



**CONESTOGA-ROVERS
& ASSOCIATES**

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May 20, 2015

Reference No. 061992

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

Re: Fourth 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 *Fourth 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 FOURTH QUARTER 2014 EVENT

On December 10 and 11, 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 | 0.07 |
| • Approximate Depth to Water | 9 to 12 feet below grade |
| • Approximate Groundwater Elevation | 46 to 52 feet above mean sea level |

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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.

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	<29	<67	<0.5	<0.5	<0.5	<0.5
MW-2	420	170	<66	<0.5	<0.5	<0.5	<0.5
MW-3	7,800	150	<67	<1	<1	150	510
MW-4	<50	<29	<67	<0.5	<0.5	<0.5	<0.5
MW-4 (DUP)	<50	<28	<65	<0.5	<0.5	<0.5	<0.5
MW-5	260	<29	<67	<0.5	<0.5	0.8 J	5
MW-6	<50	<28	<66	<0.5	<0.5	<0.5	<0.5
MW-7	<50	<28	<66	<0.5	<0.5	<0.5	<0.5
MW-8	9,000	1,600^a	<66	<1	<1	94	350
MW-9	81 J	56 J	<67	<0.5	<0.5	<0.5	<0.5
MW-10	140 J	140	<65	1	<0.5	<0.5	2
MW-11	560	<28	<66	<0.5	<0.5	<0.5	<0.5
MW-13	<50	<28	<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						
a	Elevated TPHd concentration may be due to overlap of TPHg during analysis						

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, and MW-8, with the highest concentration detected at MW-8 (Figure 5).



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- TPHd concentrations exceeded the MTCA Method A cleanup level in groundwater well MW-8 (Figure 6).
- TPHo concentrations were below MTCA Method A cleanup levels in all wells.
- 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 first quarter 2015 event will be performed in March 2015. 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 were installed in June 2014. The aquifer potability pumping test was completed in January 2015. The two remaining borings inside the building were completed in March 2015.



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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/12

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*)
 Alison Robinson, Veris Law Group (*electronic copy*)

FIGURES

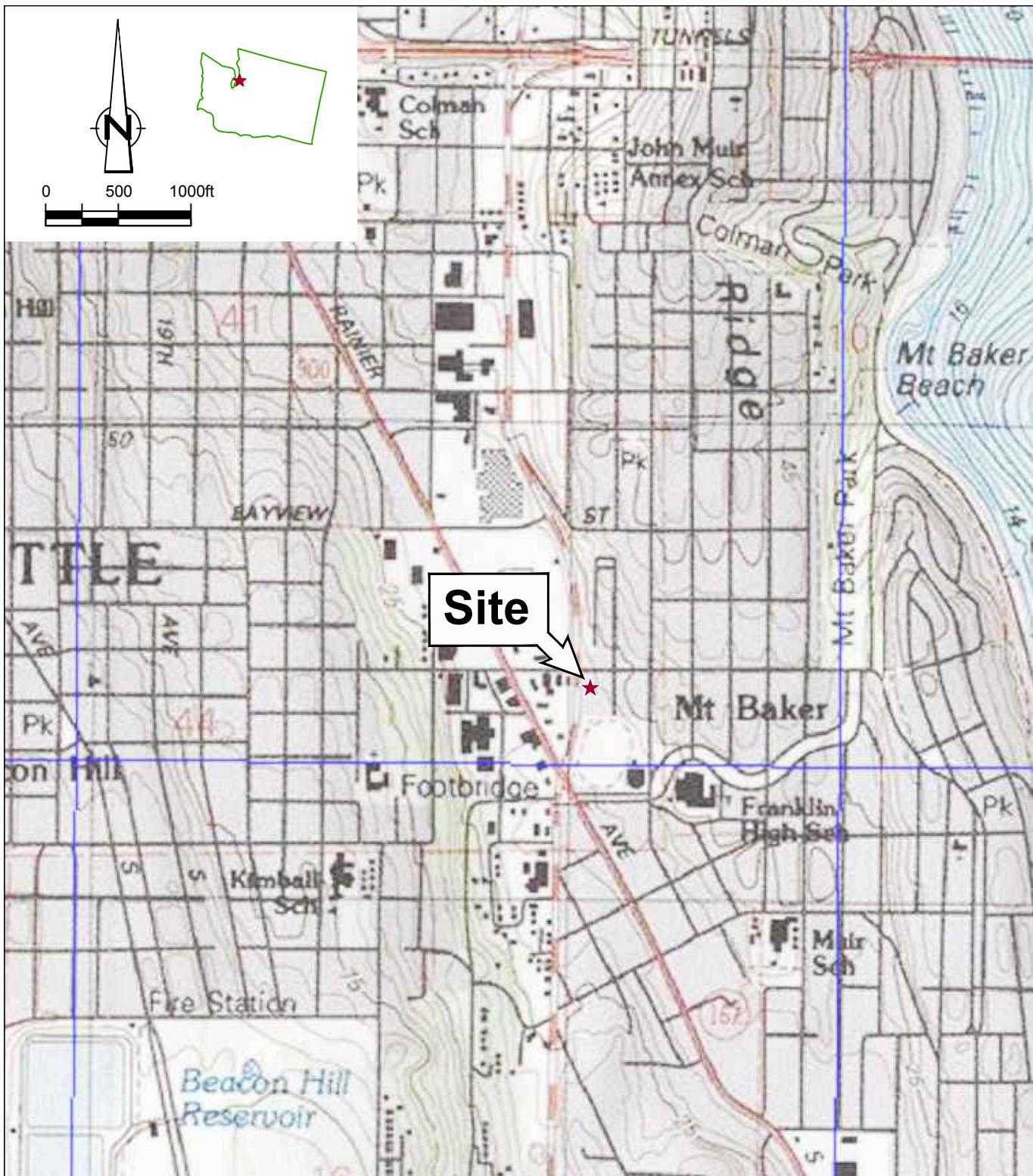


Figure 1
VICINITY MAP
FORMER TIDEWATER SERVICE STATION
PHILLIPS 66 SITE 5173
CHEVRON SITE 301233
2800 MARTIN LUTHER KING WAY SOUTH
Seattle, Washington



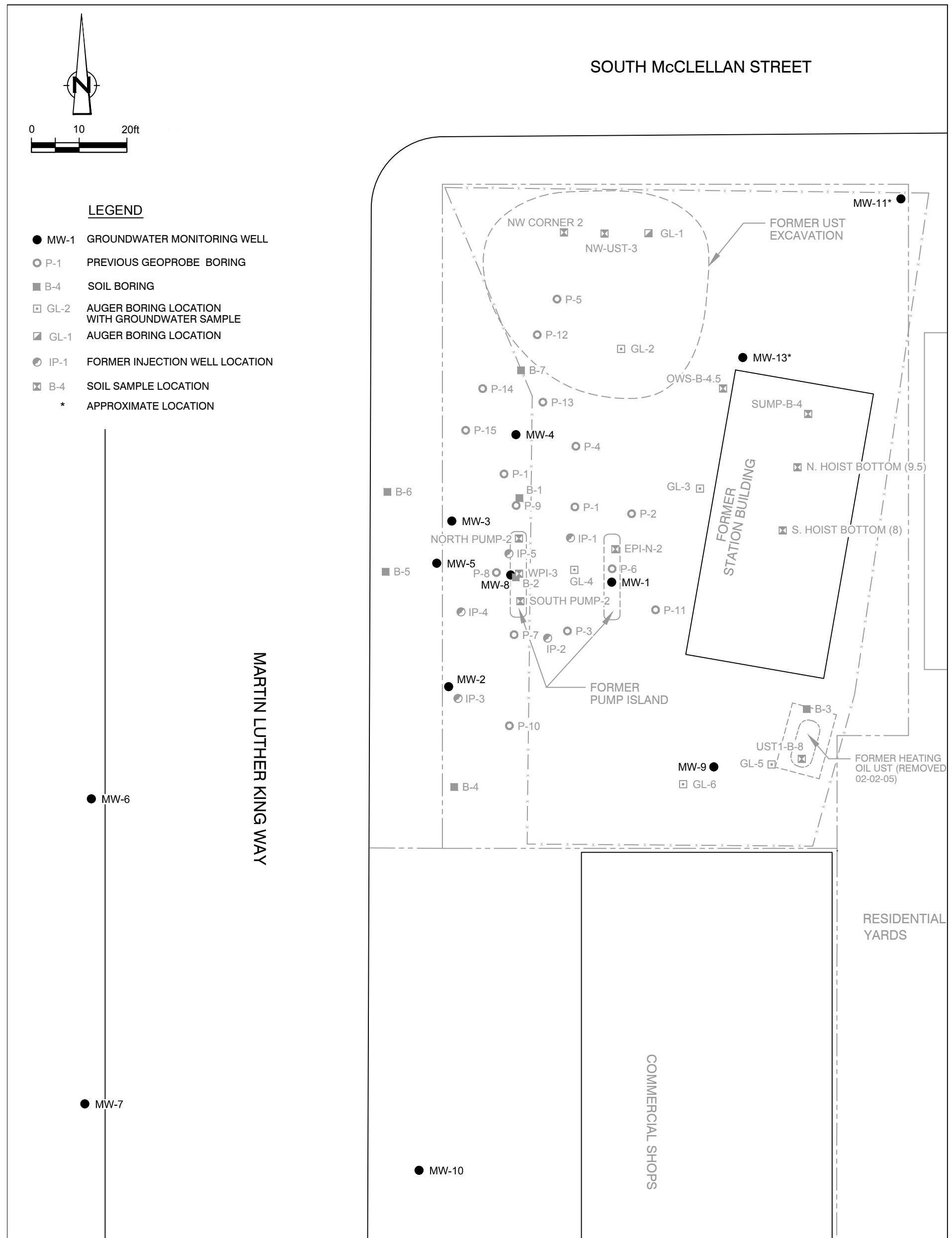
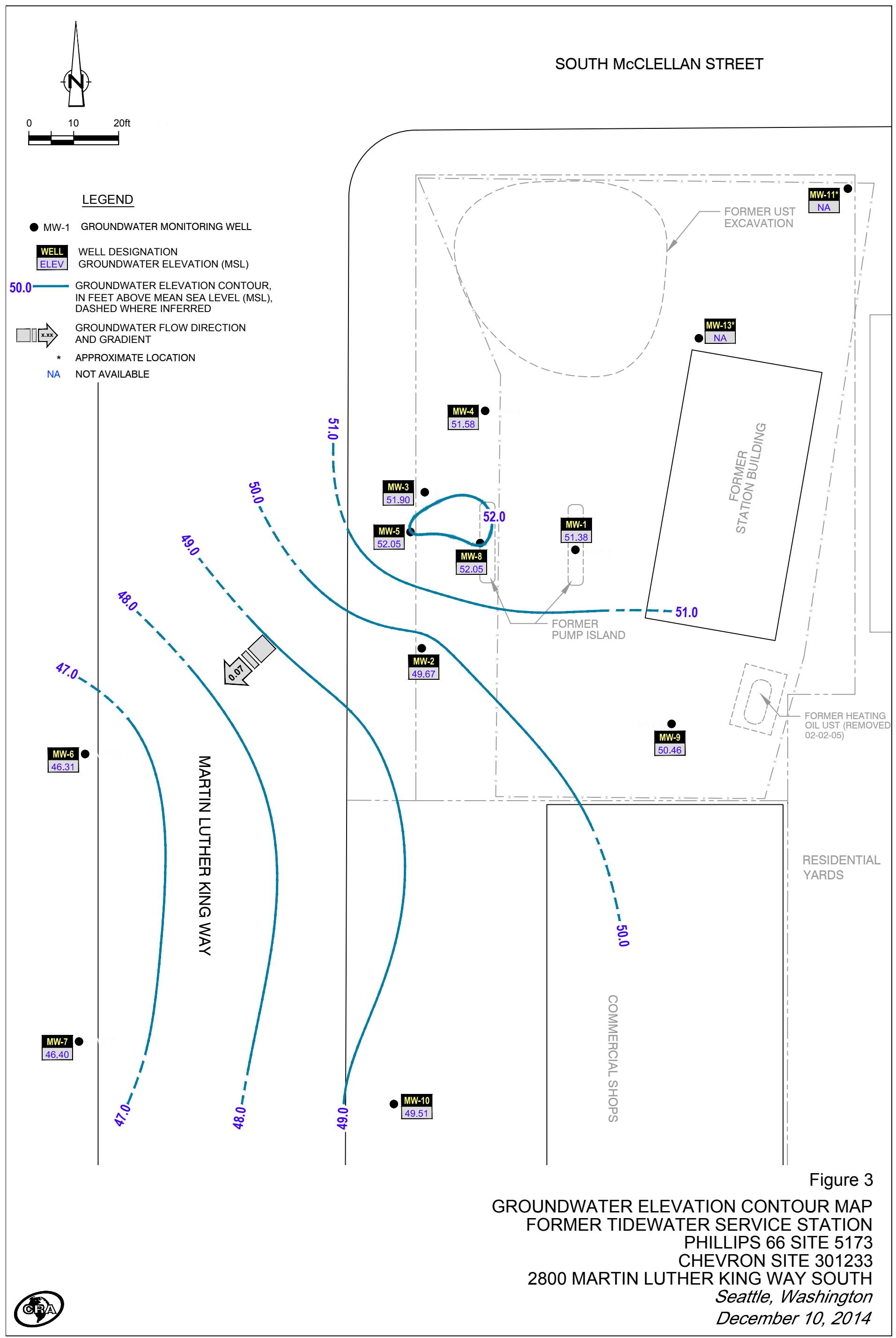
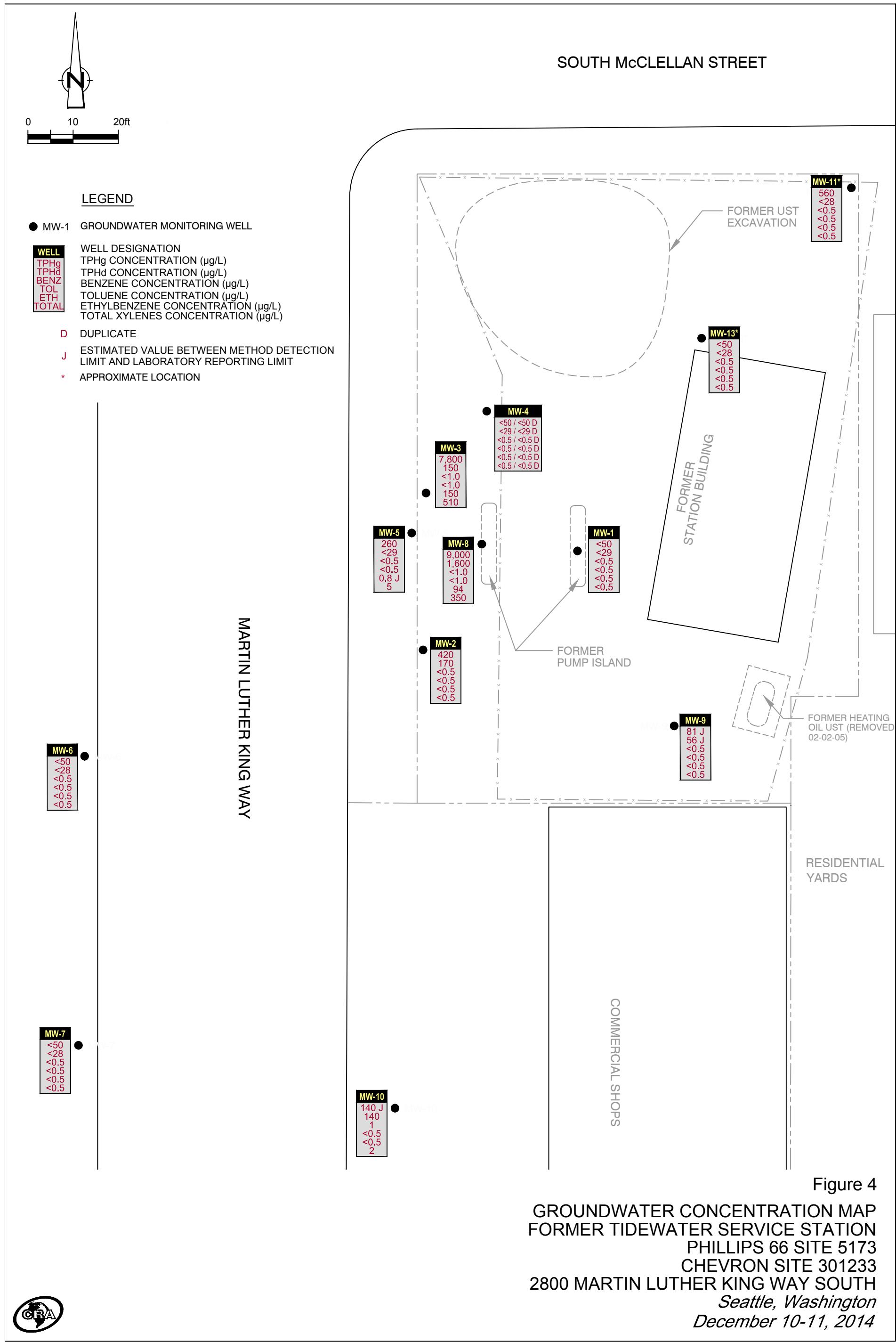
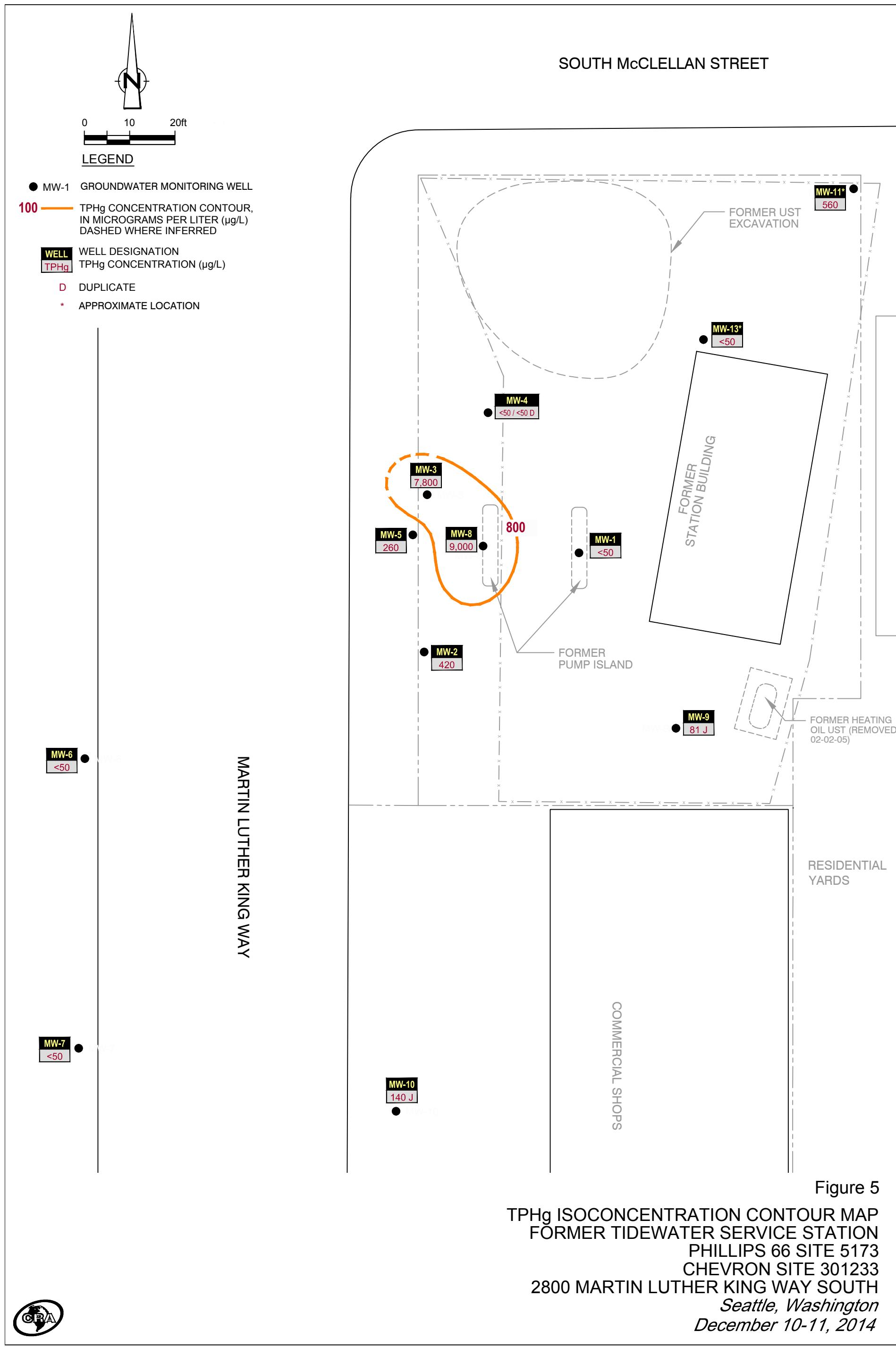


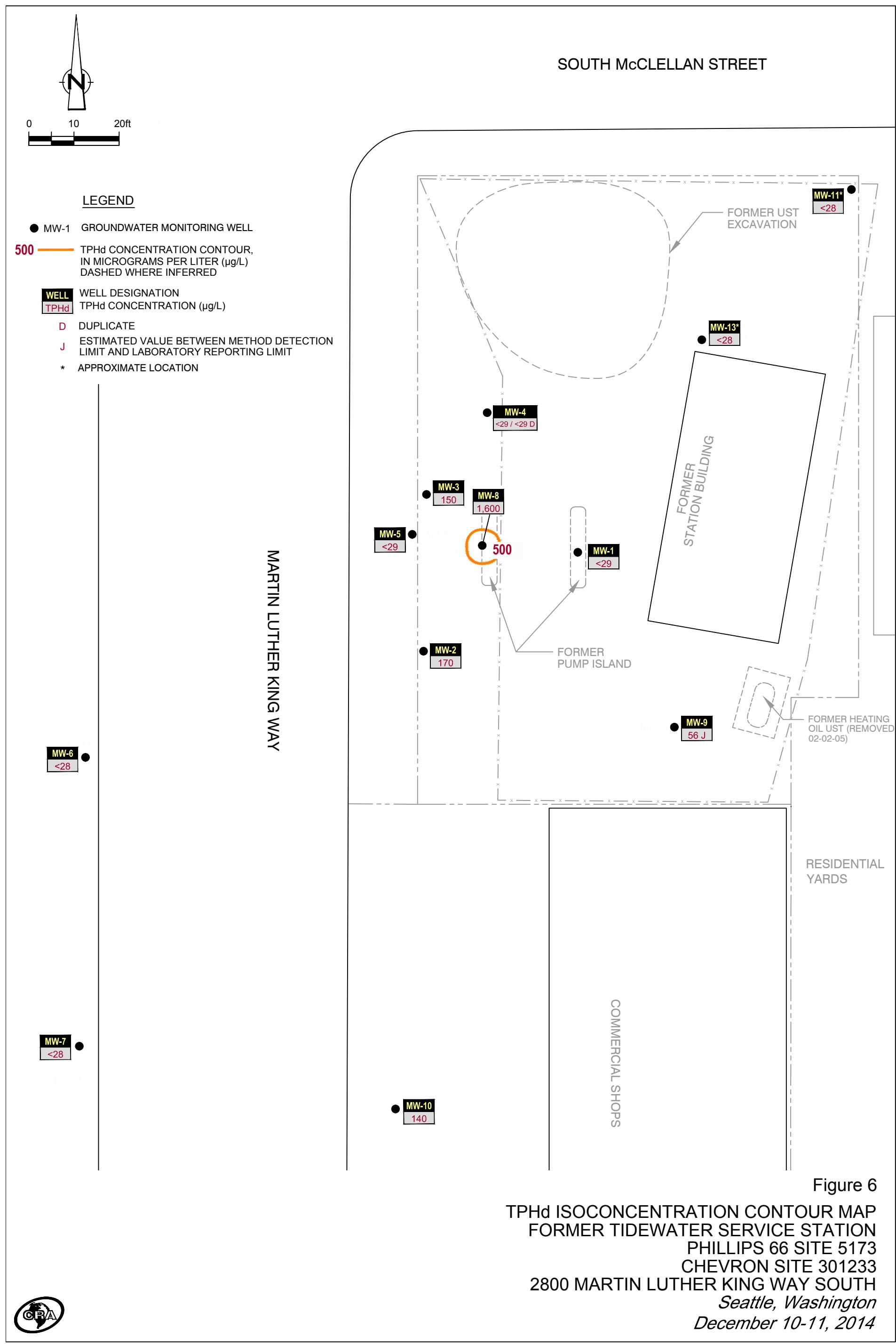
Figure 2
SITE PLAN
FORMER TIDEWATER SERVICE STATION
PHILLIPS 66 SITE 5173
CHEVRON SITE 301233
2800 MARTIN LUTHER KING WAY SOUTH
Seattle, Washington











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	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
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	<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	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	<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	<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	<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	<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	<0.5	<0.5	<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	<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	<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	<0.5	<1	<1	<1	<1	<1	0.10
MW-1	08/28/2014	62.35	11.87	50.48	<50	<28	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.40 J
MW-1 DUP	08/28/2014	62.35	11.87	50.48	<50	<29	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.31 J

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	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
MW-1	12/11/2014	62.35	10.97	51.38	<50	<29	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	0.84 J	-	
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	-

TABLE 1

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

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		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
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	-
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	<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	<1	19	10	0.44 J	-
MW-2	12/11/2014	60.72	11.05	49.67	420	170	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	21	11	0.93 J	-
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	-	-	-	-	-	-	-	-	-	-

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	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
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	0.012868
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	-
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	-
MW-3	12/11/2014	61.81	9.91	51.90	7,800	150	<67	<1	<1	150	510	<1	<1	<1	69	1,200	100	110	44	0.45 J	-
MW-4	06/28/2006	98.36	12.40	85.96	ND	-	-	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	ND	-	-	-	-	-	-	-	-	-	-
MW-4	04/11/2007	98.36	11.27	87.09	ND	-	-	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	-	-
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	-	-
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	-	-
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

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
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	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	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	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	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	<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	<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	0.14	-	
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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	0.14 J	-	
MW-4 Dup	12/10/2014	62.75	11.17	51.58	<50	<29	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	0.15 J	-	
MW-4 Dup	12/10/2014	62.75	11.17	51.58	<50	<28	<65	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	0.12 J	-	
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 0.009168	

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
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	0.9J	34	65	<0.5	<0.5	<0.5	36	65	15	170	61	0.49J	-
MW-5	12/11/2014	61.66	9.61	52.05	260	<29	<67	<0.5	<0.5	0.8J	5	<0.5	<0.5	<0.5	1J	6	2J	4J	2J	1.3	-
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	59J	120J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	24.4	-
MW-6	12/10/2014	58.03	11.72	46.31	<50	<28	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	20.5	-

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
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	<0.5	<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	<0.5	<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	<0.5	<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	<0.5	<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	<0.5	<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	<0.5	<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	<0.5	<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	<0.5	<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	<0.5	<1	<1	<1	<1	40.9	-
MW-7	12/10/2014	56.96	10.56	46.40	<50	<28	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	35.6	-
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	-

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
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	0.8J	170	590	<0.5	<0.5	<0.5	70	1,200	180	110	44	1.6	-
MW-8	12/10/2014	61.71	9.66	52.05	9,000	1,600 ⁶	<66	<1	<1	94	350	<1	<1	<1	65	1,100	210	80	31	4.4	-
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	<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	<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	<1	<1	-
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	<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	<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	<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	<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	<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	<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	<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	<1	0.092	-
MW-9	08/28/2014	62.58	14.73	47.85	<50	44J	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.12J	-

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						
MW-9	12/10/2014	62.58	12.12	50.46	81 J	56 J	<67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<0.082	-							
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	<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	<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	<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	<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	<1	0.43 J	-						
MW-10	12/10/2014	58.96	9.45	49.51	140 J	140	<65	1	<0.5	<0.5	2	<0.5	<0.5	<0.5	<1	<1	<1	12	5	0.23 J	-						
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	-							
MW-11	12/10/2014	-	9.66	-	560	<28	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.20 J	-						
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	1.7	-						
MW-13	12/10/2014	-	8.78	-	<50	<28	<66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.81 J	-						
Trip Blank	08/08/2012	-	-	-	<50	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<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	<1	-	-						

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
Trip Blank	02/26/2013	-	-	-	<50	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<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	<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	<1	<1	-
Trip Blank	08/28/2014	-	-	-	<50	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	-
Trip Blank	12/10/2014	-	-	-	<50	-	-	<0.5	<1	<1	<1	<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

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

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)
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

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.l286

<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.

6 TPHe concentration may be due to overlap of TPHg during analysis

ATTACHMENT A

MONITORING DATA PACKAGE

WELL GAUGING DATA

Project # 141210-LB1 Date 12/10/14 Client CRA

Site CRA @ TIDWATER SEATTLE

LOW FLOW WELL MONITORING DATA SHEET

Project #: 141210-LB1	Client: CRA
Sampler: LB	Gauging Date: 12/10/14
Well I.D.: MW-1	Well Diameter (in.): <input checked="" type="radio"/> 3 4 6 8
Total Well Depth (ft.): 22.46	Depth to Water (ft.): 10.97
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PNG	Grade
Flow Cell Type: YCI 55	

Purge Method: 2" Grundfos Pump

Peristaltic Pump

Bladder Pump

Sampling Method: Dedicated Tubing

New Tubing

Other

Start Purge Time: 1033

Flow Rate:

200 mg/L acryl

Pump Depth: 17'

Did well dewater? Yes

Amount actually evacuated: 31

Sampling Time: 10:49

Sampling Date: 12/11/14

Sample I.D.: SW-061992-12114 LB-Mk-1

Laboratory: —An-CHAS-DEE

Analyzed for: TPH-O BTEX MTBE TPH-D

Other: See car

Equipment Blank I.D.:

Time

Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	141210-LB1	Client:	CRA
Sampler:	LB	Gauging Date:	12/10/14
Well I.D.:	MW-2	Well Diameter (in.) :	2 3 4 6 8
Total Well Depth (ft.) :	21.31	Depth to Water (ft.) :	11.05
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PYC	Grade	Flow Cell Type: VSI 556

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
Sampling Method: Dedicated Tubing New Tubing Other

Sampling Method: Dedicated Sampling Reviewing: New Packaging Date: _____

Start Purge Time: 0833 Flow Rate: 200 mL/min Pump Depth: '6.5'

Did well dewater? Yes No Amount actually evacuated: 3L

Amount actually evacuated: 3L

Sampling Time: 0849 Sampling Date: 12/11/14

Sample I.D.: 6W-061992-12114-LB:MW-2 Laboratory: Lancaster

Analyzed for: TPH-G BTEX MTBE TPH-D Other: SEE CX

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 141210-LB1	Client: CRA
Sampler: LB	Gauging Date: 12/10/14
Well I.D.: MW-3	Well Diameter (in.): <u>2</u> 3 4 6 8
Total Well Depth (ft.): 20.07	Depth to Water (ft.): 9.91
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC	Grade
	Flow Cell Type: YSE 550

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
Sampling Method: Dedicated Tubing New Tubing Other

Start Purge Time: 0948 Flow Rate: 200 ml/min Pump Depth: 15'

Start Purge Time: 0948 Flow Rate: 200 ml/min Pump Depth: 15'

Start Purge Time: 0948 Flow Rate: 200 ml/min Pump Depth: 15'

Start Purge Time: 0948 Flow Rate: 200 ml/min Pump Depth: 15'

Did well dewater? Yes No Amount actually evacuated: 3L

Sampling Time: 1004 Sampling Date: 12/11/14

Sample I.D.: 6W-06-1992-12/11/4-LB-MW-3 Laboratory: LANCASTER

Analyzed for: TPH-C BTEX MTBE TPH-D Other: SEE COX

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	1412 10-LB1	Client:	CRA
Sampler:	LB	Gauging Date:	12/10/14
Well I.D.:	MW-4	Well Diameter (in.) :	<input checked="" type="radio"/> 3 4 6 8 _____
Total Well Depth (ft.) :	18.97	Depth to Water (ft.) :	11.17
Depth to Free Product:	Thickness of Free Product (feet):		
Referenced to:	PVC	Grade	Flow Cell Type: VSI 555

Purge Method: 2" Grundfos Pump

Peristaltic Pump

Bladder Pump

Sampling Method: Dedicated Tubing

New Tubing

Other

Start Purge Time: 1301

Flow Rate: 200 mL/min

Pump Depth: 15.5'

| Did well dewater? Yes _____ No _____

Amount actually evacuated: 3/

Sampling Time: /3/7

Sampling Date: 12/10/14

Sample I.D.: SW-061992-121014-LB.MW.4

Laboratory: Lancaster

Analyzed for: TPH-G PTEX MTBE TPH-DI

Other: See Gao

Equipment Blank I.D.:

Time

Duplicate I.D.: 54-DC-1892-121044-12-DUE

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

LOW FLOW WELL MONITORING DATA SHEET

Project #:	141210-LBI	Client:	CRA
Sampler:	LB	Gauging Date:	12/10/14
Well I.D.:	MW-5	Well Diameter (in.) :	2 3 4 6 8 <u>3/4</u>
Total Well Depth (ft.) :	19.18	Depth to Water (ft.) :	9.61
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: VSI 555

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
Sampling Method: Dedicated Tubing New Tubing Other

Start Purge Time: 0911 Flow Rate: 200ML / MIN Pump Depth: 14.5'

Start Purge Time: 0911 Flow Rate: 200ML / MIN Pump Depth: 14.5'

Did well dewater? Yes No Amount actually evacuated: 3L

Sampling Time: 6927 Sampling Date: 12/11/14

Sample I.D.: 6W-061992-12114 LB-MWS Laboratory: LANCASTER

Analyzed for: TPH-G BTEX MTBE TPH-D Other: SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

LOW FLOW WELL MONITORING DATA SHEET

Project #:	141210-LB1	Client:	CRA
Sampler:	LB	Gauging Date:	12/10/14
Well I.D.:	MW-6	Well Diameter (in.) :	(2) 3 4 6 8
Total Well Depth (ft.) :	19.77	Depth to Water (ft.) :	11.72
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSL 555

Purge Method: 2" Grundfos Pump

Peristaltic Pump

Bladder Pump

Sampling Method: Dedicated Tubing

New Tubing

Other _____

Start Purge Time: 6924

Flow Rate: 200 mL / MIN

Pump Depth: 16'

Did well dewater? Yes No

Amount actually evacuated: 34

Sampling Time: 0940

Sampling Date: 12/10/14

Sample I.D.: 66-05-1992-121014-LB-Mw-G

Laboratory: LANCASTER

Analyzed for: TPH-G BTEX MTBE TPH-D

Other: See box

Equipment Blank I.D.: @ Time

Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	141210-LBI	Client:	CRA
Sampler:	LB	Gauging Date:	12/10/14
Well I.D.:	MW-7	Well Diameter (in.) :	② 3 4 6 8
Total Well Depth (ft.) :	19.78	Depth to Water (ft.) :	10.56
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YES 556

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
Sampling Method: Dedicated Tubing New Tubing Other

Sampling Method: Dedicated tubing

Start Purge Time: 0958 Flow Rate: 200 mL/min Pump Depth: 15.5

Did well dewater? Yes No Amount actually evacuated: 3L

Sampling Time: 10/4 Sampling Date: 12/16/19

Sample I.D.: 6W-061222-121014-LB-Mw-7 Laboratory: LANCASTER

Analyzed for: TPH-G BTEX MTBE TPH-D Other: *see coc*

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #:	141210-LBI	Client:	CRA
Sampler:	LB	Gauging Date:	12/10/14
Well I.D.:	MHR-8	Well Diameter (in.) :	(<input checked="" type="radio"/>) 3 4 6 8 _____
Total Well Depth (ft.) :	19.73	Depth to Water (ft.) :	9.66
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YES 555

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
Sampling Method: Dedicated Tubing New Tubing Other

Sampling Method: Dedicated Sampling New Funding: _____ Other: _____

Start Purge Time: 1351 Flow Rate: 200 ML/MIN Pump Depth: 15'

Did well dewater? Yes Amount actually evacuated: 3L

Sampling Time: 1407 Sampling Date: 12/10/14

Sample I.D.: SW-061992-121014-LB-MW-8 Laboratory: LANCaster

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See car

Equipment Blank I.D.: @ Time Duplicate I.D.:

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

LOW FLOW WELL MONITORING DATA SHEET

Project #:	1412 b - LG	Client:	CRA
Sampler:	LB	Gauging Date:	12/10/14
Well I.D.:	MW-9	Well Diameter (in.) :	(2) 3 4 6 8
Total Well Depth (ft.) :	23.53	Depth to Water (ft.) :	12.12
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type: YSI 56

Purge Method: 2" Grundfos Pump

Peristaltic Pump

Bladder Pump

Sampling Method: Dedicated Tubing

New Tubing

Other

Start Purge Time: 11/5

Flow Rate: 200 mL/min

Pump Depth: 18

Did well dewater? Yes No

Amount actually evacuated: 3%

Sampling Time: 1(3)

Sampling Date: 12/19/14

Sample I.D.: 6W-06-997-12104-1B; Mv., -9

Laboratory: ✓ *misdated*

Analyzed for:

TPH-9 STEX MTBE TPH-1

Other: egg case

Equipment Blank ID:

1

Duplicate ID

LOW FLOW WELL MONITORING DATA SHEET

Project #: 141210-LB1	Client: CRA
Sampler: LB	Gauging Date: 12/10/14
Well I.D.: MW-10	Well Diameter (in.): 2 3 4 6 8
Total Well Depth (ft.): 1990	Depth to Water (ft.): 9.45
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC	Grade
	Flow Cell Type: YSI 586

Purge Method: 2" Grundfos Pump

Peristaltic Pump

Bladder Pump

Sampling Method: Dedicated Tubing

New Tubing

Other

Start Purge Time: 1037

Flow Rate: 200 ml/min

Pump Depth: 15'

Did well dewater? Yes No

Amount actually evacuated: 34

Sampling Time: 1053

Sampling Date: 12/11/14

Sample I.D.: *Chu-N-19222-21044-18-Mu-10*

Laboratory: Lancaster

Analyzed for: TBTG BTEX MTBE TPH^D

Other: See box

Equipment Blank I.D. : @

Duplicate ID

LOW FLOW WELL MONITORING DATA SHEET

Project #:	141210 - LBI	Client:	CRA
Sampler:	LB	Gauging Date:	12/10/14
Well I.D.:	MW-11	Well Diameter (in.) :	2 3 4 6 8
Total Well Depth (ft.) :	19.411	Depth to Water (ft.) :	9.66
Depth to Free Product:		Thickness of Free Product (feet):	
Referenced to:	PVC	Grade	Flow Cell Type:

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
Sampling Method: Dedicated Tubing New Tubing Other _____
Start Purge Time: 1153 Flow Rate: 200 mL/min Pump Depth: 15'

Did well dewater? Yes No Amount actually evacuated: 3L

Sampling Time: 1209 Sampling Date: 12/10/14

Sample I.D.: SW-021992-12/014-1B-Mu-11 Laboratory: LANCASTER

Analyzed for: TPH-G BTEX MTBE TPH-FD Other SGE CN

Equipment Blank I.D.: @ Time Duplicate I.D.:

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

LOW FLOW WELL MONITORING DATA SHEET

Project #:	141210 - LB1	Client:	CRA
Sampler:	LB	Gauging Date:	12/10/14
Well I.D.:	MW-13	Well Diameter (in.) :	(2) 3 4 6 8 _____
Total Well Depth (ft.) :	17.88	Depth to Water (ft.) :	8.78
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: 1228

Flow Rate:

200 ML / MEN

Pump Depth: 13.5'

Did well dewater? Yes No

Amount actually evacuated: 34

Sampling Time: 1244

Sampling Date: 12/10/14

Sample I.D.: 6W-061997-121014-LB-MW-13

Laboratory: LANCASTER

Analyzed for: TPH-G BTEX MTBE TPH-HD

Other: See cor.

Equipment Blank I.D.:

@ Time

Duplicate I.D.:

WELLHEAD INSPECTION FORM

Client: CRA Site: CRA @ TIDEWATER SEAPORT Date: 12/10/14
Job #: 141210-LBI 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	12/10/14				
Number of drum(s) empty:	0	0				
Number of drum(s) 1/4 full:	0	0				
Number of drum(s) 1/2 full:	0	1				
Number of drum(s) 3/4 full:	0	0				
Number of drum(s) full:	10	10				
Total drum(s) on site:	10	11				
Are the drum(s) properly labeled?	YES	YES				
Drum ID & Contents:	NA	NA				
If any drum(s) are partially or totally filled, what is the first use date:	NA	NA				

- 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	12/11/14				
Number of drums empty:	0	0				
Number of drum(s) 1/4 full:	0	0				
Number of drum(s) 1/2 full:	1	0				
Number of drum(s) 3/4 full:	0	0				
Number of drum(s) full:	10	11				
Total drum(s) on site:	11	11				
Are the drum(s) properly labeled?	YES	YES				
Drum ID & Contents:	NA	NA				

LOCATION OF DRUM(S)

Describe location of drum(s):

SEE MAD

FINAL STATUS

Number of new drum(s) left on site this event	1	0				
Date of inspection:	8/29/14	12/11/14				
Drum(s) labelled properly:	YES	YES				
Logged by BTS Field Tech:	LB	LB				
Office reviewed by:						

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

For Lancaster Laboratories use only
Group # _____ Sample # _____
Instructions on reverse side correspond with circled numbers.

1) Client Information				2) Sample Identification		3) Collected		4) Matrix		5) Analyses Requested		6) Remarks			
Facility #	WBS	Acct #		Site Address	Martin Luther King Jr. Way, Seattle, WA	Date	Time	Sediment	Soil	Compsoite	NWTPH GX	Lead	Total Diss.	WAVPH	WAEPH
Site Address		Lead Consultant		Consultant Project Mgr.	Matthew Davis	12/01/14	10:49		X	X	X	X	X	X	X
Consultant/Office		Consultant Phone #	253-507-6017	Consultant PM		12/01/14	0849		X	X	X	X	X	X	X
		Sampler				12/01/14	1004		X	X	X	X	X	X	X
						12/01/14	1317		X	X	X	X	X	X	X
						12/01/14	0927		X	X	X	X	X	X	X
						12/01/14	0940		X	X	X	X	X	X	X
						12/01/14	1014		X	X	X	X	X	X	X
						12/01/14	1407		X	X	X	X	X	X	X
						12/01/14	1131		X	X	X	X	X	X	X
						12/01/14	1053		X	X	X	X	X	X	X
						12/01/14	1209		X	X	X	X	X	X	X
						12/01/14	1244		X	X	X	X	X	X	X
						12/01/14	—		X	X	X	X	X	X	X
7) Turnaround Time Requested (TAT) (please circle)															
Standard		5 day		4 day		24 hour		72 hour		48 hour		24 hour		4 day	
8) Data Package Options (please circle if required)															
Type I - Full		Type VI (Raw Data)		Temperature Upon Receipt _____ °C		Relinquished by Commercial Carrier:		UPS _____ FedEx _____ Other _____		Received by _____		Received by _____		Yes No	

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 140
15575 SW Sequoia Parkway
Portland OR 97224

December 29, 2014

Project: 301233 Tidewater Seattle

Submittal Date: 12/13/2014
Group Number: 1525382
PO Number: 4071016
State of Sample Origin: WA

Client Sample Description

GW-061992-121114-LB-MW-1 Grab Groundwater
GW-061992-121114-LB-MW-2 Grab Groundwater
GW-061992-121114-LB-MW-3 Grab Groundwater
GW-061992-121014-LB-MW-4 Grab Groundwater
GW-061992-121114-LB-MW-5 Grab Groundwater
GW-061992-121014-LB-MW-6 Grab Groundwater
GW-061992-121014-LB-MW-7 Grab Groundwater
GW-061992-121014-LB-MW-8 Grab Groundwater
GW-061992-121014-LB-MW-8 MS Grab Groundwater
GW-061992-121014-LB-MW-8 MSD Grab Groundwater
GW-061992-121014-LB-MW-9 Grab Groundwater
GW-061992-121014-LB-MW-10 Grab Groundwater
GW-061992-121014-LB-MW-11 Grab Groundwater
GW-061992-121014-LB-MW-13 Grab Groundwater
GW-061992-121014-LB-DUP Grab Groundwater

Lancaster Labs (LL) #

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

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>.

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 COPY TO	Chevron	Attn: Anna Avina
ELECTRONIC COPY TO	Chevron c/o CRA	Attn: Report Contact
ELECTRONIC COPY TO	CRA	Attn: Chevron GWRT

Respectfully Submitted,



Amek Carter
Specialist

(717) 556-7252

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

Sample Description: GW-061992-121114-LB-MW-1 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711062
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/11/2014 10:49 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK01

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	20	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-061992-121114-LB-MW-1 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711062
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/11/2014 10:49 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK01

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	4	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	5	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	J	0.5
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.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.030	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs SW-846 8011					
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	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	0.84	J	0.082

Sample Description: GW-061992-121114-LB-MW-1 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711062
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/11/2014 10:49 by LB

Conestoga-Rovers & Associates

Suite 140

Submitted: 12/13/2014 09:30

15575 SW Sequoia Parkway

Reported: 12/29/2014 10:48

Portland OR 97224

MLK01

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.

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	Y143551AA	12/21/2014	12:54	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y143551AA	12/21/2014	12:54	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14350WAO026	12/26/2014	20:23	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14350WAO026	12/17/2014	09:30	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14356A20A	12/23/2014	04:48	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14356A20A	12/23/2014	04:48	Miranda P Tillinghast	1
10398	EDB by 8011	SW-846 8011	1	143520034A	12/21/2014	23:16	Matthew S Listner	1
07786	EDB Extraction	SW-846 8011	1	143520034A	12/21/2014	11:30	Kelli M Barto	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510040A	12/20/2014	07:17	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	143510040A	12/18/2014	09:30	David S Schrum	1
06035	Lead	SW-846 6020	1	143566050005A	12/24/2014	04:19	Choon Y Tian	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	143566050005	12/23/2014	09:14	Micaela L Dishong	1

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Sample Description: GW-061992-121114-LB-MW-2 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711063
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/11/2014 08:49 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK02

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	11	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	21	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-061992-121114-LB-MW-2 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711063
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/11/2014 08:49 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK02

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.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	0.013 J	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.011 J	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.093	0.010	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.030	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	420	50	1
Pesticides/PCBs SW-846 8011					
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	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	0.93 J	0.082	1



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Sample Description: GW-061992-121114-LB-MW-2 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711063
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/11/2014 08:49 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK02

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.

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	Y143551AA	12/21/2014 13:15	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y143551AA	12/21/2014 13:15	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14350WA0026	12/26/2014 20:51	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14350WA0026	12/17/2014 09:30	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14356A20A	12/23/2014 05:16	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14356A20A	12/23/2014 05:16	Miranda P Tillinghast	1
10398	EDB by 8011	SW-846 8011	1	143520034A	12/22/2014 00:04	Matthew S Listner	1
07786	EDB Extraction	SW-846 8011	1	143520034A	12/21/2014 11:30	Kelli M Barto	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510040A	12/20/2014 08:44	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	143510040A	12/18/2014 09:30	David S Schrum	1
06035	Lead	SW-846 6020	1	143566050005A	12/24/2014 04:21	Choon Y Tian	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	143566050005	12/23/2014 09:14	Micaela L Dishong	1

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Sample Description: GW-061992-121114-LB-MW-3 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711064
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/11/2014 10:04 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK03

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.	12	2
10335	Benzene	71-43-2	N.D.	1	2
10335	Bromobenzene	108-86-1	N.D.	2	2
10335	Bromochloromethane	74-97-5	N.D.	2	2
10335	Bromodichloromethane	75-27-4	N.D.	1	2
10335	Bromoform	75-25-2	N.D.	1	2
10335	Bromomethane	74-83-9	N.D.	1	2
10335	2-Butanone	78-93-3	N.D.	6	2
10335	n-Butylbenzene	104-51-8	10	2	2
10335	sec-Butylbenzene	135-98-8	9 J	2	2
10335	tert-Butylbenzene	98-06-6	N.D.	2	2
10335	Carbon Disulfide	75-15-0	N.D.	2	2
10335	Carbon Tetrachloride	56-23-5	N.D.	1	2
10335	Chlorobenzene	108-90-7	N.D.	1	2
10335	Chloroethane	75-00-3	N.D.	1	2
10335	Chloroform	67-66-3	N.D.	1	2
10335	Chloromethane	74-87-3	N.D.	1	2
10335	2-Chlorotoluene	95-49-8	N.D.	2	2
10335	4-Chlorotoluene	106-43-4	N.D.	2	2
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	4	2
10335	Dibromochloromethane	124-48-1	N.D.	1	2
10335	1,2-Dibromoethane	106-93-4	N.D.	1	2
10335	Dibromomethane	74-95-3	N.D.	1	2
10335	1,2-Dichlorobenzene	95-50-1	N.D.	2	2
10335	1,3-Dichlorobenzene	541-73-1	N.D.	2	2
10335	1,4-Dichlorobenzene	106-46-7	N.D.	2	2
10335	Dichlorodifluoromethane	75-71-8	N.D.	1	2
10335	1,1-Dichloroethane	75-34-3	N.D.	1	2
10335	1,2-Dichloroethane	107-06-2	N.D.	1	2
10335	1,1-Dichloroethene	75-35-4	N.D.	1	2
10335	cis-1,2-Dichloroethene	156-59-2	2	1	2
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	1	2
10335	1,2-Dichloropropane	78-87-5	N.D.	1	2
10335	1,3-Dichloropropane	142-28-9	N.D.	1	2
10335	2,2-Dichloropropane	594-20-7	N.D.	1	2
10335	1,1-Dichloropropene	563-58-6	N.D.	2	2
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	2
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	2
10335	Ethylbenzene	100-41-4	150	1	2
10335	Hexachlorobutadiene	87-68-3	N.D.	4	2
10335	2-Hexanone	591-78-6	N.D.	6	2
10335	Isopropylbenzene	98-82-8	44	2	2
10335	p-Isopropyltoluene	99-87-6	4 J	2	2
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	2
10335	4-Methyl-2-pentanone	108-10-1	N.D.	6	2
10335	Methylene Chloride	75-09-2	N.D.	4	2
10335	Naphthalene	91-20-3	69	2	2
10335	n-Propylbenzene	103-65-1	110	2	2
10335	Styrene	100-42-5	N.D.	2	2
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	2

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Sample Description: GW-061992-121114-LB-MW-3 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711064
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/11/2014 10:04 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK03

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.	1	2
10335	Tetrachloroethene	127-18-4	N.D.	1	2
10335	Toluene	108-88-3	N.D.	1	2
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	2	2
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	2	2
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	2
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	2
10335	Trichloroethene	79-01-6	N.D.	1	2
10335	Trichlorofluoromethane	75-69-4	N.D.	1	2
10335	1,2,3-Trichloropropane	96-18-4	N.D.	2	2
10335	1,2,4-Trimethylbenzene	95-63-6	1,200	20	20
10335	1,3,5-Trimethylbenzene	108-67-8	100	2	2
10335	Vinyl Chloride	75-01-4	N.D.	1	2
10335	m+p-Xylene	179601-23-1	480	1	2
10335	o-Xylene	95-47-6	34	1	2
10335	Xylene (Total)	1330-20-7	510	1	2
GC/MS Semivolatiles SW-846 8270C SIM					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	9.9	0.010	1
08357	2-Methylnaphthalene	91-57-6	7.2	0.010	1
08357	Naphthalene	91-20-3	53	1.5	50
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	7,800	500	10
Pesticides/PCBs SW-846 8011					
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	150	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
Metals SW-846 6020					
06035	Lead	7439-92-1	0.45 J	0.082	1



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Sample Description: GW-061992-121114-LB-MW-3 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711064
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/11/2014 10:04 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK03

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.

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	Y143551AA	12/21/2014 16:23	Jason M Long	2
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y143551AA	12/21/2014 16:44	Jason M Long	20
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y143551AA	12/21/2014 16:23	Jason M Long	2
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y143551AA	12/21/2014 16:44	Jason M Long	20
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14350WA0026	12/26/2014 21:18	Catherine E Bachman	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14350WA0026	12/27/2014 12:36	Catherine E Bachman	50
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14350WA0026	12/17/2014 09:30	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14356A20A	12/23/2014 16:22	Miranda P Tillinghast	10
01146	GC VOA Water Prep	SW-846 5030B	1	14356A20A	12/23/2014 16:22	Miranda P Tillinghast	10
10398	EDB by 8011	SW-846 8011	1	143520034A	12/22/2014 00:20	Matthew S Listner	1
07786	EDB Extraction	SW-846 8011	1	143520034A	12/21/2014 11:30	Kelli M Barto	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510040A	12/20/2014 09:06	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	143510040A	12/18/2014 09:30	David S Schrum	1
06035	Lead	SW-846 6020	1	143566050005A	12/24/2014 04:26	Choon Y Tian	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	143566050005	12/23/2014 09:14	Micaela L Dishong	1

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Sample Description: GW-061992-121014-LB-MW-4 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711065
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 13:17 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK04

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-061992-121014-LB-MW-4 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711065
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 13:17 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK04

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.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.030	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs SW-846 8011					
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	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	0.15 J	0.082	1



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Sample Description: GW-061992-121014-LB-MW-4 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711065
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 13:17 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK04

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.

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	Y143551AA	12/21/2014 13:36	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y143551AA	12/21/2014 13:36	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14350WA0026	12/26/2014 21:46	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14350WA0026	12/17/2014 09:30	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14355A20A	12/22/2014 20:38	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14355A20A	12/22/2014 20:38	Miranda P Tillinghast	1
10398	EDB by 8011	SW-846 8011	1	143520034A	12/22/2014 00:36	Matthew S Listner	1
07786	EDB Extraction	SW-846 8011	1	143520034A	12/21/2014 11:30	Kelli M Barto	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510040A	12/20/2014 07:39	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	143510040A	12/18/2014 09:30	David S Schrum	1
06035	Lead	SW-846 6020	1	143566050005A	12/24/2014 04:28	Choon Y Tian	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	143566050005	12/23/2014 09:14	Micaela L Dishong	1

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Sample Description: GW-061992-121114-LB-MW-5 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711066
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/11/2014 09:27 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK05

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	0.8 J	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	2 J	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	1 J	1	1
10335	n-Propylbenzene	103-65-1	4 J	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-061992-121114-LB-MW-5 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711066
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/11/2014 09:27 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK05

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	0.6 J	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	6	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	2 J	1	1
10335	Vinyl Chloride	75-01-4	N.D.	0.5	1
10335	m+p-Xylene	179601-23-1	4	0.5	1
10335	o-Xylene	95-47-6	0.7 J	0.5	1
10335	Xylene (Total)	1330-20-7	5	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.17	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.034 J	0.010	1
08357	Naphthalene	91-20-3	0.34	0.030	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	260	50	1
Pesticides/PCBs SW-846 8011					
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	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	1.3	0.082	1



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Sample Description: GW-061992-121114-LB-MW-5 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711066
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/11/2014 09:27 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK05

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.

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	Y143551AA	12/21/2014 13:57	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y143551AA	12/21/2014 13:57	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14350WA0026	12/26/2014 22:14	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14350WA0026	12/17/2014 09:30	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14356A20A	12/23/2014 08:54	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14356A20A	12/23/2014 08:54	Miranda P Tillinghast	1
10398	EDB by 8011	SW-846 8011	1	143520034A	12/22/2014 00:52	Matthew S Listner	1
07786	EDB Extraction	SW-846 8011	1	143520034A	12/21/2014 11:30	Kelli M Barto	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510040A	12/20/2014 08:00	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	143510040A	12/18/2014 09:30	David S Schrum	1
06035	Lead	SW-846 6020	1	143566050005A	12/24/2014 04:30	Choon Y Tian	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	143566050005	12/23/2014 09:14	Micaela L Dishong	1

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

Sample Description: GW-061992-121014-LB-MW-6 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711067
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 09:40 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK06

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-061992-121014-LB-MW-6 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711067
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 09:40 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK06

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.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.030	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs SW-846 8011					
10398	Ethylene dibromide	106-93-4	N.D.	0.0098	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	20.5	0.082	1

Sample Description: GW-061992-121014-LB-MW-6 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711067
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 09:40 by LB

Conestoga-Rovers & Associates

Suite 140

Submitted: 12/13/2014 09:30

15575 SW Sequoia Parkway

Reported: 12/29/2014 10:48

Portland OR 97224

MLK06

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.

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	Y143551AA	12/21/2014	14:18	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y143551AA	12/21/2014	14:18	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14350WAO026	12/26/2014	22:41	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14350WAO026	12/17/2014	09:30	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14355A20A	12/22/2014	21:05	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14355A20A	12/22/2014	21:05	Miranda P Tillinghast	1
10398	EDB by 8011	SW-846 8011	1	143520034A	12/22/2014	01:08	Matthew S Listner	1
07786	EDB Extraction	SW-846 8011	1	143520034A	12/21/2014	11:30	Kelli M Barto	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510040A	12/20/2014	09:27	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	143510040A	12/18/2014	09:30	David S Schrum	1
06035	Lead	SW-846 6020	1	143566050005A	12/24/2014	04:32	Choon Y Tian	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	143566050005	12/23/2014	09:14	Micaela L Dishong	1

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Sample Description: GW-061992-121014-LB-MW-7 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711068
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 10:14 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK07

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	7	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-061992-121014-LB-MW-7 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711068
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 10:14 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK07

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	2	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	3	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.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.011 J	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.030	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs SW-846 8011					
10398	Ethylene dibromide	106-93-4	N.D.	0.0098	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	35.6	0.082	1



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Sample Description: GW-061992-121014-LB-MW-7 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711068
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 10:14 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK07

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.

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	Y143551AA	12/21/2014 14:39	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y143551AA	12/21/2014 14:39	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14350WA0026	12/26/2014 23:09	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14350WA0026	12/17/2014 09:30	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14355A20A	12/22/2014 21:32	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14355A20A	12/22/2014 21:32	Miranda P Tillinghast	1
10398	EDB by 8011	SW-846 8011	1	143520034A	12/22/2014 01:24	Matthew S Listner	1
07786	EDB Extraction	SW-846 8011	1	143520034A	12/21/2014 11:30	Kelli M Barto	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	143510040A	12/20/2014 08:22	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	143510040A	12/18/2014 09:30	David S Schrum	1
06035	Lead	SW-846 6020	1	143566050005A	12/24/2014 04:33	Choon Y Tian	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	143566050005	12/23/2014 09:14	Micaela L Dishong	1

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Sample Description: GW-061992-121014-LB-MW-8 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711069
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 14:07 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK08

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.	12	2
10335	Benzene	71-43-2	N.D.	1	2
10335	Bromobenzene	108-86-1	N.D.	2	2
10335	Bromochloromethane	74-97-5	N.D.	2	2
10335	Bromodichloromethane	75-27-4	N.D.	1	2
10335	Bromoform	75-25-2	N.D.	1	2
10335	Bromomethane	74-83-9	N.D.	1	2
10335	2-Butanone	78-93-3	N.D.	6	2
10335	n-Butylbenzene	104-51-8	18	2	2
10335	sec-Butylbenzene	135-98-8	11	2	2
10335	tert-Butylbenzene	98-06-6	N.D.	2	2
10335	Carbon Disulfide	75-15-0	N.D.	2	2
10335	Carbon Tetrachloride	56-23-5	N.D.	1	2
10335	Chlorobenzene	108-90-7	N.D.	1	2
10335	Chloroethane	75-00-3	N.D.	1	2
10335	Chloroform	67-66-3	N.D.	1	2
10335	Chloromethane	74-87-3	N.D.	1	2
10335	2-Chlorotoluene	95-49-8	N.D.	2	2
10335	4-Chlorotoluene	106-43-4	N.D.	2	2
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	4	2
10335	Dibromochloromethane	124-48-1	N.D.	1	2
10335	1,2-Dibromoethane	106-93-4	N.D.	1	2
10335	Dibromomethane	74-95-3	N.D.	1	2
10335	1,2-Dichlorobenzene	95-50-1	N.D.	2	2
10335	1,3-Dichlorobenzene	541-73-1	N.D.	2	2
10335	1,4-Dichlorobenzene	106-46-7	N.D.	2	2
10335	Dichlorodifluoromethane	75-71-8	N.D.	1	2
10335	1,1-Dichloroethane	75-34-3	N.D.	1	2
10335	1,2-Dichloroethane	107-06-2	N.D.	1	2
10335	1,1-Dichloroethene	75-35-4	N.D.	1	2
10335	cis-1,2-Dichloroethene	156-59-2	2 J	1	2
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	1	2
10335	1,2-Dichloropropane	78-87-5	N.D.	1	2
10335	1,3-Dichloropropane	142-28-9	N.D.	1	2
10335	2,2-Dichloropropane	594-20-7	N.D.	1	2
10335	1,1-Dichloropropene	563-58-6	N.D.	2	2
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	2
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	2
10335	Ethylbenzene	100-41-4	94	1	2
10335	Hexachlorobutadiene	87-68-3	N.D.	4	2
10335	2-Hexanone	591-78-6	N.D.	6	2
10335	Isopropylbenzene	98-82-8	31	2	2
10335	p-Isopropyltoluene	99-87-6	8 J	2	2
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	1	2
10335	4-Methyl-2-pentanone	108-10-1	N.D.	6	2
10335	Methylene Chloride	75-09-2	N.D.	4	2
10335	Naphthalene	91-20-3	65	2	2
10335	n-Propylbenzene	103-65-1	80	2	2
10335	Styrene	100-42-5	N.D.	2	2
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	2

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Sample Description: GW-061992-121014-LB-MW-8 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711069
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 14:07 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK08

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.	1	2
10335	Tetrachloroethene	127-18-4	N.D.	1	2
10335	Toluene	108-88-3	N.D.	1	2
10335	1,2,3-Trichlorobenzene	87-61-6	N.D.	2	2
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	2	2
10335	1,1,1-Trichloroethane	71-55-6	N.D.	1	2
10335	1,1,2-Trichloroethane	79-00-5	N.D.	1	2
10335	Trichloroethene	79-01-6	N.D.	1	2
10335	Trichlorofluoromethane	75-69-4	N.D.	1	2
10335	1,2,3-Trichloropropane	96-18-4	N.D.	2	2
10335	1,2,4-Trimethylbenzene	95-63-6	1,100	20	20
10335	1,3,5-Trimethylbenzene	108-67-8	210	2	2
10335	Vinyl Chloride	75-01-4	N.D.	1	2
10335	m+p-Xylene	179601-23-1	250	1	2
10335	o-Xylene	95-47-6	100	1	2
10335	Xylene (Total)	1330-20-7	350	1	2
GC/MS Semivolatiles	SW-846 8270C SIM		ug/l	ug/l	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.10	10
08357	Benzo(a)pyrene	50-32-8	N.D.	0.10	10
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.10	10
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.10	10
08357	Chrysene	218-01-9	N.D.	0.10	10
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.10	10
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.10	10
08357	1-Methylnaphthalene	90-12-0	22	0.10	10
08357	2-Methylnaphthalene	91-57-6	21	0.10	10
08357	Naphthalene	91-20-3	49	0.30	10
GC Volatiles	ECY 97-602 NWTPH-Gx		ug/l	ug/l	
08273	NWTPH-Gx water C7-C12	n.a.	9,000	1,000	20
Pesticides/PCBs	SW-846 8011		ug/l	ug/l	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	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.	1,600	28	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1
Metals	SW-846 6020		ug/l	ug/l	
06035	Lead	7439-92-1	4.4	0.082	1



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Sample Description: GW-061992-121014-LB-MW-8 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711069
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 14:07 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK08

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.

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	Y143551AA	12/21/2014 11:30	Jason M Long	2
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y143551AA	12/21/2014 12:33	Jason M Long	20
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y143551AA	12/21/2014 11:30	Jason M Long	2
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y143551AA	12/21/2014 12:33	Jason M Long	20
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14350WA0026	12/27/2014 13:03	Catherine E Bachman	10
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14350WA0026	12/17/2014 09:30	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14356A20A	12/23/2014 14:59	Miranda P Tillinghast	20
01146	GC VOA Water Prep	SW-846 5030B	1	14356A20A	12/23/2014 14:59	Miranda P Tillinghast	20
10398	EDB by 8011	SW-846 8011	1	143520034A	12/22/2014 01:40	Matthew S Listner	1
07786	EDB Extraction	SW-846 8011	1	143520034A	12/21/2014 11:30	Kelli M Barto	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	143520046A	12/20/2014 18:45	Lisa A Reinert	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	143520046A	12/19/2014 14:50	Samantha L Bronder	1
06035	Lead	SW-846 6020	1	143566050005A	12/24/2014 04:59	Choon Y Tian	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	143566050005	12/23/2014 09:14	Micaela L Dishong	1

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Sample Description: GW-061992-121014-LB-MW-8 MS Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711070
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 14:07 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK08

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	280	12	2
10335	Benzene	71-43-2	37	1	2
10335	Bromobenzene	108-86-1	38	2	2
10335	Bromochloromethane	74-97-5	39	2	2
10335	Bromodichloromethane	75-27-4	36	1	2
10335	Bromoform	75-25-2	30	1	2
10335	Bromomethane	74-83-9	29	1	2
10335	2-Butanone	78-93-3	300	6	2
10335	n-Butylbenzene	104-51-8	54	2	2
10335	sec-Butylbenzene	135-98-8	47	2	2
10335	tert-Butylbenzene	98-06-6	37	2	2
10335	Carbon Disulfide	75-15-0	25	2	2
10335	Carbon Tetrachloride	56-23-5	28	1	2
10335	Chlorobenzene	108-90-7	38	1	2
10335	Chloroethane	75-00-3	29	1	2
10335	Chloroform	67-66-3	38	1	2
10335	Chloromethane	74-87-3	39	1	2
10335	2-Chlorotoluene	95-49-8	37	2	2
10335	4-Chlorotoluene	106-43-4	37	2	2
10335	1,2-Dibromo-3-chloropropane	96-12-8	38	4	2
10335	Dibromochloromethane	124-48-1	35	1	2
10335	1,2-Dibromoethane	106-93-4	41	1	2
10335	Dibromomethane	74-95-3	39	1	2
10335	1,2-Dichlorobenzene	95-50-1	39	2	2
10335	1,3-Dichlorobenzene	541-73-1	38	2	2
10335	1,4-Dichlorobenzene	106-46-7	39	2	2
10335	Dichlorodifluoromethane	75-71-8	39	1	2
10335	1,1-Dichloroethane	75-34-3	33	1	2
10335	1,2-Dichloroethane	107-06-2	39	1	2
10335	1,1-Dichloroethene	75-35-4	28	1	2
10335	cis-1,2-Dichloroethene	156-59-2	39	1	2
10335	trans-1,2-Dichloroethene	156-60-5	33	1	2
10335	1,2-Dichloropropane	78-87-5	39	1	2
10335	1,3-Dichloropropane	142-28-9	40	1	2
10335	2,2-Dichloropropane	594-20-7	29	1	2
10335	1,1-Dichloropropene	563-58-6	33	2	2
10335	cis-1,3-Dichloropropene	10061-01-5	36	1	2
10335	trans-1,3-Dichloropropene	10061-02-6	35	1	2
10335	Ethylbenzene	100-41-4	130	1	2
10335	Hexachlorobutadiene	87-68-3	30	4	2
10335	2-Hexanone	591-78-6	200	6	2
10335	Isopropylbenzene	98-82-8	66	2	2
10335	p-Isopropyltoluene	99-87-6	45	2	2
10335	Methyl Tertiary Butyl Ether	1634-04-4	38	1	2
10335	4-Methyl-2-pentanone	108-10-1	200	6	2
10335	Methylene Chloride	75-09-2	37	4	2
10335	Naphthalene	91-20-3	100	2	2
10335	n-Propylbenzene	103-65-1	110	2	2
10335	Styrene	100-42-5	41	2	2
10335	1,1,1,2-Tetrachloroethane	630-20-6	35	1	2



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Sample Description: GW-061992-121014-LB-MW-8 MS Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711070
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 14:07 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK08

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	40	ug/l	1
10335	Tetrachloroethene	127-18-4	33	ug/l	2
10335	Toluene	108-88-3	37	ug/l	2
10335	1,2,3-Trichlorobenzene	87-61-6	37	ug/l	2
10335	1,2,4-Trichlorobenzene	120-82-1	38	ug/l	2
10335	1,1,1-Trichloroethane	71-55-6	27	ug/l	2
10335	1,1,2-Trichloroethene	79-00-5	47	ug/l	2
10335	Trichloroethene	79-01-6	36	ug/l	2
10335	Trichlorofluoromethane	75-69-4	37	ug/l	2
10335	1,2,3-Trichloropropane	96-18-4	39	ug/l	2
10335	1,2,4-Trimethylbenzene	95-63-6	770	E	2
10335	1,3,5-Trimethylbenzene	108-67-8	230	ug/l	2
10335	Vinyl Chloride	75-01-4	40	ug/l	2
10335	m+p-Xylene	179601-23-1	330	ug/l	2
10335	o-Xylene	95-47-6	140	ug/l	2
10335	Xylene (Total)	1330-20-7	460	ug/l	2
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	35,000	ug/l	1,000
20					
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	3,800	ug/l	28
02211	HRO C24-C40 w/Si Gel	n.a.	81	J	66
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	Y143551AA	12/21/2014 11:51	Jason M Long	2
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y143551AA	12/21/2014 11:51	Jason M Long	2
08273	NWTPH-Gx water C7-C12	ECY 97-602	1	14356A20A	12/23/2014 15:27	Miranda P Tillinghast	20
	NWTPH-Gx						
01146	GC VOA Water Prep	SW-846 5030B	1	14356A20A	12/23/2014 15:27	Miranda P Tillinghast	20
02211	NWTPH-Dx water w/Si Gel	ECY 97-602	1	143520046A	12/20/2014 19:07	Lisa A Reinert	1
	NWTPH-Dx modified						
02135	Extraction - DRO Water Special	ECY 97-602	1	143520046A	12/19/2014 14:50	Samantha L Bronder	1
	NWTPH-Dx 06/97						

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Sample Description: GW-061992-121014-LB-MW-8 MSD Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711071
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 14:07 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK08

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	280	12	2
10335	Benzene	71-43-2	36	1	2
10335	Bromobenzene	108-86-1	38	2	2
10335	Bromochloromethane	74-97-5	39	2	2
10335	Bromodichloromethane	75-27-4	36	1	2
10335	Bromoform	75-25-2	30	1	2
10335	Bromomethane	74-83-9	29	1	2
10335	2-Butanone	78-93-3	300	6	2
10335	n-Butylbenzene	104-51-8	53	2	2
10335	sec-Butylbenzene	135-98-8	48	2	2
10335	tert-Butylbenzene	98-06-6	36	2	2
10335	Carbon Disulfide	75-15-0	25	2	2
10335	Carbon Tetrachloride	56-23-5	28	1	2
10335	Chlorobenzene	108-90-7	37	1	2
10335	Chloroethane	75-00-3	28	1	2
10335	Chloroform	67-66-3	37	1	2
10335	Chloromethane	74-87-3	39	1	2
10335	2-Chlorotoluene	95-49-8	37	2	2
10335	4-Chlorotoluene	106-43-4	37	2	2
10335	1,2-Dibromo-3-chloropropane	96-12-8	38	4	2
10335	Dibromochloromethane	124-48-1	35	1	2
10335	1,2-Dibromoethane	106-93-4	40	1	2
10335	Dibromomethane	74-95-3	38	1	2
10335	1,2-Dichlorobenzene	95-50-1	39	2	2
10335	1,3-Dichlorobenzene	541-73-1	38	2	2
10335	1,4-Dichlorobenzene	106-46-7	39	2	2
10335	Dichlorodifluoromethane	75-71-8	38	1	2
10335	1,1-Dichloroethane	75-34-3	33	1	2
10335	1,2-Dichloroethane	107-06-2	38	1	2
10335	1,1-Dichloroethene	75-35-4	27	1	2
10335	cis-1,2-Dichloroethene	156-59-2	39	1	2
10335	trans-1,2-Dichloroethene	156-60-5	33	1	2
10335	1,2-Dichloropropane	78-87-5	39	1	2
10335	1,3-Dichloropropane	142-28-9	39	1	2
10335	2,2-Dichloropropane	594-20-7	29	1	2
10335	1,1-Dichloropropene	563-58-6	33	2	2
10335	cis-1,3-Dichloropropene	10061-01-5	35	1	2
10335	trans-1,3-Dichloropropene	10061-02-6	35	1	2
10335	Ethylbenzene	100-41-4	130	1	2
10335	Hexachlorobutadiene	87-68-3	31	4	2
10335	2-Hexanone	591-78-6	200	6	2
10335	Isopropylbenzene	98-82-8	66	2	2
10335	p-Isopropyltoluene	99-87-6	44	2	2
10335	Methyl Tertiary Butyl Ether	1634-04-4	38	1	2
10335	4-Methyl-2-pentanone	108-10-1	200	6	2
10335	Methylene Chloride	75-09-2	36	4	2
10335	Naphthalene	91-20-3	100	2	2
10335	n-Propylbenzene	103-65-1	110	2	2
10335	Styrene	100-42-5	41	2	2
10335	1,1,1,2-Tetrachloroethane	630-20-6	34	1	2



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Sample Description: GW-061992-121014-LB-MW-8 MSD Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711071
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 14:07 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK08

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	40	1	2
10335	Tetrachloroethene	127-18-4	33	1	2
10335	Toluene	108-88-3	37	1	2
10335	1,2,3-Trichlorobenzene	87-61-6	37	2	2
10335	1,2,4-Trichlorobenzene	120-82-1	38	2	2
10335	1,1,1-Trichloroethane	71-55-6	27	1	2
10335	1,1,2-Trichloroethene	79-00-5	46	1	2
10335	Trichloroethene	79-01-6	36	1	2
10335	Trichlorofluoromethane	75-69-4	37	1	2
10335	1,2,3-Trichloropropane	96-18-4	40	2	2
10335	1,2,4-Trimethylbenzene	95-63-6	780	E	2
10335	1,3,5-Trimethylbenzene	108-67-8	230	2	2
10335	Vinyl Chloride	75-01-4	39	1	2
10335	m+p-Xylene	179601-23-1	320	1	2
10335	o-Xylene	95-47-6	130	1	2
10335	Xylene (Total)	1330-20-7	450	1	2
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	35,000	1,000	20
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	1,400	28	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	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	Y143551AA	12/21/2014 12:12	Jason M Long	2
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y143551AA	12/21/2014 12:12	Jason M Long	2
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14356A20A	12/23/2014 15:54	Miranda P Tillinghast	20
01146	GC VOA Water Prep	SW-846 5030B	1	14356A20A	12/23/2014 15:54	Miranda P Tillinghast	20
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	143520046A	12/20/2014 19:28	Lisa A Reinert	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	143520046A	12/19/2014 14:50	Samantha L Bronder	1

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Sample Description: GW-061992-121014-LB-MW-9 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711072
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 11:31 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK09

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	0.7 J	0.5	1
10335	cis-1,2-Dichloroethene	156-59-2	120	0.5	1
10335	trans-1,2-Dichloroethene	156-60-5	0.7 J	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-061992-121014-LB-MW-9 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711072
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 11:31 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK09

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	140	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	87	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	13	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.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.026 J	0.010	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.030	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	81 J	50	1
Pesticides/PCBs SW-846 8011					
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	56 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	N.D.	0.082	1



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Sample Description: GW-061992-121014-LB-MW-9 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711072
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 11:31 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK09

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.

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	Y143551AA	12/21/2014 15:00	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y143551AA	12/21/2014 15:00	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14350WA0026	12/27/2014 00:04	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14350WA0026	12/17/2014 09:30	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14356A20A	12/23/2014 05:43	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14356A20A	12/23/2014 05:43	Miranda P Tillinghast	1
10398	EDB by 8011	SW-846 8011	1	143520034A	12/22/2014 01:55	Matthew S Listner	1
07786	EDB Extraction	SW-846 8011	1	143520034A	12/21/2014 11:30	Kelli M Barto	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	143520046A	12/20/2014 16:57	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	143520046A	12/19/2014 14:50	Samantha L Bronder	1
06035	Lead	SW-846 6020	1	143566050005A	12/24/2014 04:35	Choon Y Tian	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	143566050005	12/23/2014 09:14	Micaela L Dishong	1

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Sample Description: GW-061992-121014-LB-MW-10 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711073
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 10:53 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

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	1	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	5	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	12	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-061992-121014-LB-MW-10 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711073
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 10:53 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK10

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	10	0.5	1
10335	m+p-Xylene	179601-23-1	2	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	2	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM					
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	0.46	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.19	0.010	1
08357	Naphthalene	91-20-3	0.16	0.030	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	140	J	50
Pesticides/PCBs SW-846 8011					
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
GC Petroleum Hydrocarbons w/Si modified					
02211	DRO C12-C24 w/Si Gel	n.a.	140	28	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	65	1
Metals SW-846 6020					
06035	Lead	7439-92-1	0.23	J	0.082

Sample Description: GW-061992-121014-LB-MW-10 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711073
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 10:53 by LB

Conestoga-Rovers & Associates

Suite 140

Submitted: 12/13/2014 09:30

15575 SW Sequoia Parkway

Reported: 12/29/2014 10:48

Portland OR 97224

MLK10

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.

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	Y143551AA	12/21/2014	15:21	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y143551AA	12/21/2014	15:21	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14350WAO026	12/27/2014	00:32	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14350WAO026	12/17/2014	09:30	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14356A20A	12/23/2014	06:10	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14356A20A	12/23/2014	06:10	Miranda P Tillinghast	1
10398	EDB by 8011	SW-846 8011	1	143520034A	12/22/2014	02:12	Matthew S Listner	1
07786	EDB Extraction	SW-846 8011	1	143520034A	12/21/2014	11:30	Kelli M Barto	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	143520046A	12/20/2014	18:24	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	143520046A	12/19/2014	14:50	Samantha L Bronder	1
06035	Lead	SW-846 6020	1	143566050005A	12/24/2014	04:37	Choon Y Tian	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	143566050005	12/23/2014	09:14	Micaela L Dishong	1

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Sample Description: GW-061992-121014-LB-MW-11 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711074
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 12:09 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

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-061992-121014-LB-MW-11 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711074
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 12:09 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

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	37	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.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.017	J	1
08357	Naphthalene	91-20-3	0.031	J	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	560	50	1
Pesticides/PCBs SW-846 8011					
10398	Ethylene dibromide	106-93-4	N.D.	0.0096	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	0.20	J	0.082



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

Sample Description: GW-061992-121014-LB-MW-11 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711074
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 12:09 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLK11

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.

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	Y143551AA	12/21/2014 17:05	Jason M Long	1
10335	8260 Solvent Compound - Water	SW-846 8260B	1	Y143551AA	12/21/2014 17:26	Jason M Long	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y143551AA	12/21/2014 17:05	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y143551AA	12/21/2014 17:26	Jason M Long	10
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14350WA0026	12/27/2014 01:00	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14350WA0026	12/17/2014 09:30	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14356A20A	12/23/2014 06:38	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14356A20A	12/23/2014 06:38	Miranda P Tillinghast	1
10398	EDB by 8011	SW-846 8011	1	143520034A	12/22/2014 02:27	Matthew S Listner	1
07786	EDB Extraction	SW-846 8011	1	143520034A	12/21/2014 11:30	Kelli M Barto	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	143520046A	12/20/2014 17:19	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	143520046A	12/19/2014 14:50	Samantha L Bronder	1
06035	Lead	SW-846 6020	1	143566050005A	12/24/2014 04:08	Choon Y Tian	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	143566050005	12/23/2014 09:14	Micaela L Dishong	1

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Sample Description: GW-061992-121014-LB-MW-13 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711075
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 12:44 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

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	39	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-061992-121014-LB-MW-13 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711075
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 12:44 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

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	1	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	26	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.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.030	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs SW-846 8011					
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	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	0.81 J	0.082	1

Sample Description: GW-061992-121014-LB-MW-13 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711075
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 12:44 by LB

Conestoga-Rovers & Associates

Suite 140

Submitted: 12/13/2014 09:30

15575 SW Sequoia Parkway

Reported: 12/29/2014 10:48

Portland OR 97224

MLK13

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.

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	Y143551AA	12/21/2014	15:41	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y143551AA	12/21/2014	15:41	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14350WAO026	12/27/2014	01:27	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14350WAO026	12/17/2014	09:30	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14356A20A	12/23/2014	07:32	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14356A20A	12/23/2014	07:32	Miranda P Tillinghast	1
10398	EDB by 8011	SW-846 8011	1	143520034A	12/22/2014	03:15	Matthew S Listner	1
07786	EDB Extraction	SW-846 8011	1	143520034A	12/21/2014	11:30	Kelli M Barto	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	143520046A	12/20/2014	18:02	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	143520046A	12/19/2014	14:50	Samantha L Bronder	1
06035	Lead	SW-846 6020	1	143566050005A	12/24/2014	04:39	Choon Y Tian	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	143566050005	12/23/2014	09:14	Micaela L Dishong	1

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Sample Description: GW-061992-121014-LB-DUP Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711076
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

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	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-061992-121014-LB-DUP Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711076
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 by LB

Conestoga-Rovers & Associates

Suite 140

15575 SW Sequoia Parkway

Portland OR 97224

Submitted: 12/13/2014 09:30

Reported: 12/29/2014 10:48

MLKFD

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.	0.010	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	1
08357	Chrysene	218-01-9	N.D.	0.010	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.030	1
GC Volatiles ECY 97-602 NWTPH-Gx					
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
Pesticides/PCBs SW-846 8011					
10398	Ethylene dibromide	106-93-4	N.D.	0.0098	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.	65	1
Metals SW-846 6020					
06035	Lead	7439-92-1	0.12 J	0.082	1



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

Sample Description: GW-061992-121014-LB-DUP Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7711076
LL Group # 1525382
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 12/10/2014 by LB

Conestoga-Rovers & Associates
Suite 140

Submitted: 12/13/2014 09:30

15575 SW Sequoia Parkway
Portland OR 97224

Reported: 12/29/2014 10:48

MLKFD

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.

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	Y143551AA	12/21/2014 16:02	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y143551AA	12/21/2014 16:02	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14350WA0026	12/27/2014 01:55	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14350WA0026	12/17/2014 09:30	Jessica M Velez	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	14356A20A	12/23/2014 08:00	Miranda P Tillinghast	1
01146	GC VOA Water Prep	SW-846 5030B	1	14356A20A	12/23/2014 08:00	Miranda P Tillinghast	1
10398	EDB by 8011	SW-846 8011	1	143520034A	12/22/2014 03:31	Matthew S Listner	1
07786	EDB Extraction	SW-846 8011	1	143520034A	12/21/2014 11:30	Kelli M Barto	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	143520046A	12/20/2014 17:41	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	143520046A	12/19/2014 14:50	Samantha L Bronder	1
06035	Lead	SW-846 6020	1	143566050005A	12/24/2014 04:41	Choon Y Tian	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	143566050005	12/23/2014 09:14	Micaela L Dishong	1

Quality Control Summary

Client Name: Conestoga-Rovers & Associates
Reported: 12/29/14 at 10:48 AM

Group Number: 1525382

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>	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD RPD	RPD Max
Batch number: Y143551AA			Sample number(s): 7711062-7711076					
Acetone	N.D.	6.	ug/l	93		55-129		
Benzene	N.D.	0.5	ug/l	100		78-120		
Bromobenzene	N.D.	1.	ug/l	99		80-120		
Bromo(chloromethane)	N.D.	1.	ug/l	97		80-121		
Bromodichloromethane	N.D.	0.5	ug/l	90		73-120		
Bromoform	N.D.	0.5	ug/l	78		61-120		
Bromomethane	N.D.	0.5	ug/l	75		53-130		
2-Butanone	N.D.	3.	ug/l	99		54-133		
n-Butylbenzene	N.D.	1.	ug/l	105		68-120		
sec-Butylbenzene	N.D.	1.	ug/l	108		75-120		
tert-Butylbenzene	N.D.	1.	ug/l	104		80-120		
Carbon Disulfide	N.D.	1.	ug/l	78		58-126		
Carbon Tetrachloride	N.D.	0.5	ug/l	90		74-130		
Chlorobenzene	N.D.	0.5	ug/l	101		80-120		
Chloroethane	N.D.	0.5	ug/l	67		56-120		
Chloroform	N.D.	0.5	ug/l	98		80-122		
Chloromethane	N.D.	0.5	ug/l	100		63-120		
2-Chlorotoluene	N.D.	1.	ug/l	101		80-120		
4-Chlorotoluene	N.D.	1.	ug/l	100		80-120		
1,2-Dibromo-3-chloropropane	N.D.	2.	ug/l	88		56-120		
Dibromochloromethane	N.D.	0.5	ug/l	92		72-120		
1,2-Dibromoethane	N.D.	0.5	ug/l	102		80-120		
Dibromomethane	N.D.	0.5	ug/l	97		80-120		
1,2-Dichlorobenzene	N.D.	1.	ug/l	102		80-120		
1,3-Dichlorobenzene	N.D.	1.	ug/l	101		80-120		
1,4-Dichlorobenzene	N.D.	1.	ug/l	103		80-120		
Dichlorodifluoromethane	N.D.	0.5	ug/l	95		55-127		
1,1-Dichloroethane	N.D.	0.5	ug/l	95		80-120		
1,2-Dichloroethane	N.D.	0.5	ug/l	98		65-135		
1,1-Dichloroethene	N.D.	0.5	ug/l	90		76-124		
cis-1,2-Dichloroethene	N.D.	0.5	ug/l	101		80-120		
trans-1,2-Dichloroethene	N.D.	0.5	ug/l	98		80-120		
1,2-Dichloropropane	N.D.	0.5	ug/l	100		80-120		
1,3-Dichloropropane	N.D.	0.5	ug/l	101		80-120		
2,2-Dichloropropane	N.D.	0.5	ug/l	87		67-124		
1,1-Dichloropropene	N.D.	1.	ug/l	102		80-126		
cis-1,3-Dichloropropene	N.D.	0.5	ug/l	92		80-120		
trans-1,3-Dichloropropene	N.D.	0.5	ug/l	91		76-120		
Ethylbenzene	N.D.	0.5	ug/l	101		79-120		
Hexachlorobutadiene	N.D.	2.	ug/l	90		51-125		
2-Hexanone	N.D.	3.	ug/l	99		57-127		
Isopropylbenzene	N.D.	1.	ug/l	104		80-120		
p-Isopropyltoluene	N.D.	1.	ug/l	104		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: 12/29/14 at 10:48 AM

Group Number: 1525382

<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 RPD</u>	<u>Max</u>
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	96		75-120		
4-Methyl-2-pentanone	N.D.	3.	ug/l	98		51-124		
Methylene Chloride	N.D.	2.	ug/l	96		80-120		
Naphthalene	N.D.	1.	ug/l	98		47-126		
n-Propylbenzene	N.D.	1.	ug/l	106		80-120		
Styrene	N.D.	1.	ug/l	101		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.5	ug/l	93		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.5	ug/l	99		70-120		
Tetrachloroethene	N.D.	0.5	ug/l	99		80-120		
Toluene	N.D.	0.5	ug/l	102		80-120		
1,2,3-Trichlorobenzene	N.D.	1.	ug/l	93		68-123		
1,2,4-Trichlorobenzene	N.D.	1.	ug/l	97		73-120		
1,1,1-Trichloroethane	N.D.	0.5	ug/l	82		66-126		
1,1,2-Trichloroethane	N.D.	0.5	ug/l	101		80-120		
Trichloroethene	N.D.	0.5	ug/l	101		80-120		
Trichlorofluoromethane	N.D.	0.5	ug/l	95		58-135		
1,2,3-Trichloropropane	N.D.	1.	ug/l	99		76-120		
1,2,4-Trimethylbenzene	N.D.	1.	ug/l	105		80-120		
1,3,5-Trimethylbenzene	N.D.	1.	ug/l	105		80-120		
Vinyl Chloride	N.D.	0.5	ug/l	100		63-120		
m+p-Xylene	N.D.	0.5	ug/l	103		80-120		
o-Xylene	N.D.	0.5	ug/l	101		80-120		
Xylene (Total)	N.D.	0.5	ug/l	102		80-120		
Batch number: 14350WAO026	Sample number(s): 7711062-7711069, 7711072-7711076							
Benzo(a)anthracene	N.D.	0.010	ug/l	96	98	79-122	2	30
Benzo(a)pyrene	N.D.	0.010	ug/l	97	100	72-126	3	30
Benzo(b)fluoranthene	N.D.	0.010	ug/l	106	109	79-136	3	30
Benzo(k)fluoranthene	N.D.	0.010	ug/l	99	104	72-129	4	30
Chrysene	N.D.	0.010	ug/l	103	104	77-122	1	30
Dibenz(a,h)anthracene	N.D.	0.010	ug/l	81	87	42-143	6	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	ug/l	83	87	53-136	5	30
1-Methylnaphthalene	N.D.	0.010	ug/l	103	102	75-117	1	30
2-Methylnaphthalene	N.D.	0.010	ug/l	99	98	68-124	1	30
Naphthalene	N.D.	0.030	ug/l	94	93	78-117	1	30
Batch number: 14355A20A	Sample number(s): 7711065, 7711067-7711068							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	102	102	75-135	0	30
Batch number: 14356A20A	Sample number(s): 7711062-7711064, 7711066, 7711069-7711076							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	103		75-135		
Batch number: 143520034A	Sample number(s): 7711062-7711069, 7711072-7711076							
Ethylene dibromide	N.D.	0.010	ug/l	114	106	60-140	7	20
Batch number: 143510040A	Sample number(s): 7711062-7711068							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	82	78	32-117	4	20
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 143520046A	Sample number(s): 7711069-7711076							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	68		32-117		
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 143566050005A	Sample number(s): 7711062-7711069, 7711072-7711076							
Lead	N.D.	0.082	ug/l	106		80-120		

*- Outside of specification

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

Quality Control Summary

Client Name: Conestoga-Rovers & Associates
Reported: 12/29/14 at 10:48 AM

Group Number: 1525382

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 RPD</u>	<u>BKG MAX</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: Y143551AA			Sample number(s): 7711062-7711076 UNSPK: 7711069					
Acetone	94	92	35-144	2	30			
Benzene	91	91	72-134	1	30			
Bromobenzene	94	94	82-115	0	30			
Bromochloromethane	97	97	76-134	0	30			
Bromodichloromethane	90	91	73-125	1	30			
Bromoform	76	74	48-118	2	30			
Bromomethane	72	72	47-129	0	30			
2-Butanone	100	98	44-135	2	30			
n-Butylbenzene	89	88	74-134	1	30			
sec-Butylbenzene	90	90	74-137	1	30			
tert-Butylbenzene	91	91	81-121	1	30			
Carbon Disulfide	63	63	53-149	0	30			
Carbon Tetrachloride	70*	69*	75-148	2	30			
Chlorobenzene	96	93	87-124	3	30			
Chloroethane	72	71	55-130	2	30			
Chloroform	96	94	81-134	2	30			
Chloromethane	97	97	61-125	1	30			
2-Chlorotoluene	92	92	82-118	0	30			
4-Chlorotoluene	93	93	84-122	0	30			
1,2-Dibromo-3-chloropropane	94	94	50-123	0	30			
Dibromochloromethane	89	87	74-116	2	30			
1,2-Dibromoethane	103	101	77-116	2	30			
Dibromomethane	96	95	83-119	1	30			
1,2-Dichlorobenzene	99	99	84-119	0	30			
1,3-Dichlorobenzene	95	95	86-121	1	30			
1,4-Dichlorobenzene	98	97	85-121	1	30			
Dichlorodifluoromethane	97	96	58-156	1	30			
1,1-Dichloroethane	83*	83*	84-129	0	30			
1,2-Dichloroethane	98	96	63-142	2	30			
1,1-Dichloroethene	69*	68*	79-137	1	30			
cis-1,2-Dichloroethene	92	92	80-141	0	30			
trans-1,2-Dichloroethene	83*	83*	86-131	0	30			
1,2-Dichloropropane	97	96	83-124	1	30			
1,3-Dichloropropane	99	98	81-120	1	30			
2,2-Dichloropropane	71	71	69-135	0	30			
1,1-Dichloropropene	83*	82*	86-137	1	30			
cis-1,3-Dichloropropene	89	88	70-116	2	30			
trans-1,3-Dichloropropene	88	88	74-119	0	30			
Ethylbenzene	88	84	71-134	1	30			
Hexachlorobutadiene	75	77	56-134	4	30			
2-Hexanone	102	100	38-131	2	30			
Isopropylbenzene	89	87	75-128	1	30			
p-Isopropyltoluene	91	90	76-123	1	30			
Methyl Tertiary Butyl Ether	95	95	72-126	0	30			
4-Methyl-2-pentanone	100	99	45-128	1	30			
Methylene Chloride	92	91	78-133	1	30			
Naphthalene	96	96	52-125	0	30			

*- Outside of specification

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Quality Control Summary

Client Name: Conestoga-Rovers & Associates
Reported: 12/29/14 at 10:48 AM

Group Number: 1525382

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>MAX</u>	BKG <u>Conc</u>	DUP <u>Conc</u>	DUP <u>RPD</u>	Dup RPD <u>Max</u>
n-Propylbenzene	83	84	74-134	0	30			
Styrene	103	102	78-125	1	30			
1,1,1,2-Tetrachloroethane	88	86	80-123	2	30			
1,1,2,2-Tetrachloroethane	100	99	72-128	1	30			
Tetrachloroethene	83	82	80-128	2	30			
Toluene	92	92	80-125	1	30			
1,2,3-Trichlorobenzene	92	92	62-133	0	30			
1,2,4-Trichlorobenzene	95	95	56-137	0	30			
1,1,1-Trichloroethane	68*	67*	69-140	1	30			
1,1,2-Trichloroethane	118	115	71-141	3	30			
Trichloroethene	91	89	88-133	2	30			
Trichlorofluoromethane	94	92	63-163	1	30			
1,2,3-Trichloropropane	98	99	76-118	1	30			
1,2,4-Trimethylbenzene	-27 (2)	-17 (2)	72-130	1	30			
1,3,5-Trimethylbenzene	57 (2)	58 (2)	65-132	0	30			
Vinyl Chloride	100	98	66-133	1	30			
m+p-Xylene	93	85	79-125	2	30			
o-Xylene	85	82	79-125	1	30			
Xylene (Total)	90	84	79-125	2	30			

Batch number: 14356A20A
NWTPH-Gx water C7-C12

Sample number(s): 7711062-7711064, 7711066, 7711069-7711076 UNSPK: 7711069
118 118 75-135 0 30

Batch number: 143520034A
Ethylene dibromide

Sample number(s): 7711062-7711069, 7711072-7711076 UNSPK: P714444 BKG: P714445
107 60-140 N.D. N.D. 0 (1) 30

Batch number: 143520046A
DRO C12-C24 w/Si Gel

Sample number(s): 7711069-7711076 UNSPK: 7711069
142* -14* 48-115 93* 20

Batch number: 143566050005A
Lead

Sample number(s): 7711062-7711069, 7711072-7711076 UNSPK: 7711074 BKG: 7711074
104 104 75-125 0 20 0.20 J 0.20 J 0 (1) 20

Surrogate Quality Control

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

Analysis Name: 8260 Solvent Compound - Water
Batch number: Y143551AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7711062	97	99	100	98
7711063	97	100	100	101
7711064	96	98	100	100
7711065	96	98	100	99
7711066	97	99	100	98
7711067	97	99	99	98
7711068	97	99	100	98
7711069	98	101	100	102
7711070	97	100	100	103

*- Outside of specification

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Quality Control Summary

Client Name: Conestoga-Rovers & Associates
 Reported: 12/29/14 at 10:48 AM

Group Number: 1525382

Surrogate Quality Control

7711071	97	99	100	102
7711072	97	99	99	98
7711073	98	100	100	98
7711074	97	99	99	97
7711075	97	99	100	98
7711076	97	100	100	98
Blank	97	99	99	98
LCS	96	99	100	99
MS	97	100	100	103
MSD	97	99	100	102
Limits:	80-116	77-113	80-113	78-113

Analysis Name: PAHs in waters by SIM
 Batch number: 14350WAO026

Fluoranthene-d10 Benzo(a)pyrene-d12 1-Methylnaphthalene-d10

7711062	97	87	89
7711063	91	76	94
7711064	96	108	104
7711065	94	86	90
7711066	95	93	87
7711067	88	85	91
7711068	83	67	82
7711069	84	59	98
7711072	93	101	92
7711073	88	94	93
7711074	99	101	92
7711075	96	85	95
7711076	94	73	88
Blank	90	89	86
LCS	98	106	95
LCSD	99	110	94
Limits:	56-134	36-156	59-132

Analysis Name: NWTPH-Gx water C7-C12
 Batch number: 14355A20A

Trifluorotoluene-F

7711065	88
7711067	82
7711068	87
Blank	89
LCS	94
LCSD	93
Limits:	63-135

Analysis Name: NWTPH-Gx water C7-C12
 Batch number: 14356A20A

Trifluorotoluene-F

7711062	90
7711063	88
7711064	92
7711066	90
7711069	88
7711070	94
7711071	97

*- 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: 12/29/14 at 10:48 AM

Group Number: 1525382

Surrogate Quality Control

7711072	89
7711073	90
7711074	89
7711075	88
7711076	89
Blank	89
LCS	96
MS	94
MSD	97

Limits: 63-135

Analysis Name: EDB by 8011
Batch number: 143520034A

1,1,2,2-

Tetrachloroethane

7711062	109
7711063	103
7711064	105
7711065	105
7711066	102
7711067	108
7711068	97
7711069	102
7711072	99
7711073	103
7711074	103
7711075	104
7711076	109
Blank	100
DUP	97
LCS	116
LCSD	109
MS	102

Limits: 46-136

Analysis Name: NWTPH-Dx water w/Si Gel
Batch number: 143510040A

Orthoterphenyl

7711062	100
7711063	106
7711064	107
7711065	102
7711066	95
7711067	109
7711068	102
Blank	96
LCS	112
LCSD	109

Limits: 50-150

Analysis Name: NWTPH-Dx water w/Si Gel
Batch number: 143520046A

Orthoterphenyl

7711069	85
7711070	61

*- 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: 12/29/14 at 10:48 AM

Group Number: 1525382

Surrogate Quality Control

7711071	81
7711072	93
7711073	95
7711074	84
7711075	91
7711076	91
Blank	88
LCS	89
MS	61
MSD	81

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



Lancaster
Laboratories

Acct. # 13534

For Lancaster Laboratories use only
Group # 1525362 Sample # 7711062-76
Instructions on reverse side correspond with circled numbers.

1 Client Information		4 Matrix		5 Analyses Requested		SCR #: _____		
Facility #	WBS	Sediment	<input checked="" type="checkbox"/> Ground	Surface	<input type="checkbox"/>			
Site Address	PB605173 / chevron 301233	Water	<input type="checkbox"/> NPDES	<input type="checkbox"/> Surface	<input type="checkbox"/>			
Chevron PM	Lead Consultant	Oil	<input type="checkbox"/> Air	<input type="checkbox"/>	<input type="checkbox"/>			
Consultant/Office	CRA	Total Number of Containers	BTEX + MTBE	8021	8260	Naphth		
Consultant Project Mgr.	Seattle - Tacoma	8260 full scan	8260	8260	8260	Silica Gel Cleanup	<input checked="" type="checkbox"/>	
Consultant Phone #	Matthew Davis	Oxygenates	Lead	Total	Diss.	Method	<input checked="" type="checkbox"/>	
Sampler	Lee Bures	NWTPH GX	WAVPH	WAVPH	WAEPH		<input type="checkbox"/>	
2 Sample Identification	Collected	NWTPH DX	WAEPH	WAEPH	WAEPH		<input type="checkbox"/>	
Date	Time	Grab	Composite	Composite	Composite		<input type="checkbox"/>	
GW-061992-121114-LB-Mw-1	12/10/14	1049	X	X	X	X X X	X X	
GW-061992-121114-LB-Mw-2	12/10/14	0849	X	X	X	X X X	X X	
GW-061992-121114-LB-Mw-3	12/10/14	1004	X	X	X	X X X	X X	
GW-061992-121014-LB-Mw-4	12/10/14	1317	X	X	X	X X X	X X	
GW-061992-121114-LB-Mw-5	12/10/14	0927	X	X	X	X X X	X X	
GW-061992-121014-LB-Mw-6	12/10/14	0940	X	X	X	X X X	X X	
GW-061992-121014-LB-Mw-7	12/10/14	1014	X	X	X	X X X	X X	
GW-061992-121014-LB-Mw-8	12/10/14	1407	X	X	X	X X X	X X	
GW-061992-121014-LB-Mw-9	12/10/14	1131	X	X	X	X X X	X X	
GW-061992-121014-LB-Mw-10	12/10/14	1053	X	X	X	X X X	X X	
GW-061992-121014-LB-Mw-11	12/10/14	1209	X	X	X	X X X	X X	
GW-061992-121014-LB-Mw-13	12/10/14	1244	X	X	X	X X X	X X	
GW-061992-121014-LB-DUP	12/10/14	—	X	X	Y	X X Y	X X	
7 Turnaround Time Requested (TAT) (please circle)	Relinquished by		Date	Time		Received by	Date	Time
Standard	5 day	4 day	12/11/14			<i>Vickie</i>	12/12/14	17:00
72 hour	48 hour	24 hour	Relinquished by	Date	Time	Received by	Date	Time
8 Data Package Options (please circle if required)	Relinquished by Commercial Carrier:					Received by	Date	Time
Type I - Full	UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Other <input type="checkbox"/>					<i>SZ</i>	12/13/14	9:30
Type VI (Raw Data)	Temperature Upon Receipt <u>0.1-0.8°C</u>					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.