropropane	N.D.	0.5	ug/l	90	93	67-124	3	30
1,1-Dichloropropene	N.D.	1.	ug/l	104	107	80-126	3	30
cis-1,3-Dichloropropene	N.D.	0.5	ug/l	90	92	80-120	2	30
trans-1,3-Dichloropropene	N.D.	0.5	ug/l	91	93	76-120	2	30
Ethylbenzene	N.D.	0.5	ug/l	95	98	79-120	3	30
Hexachlorobutadiene	N.D.	2.	ug/l	75	78	51-125	4	30
2-Hexanone	N.D.	3.	ug/l	72	74	57-127	2	30
Isopropylbenzene	N.D.	1.	ug/l	94	96	80-120	3	30
p-Isopropyltoluene	N.D.	1.	ug/l	90	92	76-120	3	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	83	82	75-120	2	30
4-Methyl-2-pentanone	N.D.	3.	ug/l	72	73	51-124	2	30
Methylene Chloride	N.D.	2.	ug/l	84	97	80-120	14	30
Naphthalene	N.D.	1.	ug/l	78	81	47-126	4	30
n-Propylbenzene	N.D.	1.	ug/l	96	99	80-120	3	30
Styrene	N.D.	1.	ug/l	92	95	80-120	3	30
1,1,1,2-Tetrachloroethane	N.D.	0.5	ug/l	96	97	80-120	2	30
1,1,2,2-Tetrachloroethane	N.D.	0.5	ug/l	86	89	70-120	4	30
Tetrachloroethene	N.D.	0.5	ug/l	103	100	80-120	4	30
Toluene	N.D.	0.5	ug/l	100	102	80-120	2	30
1,2,3-Trichlorobenzene	N.D.	1.	ug/l	81	86	68-123	6	30
1,2,4-Trichlorobenzene	N.D.	1.	ug/l	84	87	73-120	4	30
1,1,1-Trichloroethane	N.D.	0.5	ug/l	83	87	66-126	4	30
1,1,2-Trichloroethane	N.D.	0.5	ug/l	93	94	80-120	2	30
Trichloroethene	N.D.	0.5	ug/l	101	104	80-120	3	30
Trichlorofluoromethane	N.D.	0.5	ug/l	81	83	58-135	2	30
1,2,3-Trichloropropane	N.D.	1.	ug/l	88	91	76-120	2	30
1,2,4-Trimethylbenzene	N.D.	1.	ug/l	94	95	80-120	2	30
1,3,5-Trimethylbenzene	N.D.	1.	ug/l	93	96	80-120	3	30
Vinyl Chloride	N.D.	0.5	ug/l	84	86	63-120	2	30
m+p-Xylene	N.D.	0.5	ug/l	97	100	80-120	3	30
o-Xylene	N.D.	0.5	ug/l	95	96	80-120	2	30
Xylene (Total)	N.D.	0.5	ug/l	96	98	80-120	2	30

Batch number: 14246WAE026

Sample number(s): 7583666-7583673, 7583676-7583680

Benzo(a)anthracene

N.D. 0.010 ug/l 108 79-122 0 30

Benzo(a)pyrene

N.D. 0.010 ug/l 108 72-126 2 30

Benzo(b)fluoranthene

N.D. 0.010 ug/l 112 79-136 1 30

Benzo(k)fluoranthene

N.D. 0.010 ug/l 112 72-129 4 30

Chrysene

N.D. 0.010 ug/l 109 77-122 0 30

Dibenz(a,h)anthracene

N.D. 0.010 ug/l 108 42-143 1 30

Indeno(1,2,3-cd)pyrene

N.D. 0.010 ug/l 104 53-136 2 30

1-Methylnaphthalene

N.D. 0.010 ug/l 107 75-117 0 30

2-Methylnaphthalene

N.D. 0.010 ug/l 107 68-124 1 30

Naphthalene

N.D. 0.030 ug/l 97 78-117 1 30

Batch number: 14245A20A

NWTPH-Gx water C7-C12

Sample number(s): 7583666-7583667, 7583669, 7583671-7583672, 7583676-7583681

N.D. 50. ug/l 108 75-135

Batch number: 14245A20B

NWTPH-Gx water C7-C12

Sample number(s): 7583673-7583675

N.D. 50. ug/l 108 75-135

Batch number: 14246A53A

NWTPH-Gx water C7-C12

Sample number(s): 7583668, 7583670

N.D. 50. ug/l 108 105 75-135 3 30

*- 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.

Quality Control Summary

Client Name: Conestoga-Rovers & Associates

Group Number: 1499956

Reported: 09/11/14 at 06:05 PM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 142450005A			Sample number(s): 7583666-7583672					
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	88	98	32-117	11	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 142450023A			Sample number(s): 7583673-7583680					
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	90		32-117		
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 142466050006A			Sample number(s): 7583666-7583673, 7583676-7583680					
Lead	N.D.	0.082	ug/l	101		90-110		

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>BKG MAX</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: Y142461AA			Sample number(s): 7583666-7583678, 7583680-7583681 UNSPK: 7583673					
Acetone	78	80	35-144	2	30			
Benzene	112	115	72-134	2	30			
Bromobenzene	97	99	82-115	2	30			
Bromochloromethane	102	102	76-134	0	30			
Bromodichloromethane	104	107	73-125	4	30			
Bromoform	77	79	48-118	2	30			
Bromomethane	63	66	47-129	4	30			
2-Butanone	89	90	44-135	1	30			
n-Butylbenzene	95	101	74-134	3	30			
sec-Butylbenzene	103	105	74-137	1	30			
tert-Butylbenzene	102	104	81-121	2	30			
Carbon Disulfide	106	110	53-149	4	30			
Carbon Tetrachloride	112	114	75-148	2	30			
Chlorobenzene	102	104	87-124	2	30			
Chloroethane	72	76	55-130	6	30			
Chloroform	117	119	81-134	1	30			
Chloromethane	111	117	61-125	5	30			
2-Chlorotoluene	101	103	82-118	2	30			
4-Chlorotoluene	101	103	84-122	2	30			
1,2-Dibromo-3-chloropropane	109	110	50-123	2	30			
Dibromochloromethane	93	95	74-116	2	30			
1,2-Dibromoethane	99	100	77-116	1	30			
Dibromomethane	99	101	83-119	2	30			
1,2-Dichlorobenzene	98	100	84-119	2	30			
1,3-Dichlorobenzene	99	100	86-121	1	30			
1,4-Dichlorobenzene	99	101	85-121	2	30			
Dichlorodifluoromethane	94	95	58-156	2	30			
1,1-Dichloroethane	116	103	84-129	12	30			
1,2-Dichloroethane	108	110	63-142	2	30			
1,1-Dichloroethene	107	110	79-137	3	30			
cis-1,2-Dichloroethene	110	112	80-141	2	30			
trans-1,2-Dichloroethene	97	110	86-131	12	30			
1,2-Dichloropropane	114	117	83-124	2	30			

*- 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.

Quality Control Summary

Client Name: Conestoga-Rovers & Associates
Reported: 09/11/14 at 06:05 PM

Group Number: 1499956

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

<u>Analysis Name</u>	MS <u>%REC</u>	MSD <u>%REC</u>	MS/MSD <u>Limits</u>	RPD <u>RPD</u>	BKG <u>MAX</u>	DUP <u>Conc</u>	DUP <u>Conc</u>	DUP RPD <u>RPD</u>	Dup RPD <u>Max</u>
1,3-Dichloropropane	98	101	81-120	2	30				
2,2-Dichloropropane	100	105	69-135	4	30				
1,1-Dichloropropene	120	123	86-137	2	30				
cis-1,3-Dichloropropene	97	100	70-116	3	30				
trans-1,3-Dichloropropene	96	99	74-119	3	30				
Ethylbenzene	76 (2)	34 (2)	71-134	5	30				
Hexachlorobutadiene	81	84	56-134	3	30				
2-Hexanone	72	73	38-131	1	30				
Isopropylbenzene	98	93	75-128	2	30				
p-Isopropyltoluene	100	102	76-123	1	30				
Methyl Tertiary Butyl Ether	85	98	72-126	14	30				
4-Methyl-2-pentanone	75	76	45-128	2	30				
Methylene Chloride	104	107	78-133	3	30				
Naphthalene	77	66	52-125	3	30				
n-Propylbenzene	87 (2)	79 (2)	74-134	1	30				
Styrene	120	121	78-125	0	30				
1,1,1,2-Tetrachloroethane	101	103	80-123	1	30				
1,1,2,2-Tetrachloroethane	90	91	72-128	1	30				
Tetrachloroethene	106	108	80-128	2	30				
Toluene	108	111	80-125	2	30				
1,2,3-Trichlorobenzene	86	88	62-133	2	30				
1,2,4-Trichlorobenzene	92	93	56-137	1	30				
1,1,1-Trichloroethane	95	97	69-140	3	30				
1,1,2-Trichloroethane	135	138	71-141	2	30				
Trichloroethene	117	118	88-133	1	30				
Trichlorofluoromethane	94	97	63-163	3	30				
1,2,3-Trichloropropane	91	92	76-118	2	30				
1,2,4-Trimethylbenzene	-27 (2)	48 (2)	72-130	3	30				
1,3,5-Trimethylbenzene	74 (2)	62 (2)	65-132	1	30				
Vinyl Chloride	98	101	66-133	3	30				
m+p-Xylene	57 (2)	13 (2)	79-125	4	30				
o-Xylene	90 (2)	68 (2)	79-125	3	30				
Xylene (Total)	68 (2)	31 (2)	79-125	4	30				
Batch number: 14245A20A			Sample number(s): 7583666-7583667, 7583669, 7583671-7583672, 7583676-7583681 UNSPK: 7583673						
NWTPH-Gx water C7-C12	104	109	75-135	2	30				
Batch number: 14245A20B			Sample number(s): 7583673-7583675 UNSPK: 7583673						
NWTPH-Gx water C7-C12	104	109	75-135	2	30				
Batch number: 142450023A			Sample number(s): 7583673-7583680 UNSPK: 7583673						
DRO C12-C24 w/Si Gel	92	106	48-115	11	20				
Batch number: 142466050006A			Sample number(s): 7583666-7583673, 7583676-7583680 UNSPK: 7583670 BKG: 7583670						
Lead	97	99	89-120	2	20	0.49 J	0.49 J	1 (1)	20

Surrogate Quality Control

*- 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.

Quality Control Summary

Client Name: Conestoga-Rovers & Associates
Reported: 09/11/14 at 06:05 PM

Group Number: 1499956

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: VOCs- 5ml Water by 8260B

Batch number: Y142461AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7583666	97	99	100	97
7583667	87	95	100	100
7583668	98	100	100	100
7583669	97	98	100	97
7583670	99	99	101	102
7583671	98	98	100	98
7583672	99	98	99	96
7583673	98	98	101	104
7583674	98	101	101	106
7583675	98	101	102	106
7583676	97	97	100	98
7583677	97	97	100	97
7583678	98	98	98	98
7583680	98	98	100	97
7583681	98	98	99	97
Blank	97	98	100	97
LCS	98	101	101	100
MS	98	101	101	106
MSD	98	101	102	106
<hr/>				
Limits:	80-116	77-113	80-113	78-113

Analysis Name: VOCs- 5ml Water by 8260B

Batch number: Y142471AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7583679	99	99	99	96
Blank	98	99	99	96
LCS	98	101	101	100
LCSD	97	101	101	100
<hr/>				
Limits:	80-116	77-113	80-113	78-113

Analysis Name: PAHs in waters by SIM

Batch number: 14246WAE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7583666	90	99	98
7583667	107	103	97
7583668	111	108	101
7583669	97	107	98
7583670	106	108	97
7583671	95	105	97
7583672	101	110	97
7583673	113	102	77
7583676	97	102	92
7583677	102	103	94
7583678	99	103	93

*- 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.

Quality Control Summary

Client Name: Conestoga-Rovers & Associates
Reported: 09/11/14 at 06:05 PM

Group Number: 1499956

Surrogate Quality Control

7583679	93	93	93
7583680	88	90	90
Blank	98	109	94
LCS	102	111	97
LCSD	99	111	96

Limits: 56-134 36-156 59-132

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 14245A20A
Trifluorotoluene-F

7583666	87
7583667	94
7583669	90
7583671	90
7583672	90
7583676	90
7583677	92
7583678	90
7583679	88
7583680	91
7583681	91
Blank	91
LCS	96
MS	101
MSD	101

Limits: 63-135

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 14245A20B
Trifluorotoluene-F

7583673	99
7583674	101
7583675	101
Blank	91
LCS	96
MS	101
MSD	101

Limits: 63-135

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 14246A53A
Trifluorotoluene-F

7583668	93
7583670	114
Blank	67
LCS	75
LCSD	74

Limits: 63-135

*- 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.

Quality Control Summary

Client Name: Conestoga-Rovers & Associates
Reported: 09/11/14 at 06:05 PM

Group Number: 1499956

Surrogate Quality Control

Analysis Name: NWTPH-Dx water w/Si Gel
Batch number: 142450005A
Orthoterphenyl

7583666	93
7583667	95
7583668	99
7583669	98
7583670	103
7583671	108
7583672	101
Blank	107
LCS	114
LCSD	150

Limits: 50-150

Analysis Name: NWTPH-Dx water w/Si Gel
Batch number: 142450023A
Orthoterphenyl

7583673	110
7583674	112
7583675	126
7583676	90
7583677	112
7583678	103
7583679	115
7583680	100
Blank	92
LCS	112
MS	112
MSD	126

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

eurofins

Lancaster
Laboratories

Acct. # 13534

For Lancaster Laboratories use only
Group # 1499956 Sample # 7583666-81
Instructions on reverse side correspond with circled numbers.

Instructions on reverse side correspond with circled number

1 Client Information				4 Matrix		5 Analyses Requested				
Facility #	WBS			Sediment	Portables	Oxygenates	Lead	6 Remarks		
Pbb 05173/chevron 301233				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SCR #: _____		
Site Address	2800 Martin Luther King Jr. Way Seattle, WA			Ground	<input type="checkbox"/>	NWTPH GX	Total <input checked="" type="checkbox"/>	<input type="checkbox"/> Results in Dry Weight		
Chevron PM	Lead Consultant CRA			Surface	<input type="checkbox"/>	NWTPH DX	Diss. <input type="checkbox"/>	<input checked="" type="checkbox"/> J value reporting needed		
Consultant/Office	Seattle - Tacoma			Air	<input type="checkbox"/>	Silica Gel Cleanup <input checked="" type="checkbox"/>	Method 6020	<input type="checkbox"/> Must meet lowest detection		
Consultant Project Mgr.	Matter Davis			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	limits possible for 8260 compounds		
Consultant Phone #	253-507-6217			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8021 MTBE Confirmation		
Sampler	LEE BURES			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Confirm MTBE + Naphthalene		
2 Sample Identification	Collected			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Confirm highest hit by 8260		
	Date	Time		Grab	Composite			Confirm all hits by 8260		
MW + GW - 301233 - 082814 - LB-MW-1	8/28/14	1231	X			X	X X X	Run _____ oxy's on highest hit		
GW - 301233 - 082814 - LB-MW-2	8/28/14	1411	X			X	X X X	Run _____ oxy's on all hits		
GW - 301233 - 082814 - LB-MW-3	8/29/14	0847	X			X	X X X			
GW - 301233 - 082814 - LB-MW-4	8/29/14	1058	X			X	X X X			
GW - 301233 - 082814 - LB-MW-5	8/29/14	1448	X			X	X X X			
GW - 301233 - 082814 - LB-MW-6	8/29/14	0929	X			X	X X X			
GW - 301233 - 082814 - LB-MW-7	8/29/14	1007	X			X	X X X			
GW - 301233 - 082814 - LB-MW-8	8/29/14	1130	X			X	X X X			
GW - 301233 - 082814 - LB-MW-9	8/29/14	1333	X			X	X X X	MS/MSD for NWTPH-GX		
GW - 301233 - 082814 - LB-MW-10	8/29/14	1044	X			X	X X X	NWTPH-Dx, and 8260 Full		
GW - 301233 - 082814 - LB-MW-11	8/29/14	0937	X			X	X X X			
GW - 301233 - 082814 - LB-MW-12	8/29/14	1019	X			X	X X X			
GW - 301233 - 082814 - LB-DUP	8/29/14	—	X			X	X X X			
7 Turnaround Time Requested (TAT) (please circle)	Standard 5 day 4 day			Relinquished by	Date 8/29/14	Time 11:20	Received by	Date 8/29/14	Time 11:20	
	72 hour	48 hour	24 hour	<i>J</i>			<i>J</i>			
8 Data Package Options (please circle if required)				Relinquished by Commercial Carrier:	UPS <input checked="" type="checkbox"/>	FedEx <input type="checkbox"/>	Other <input type="checkbox"/>	Received by	Date 8/30/14	Time 8:45
Type I - Full	Type VI (Raw Data)			Temperature Upon Receipt 64.7 °C			Custody Seals Intact? Yes No			

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)
C	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)	L	liter(s)
m³	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, 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 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 \geq the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

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 \geq 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.

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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ATTACHMENT C

SUMMARY OF PREVIOUS INVESTIGATIONS

SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIATION

Former Tidewater Site
Phillips 66 Site 5173
Chevron Site 301233
2800 Martin Luther King Junior Way South
Seattle, Washington

1989

Soil and groundwater investigations at the Site began with the UST removals in 1989. All soil samples collected from the UST excavation, in the northwest corner of the Property, were documented below the Model Toxics Control Act (MTCA) Method A Cleanup Levels for constituents of concern (COC). (Stantec, 2012).

February 2005

Additional soil and groundwater investigations were conducted by G-Logics in February 2005. A groundwater sample collected from boring GL-4, contained total petroleum hydrocarbons (TPH) in the gasoline range (TPHg) at 5,900 micrograms per liter ($\mu\text{g}/\text{L}$). The sample area was located between the former western and eastern pump islands. G-Logics also conducted an investigation beneath the former heating oil UST. Impacted soil was found in this location but it did not exceed MTCA Method A cleanup levels. (Stantec, 2012).

June 2005

Further soil and groundwater investigation of the western and eastern pump island area was conducted by G-Logics in June 2005 (soil borings P1 through P11). Laboratory results confirmed that the highest concentrations of petroleum-impacted soil, mostly in the gasoline range, were from soil borings P7, P8, and P9 in the vicinity of the western pump island, which all exceeded MTCA Method A cleanup levels. The impact was primarily observed between 15 and 20 feet below ground surface (bgs). (Stantec, 2012).

August 2005

In August 2005, G-Logics began the installation and operation of an ozone treatment system. Five ozone injection points (IP-1 through IP-5) and monitoring wells MW-1, MW-2, and MW-3 were installed. The ozone system began operation on August 26, 2005. (Stantec, 2012).

June 2006

Elevated concentrations of TPHg were regularly detected at MW-3, located west of the western pump island. As a result, G-Logics continued soil investigations in the vicinity

of MW-3 in June 2006 due to elevated concentrations of TPHg detected in the groundwater well during quarterly sampling activities. Petroleum related compounds were either non-detect or were below the MTCA Method A cleanup levels in the borings, supporting that the source area was concentrated in the area of the west pump island. (Stantec, 2012).

August 2006

In August 2006, a second compressor was added to augment the ozone injection system. The second compressor was dedicated to providing a primary source of air flow to the wells; the original compressor was dedicated to providing air flow to the ozone generator. (Stantec, 2012).

December 2006 through June 2007

To supplement the ozone treatment system, in December 2006, G-Logics oversaw the installation of a horizontal pipe for In-Situ Chemical Oxidation (ISCO) in an area up-gradient of the western pump island. The pipe was installed at approximately 6 to 7 feet; installation at a greater depth was unfeasible due to soil caving. Between January and March 2007, ISCO using Fenton's Reagent was performed to supplement ozone injection remediation efforts. On January 4, 2007, a buffered, iron-catalyst was introduced with the Fenton's application. In March 2007, a Fenton's application treatment well (TW-1) was installed directly west of the west pump island source area. The ozone system was shut down in June 2007. (Stantec, 2012).

April through July 2011

In April and July 2011, Stantec Consulting oversaw Cascade Drilling, L.P. advance seven soil borings (B-1 through B-7) and install five 2-inch diameter groundwater monitoring wells (MW-6 through MW-10). Analytical results from the smear zone and water bearing zone from soil collected between 10 and 17 feet bgs contained relatively low to non-detectable concentrations for TPHg, TPH in the diesel range (TPHd), TPH in the heavy oil range (TPHo) and benzene, toluene, ethylbenzene, and total xylenes (collectively referred to as BTEX) except for the samples collected from the former heating oil UST area (B-3 and MW-9) at 10 and 15 feet bgs. Soil samples screened in the vadose zone, in general, contained low to non-detectable concentrations of TPHg, TPHd, TPHo, and BTEX. Groundwater samples collected in borings B-1 through B-7 showed slightly elevated concentrations of TPHg and total xylenes near the former pump island (borings B-2 and B-6). Down-gradient of the Site, in borings B-4 and B-5, concentrations of TPHg and BTEX were below the laboratory method detection limit (MDL). (Stantec, 2012).

References

Stantec Consulting Corporation (Stantec, 2012), First Quarter 2012 Monitoring and Sampling Report, April 27, 2012.