CONESTOGA-ROVERS & ASSOCIATES

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December 18, 2013 Reference No. 061992

Mr. John Bails
Department of Ecology
Northwest Regional Office
3190 160th Avenue Southeast
Bellevue, Washington 98008

Re: Third Quarter 2013 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

Dear Mr. Bails,

Conestoga-Rovers & Associates (CRA) is submitting this *Third Quarter 2013 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 CRA. CRA's field forms are presented as Attachment A. Eurofins Lancaster Laboratory Environmental, LLCs' *Analytical Results* report is included as Attachment B. Graphs depicting total petroleum hydrocarbons as diesel (TPHd), TPH as gasoline (TPHg), and benzene concentrations over time for select wells are included as Attachment C. A summary of previous site investigations is included as Attachment D. A site map is presented on Figure 2.

RESULTS OF THIRD QUARTER 2013 EVENT

On August 28 and 30, 2013, CRA 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 — 0.03
- Approximate Depth to Water — 11 to 15 feet below grade
- Approximate Groundwater Elevation — 46 to 50 feet above mean sea level

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

TABLE A: GROUNDWATER ANALYTICAL DATA

Well ID	*TPHg (µg/L)*	*TPHd (µg/L)*	*TPHo (µg/L)*	*Benzene (µg/L)*	*Toluene (µg/L)*	*Ethylbenzene (µg/L)*	*Total Xylenes (µg/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	0.8
MW-2	740	200	<67	0.6	<0.5	<0.5	<0.5
MW-3	**4,300**	260	<70	<0.5	<0.5	54	190
MW-4	<50	<29	<67	<0.5	<0.5	<0.5	<0.5
MW-5	**3,200**	340	<69	0.7	1	49	89
MW-6	<50	<28	<66	<0.5	<0.5	<0.5	<0.5
MW-7	<50	<29	<67	<0.5	<0.5	<0.5	<0.5
MW-8	**6,600**	340	<66	<0.5	<0.5	60	450
MW-8 DUP	**3,500**	220	<66	<0.5	<0.5	47	350
MW-9	<50	51	<66	<0.5	<0.5	<0.5	<0.5
MW-10	<50	57	<66	0.8	<0.5	<0.5	1

Bold Indicates concentration exceed MTCA Method A cleanup level
* TPHg Cleanup Level for wells containing benzene is 800 µg/L; otherwise cleanup level is 1,000 µg/L.
µg/L micrograms per liter
TPHo total petroleum hydrocarbons as oil

CONCLUSIONS AND RECOMMENDATIONS

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

- TPHg concentrations exceeded the Washington State Ecology (Ecology) Model Toxics Control Act (MTCA) Method A cleanup level in groundwater wells MW-3, MW-5, and MW-8, with the highest concentration detected at MW-8 (Figure 5).
- TPHd concentrations were below MTCA Method A cleanup levels in all wells.
- TPHo concentrations were below MTCA Method A cleanup levels in all wells.
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations were all below the MTCA Method A cleanup levels in groundwater.

CONESTOGA-ROVERS & ASSOCIATES

- With the exception of source area well MW-8, hydrocarbon concentrations exhibit decreasing concentration trends over time. Hydrocarbon concentrations in MW-8 have been stable.

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

ANTICIPATED FUTURE ACTIVITIES

Groundwater Monitoring
CRA will monitor and sample site wells per the established schedule. The fourth quarter 2013 event was performed in November 2013. 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.

Please contact Edwin Turner at (425) 563-6500 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Edwin Turner

ET/aa/7
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	Concentration Trend Graphs
Attachment D	Summary of Previous Investigations

cc: Mr. Brett Hunter, Chevron *(electronic copy)*
Mr. Ed Ralston, Phillips 66 (*electronic copy*)
Thom Morin, EP Inc. (*electronic copy*)

FIGURES

Figure 1

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

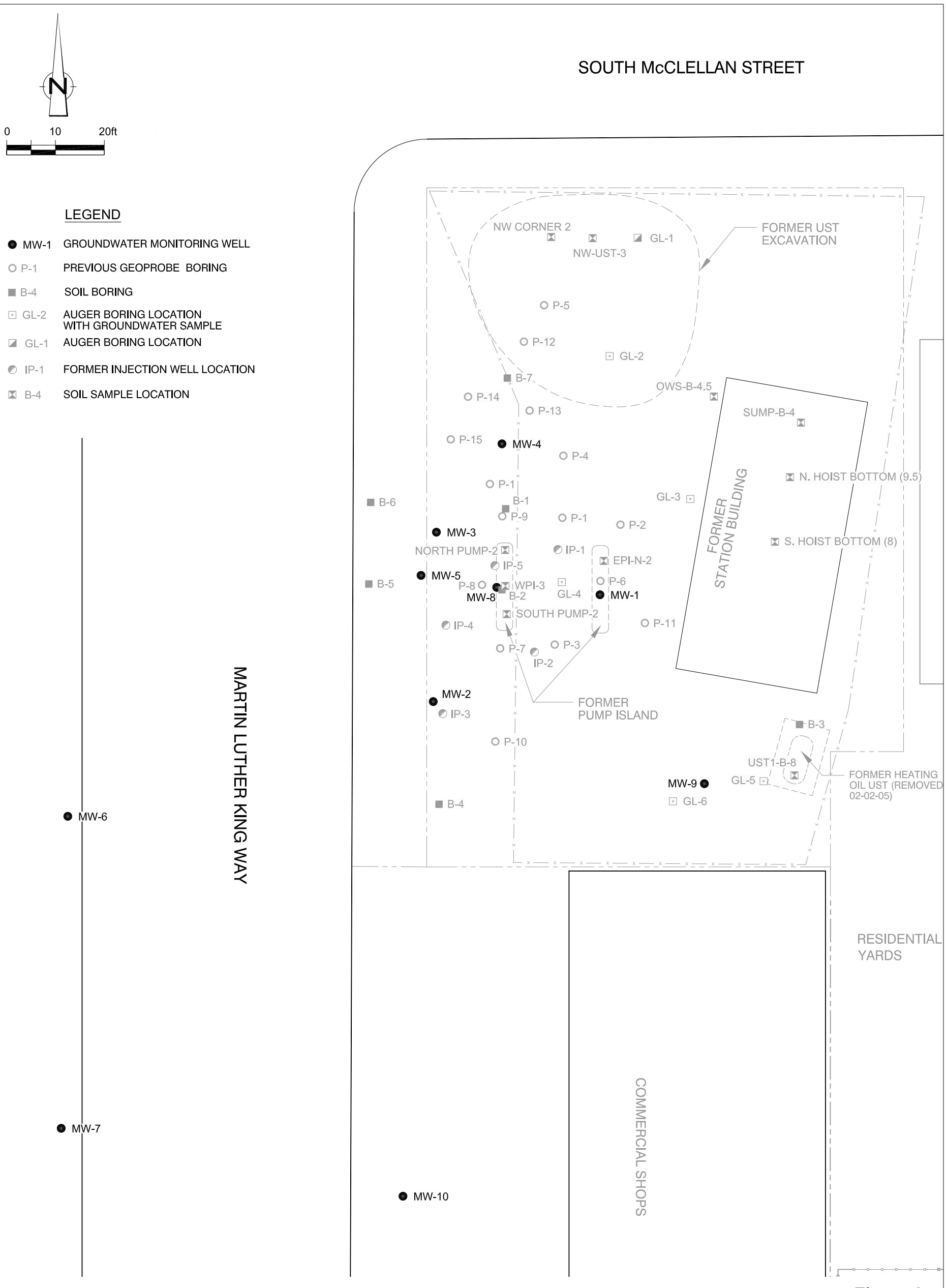


Figure 2

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

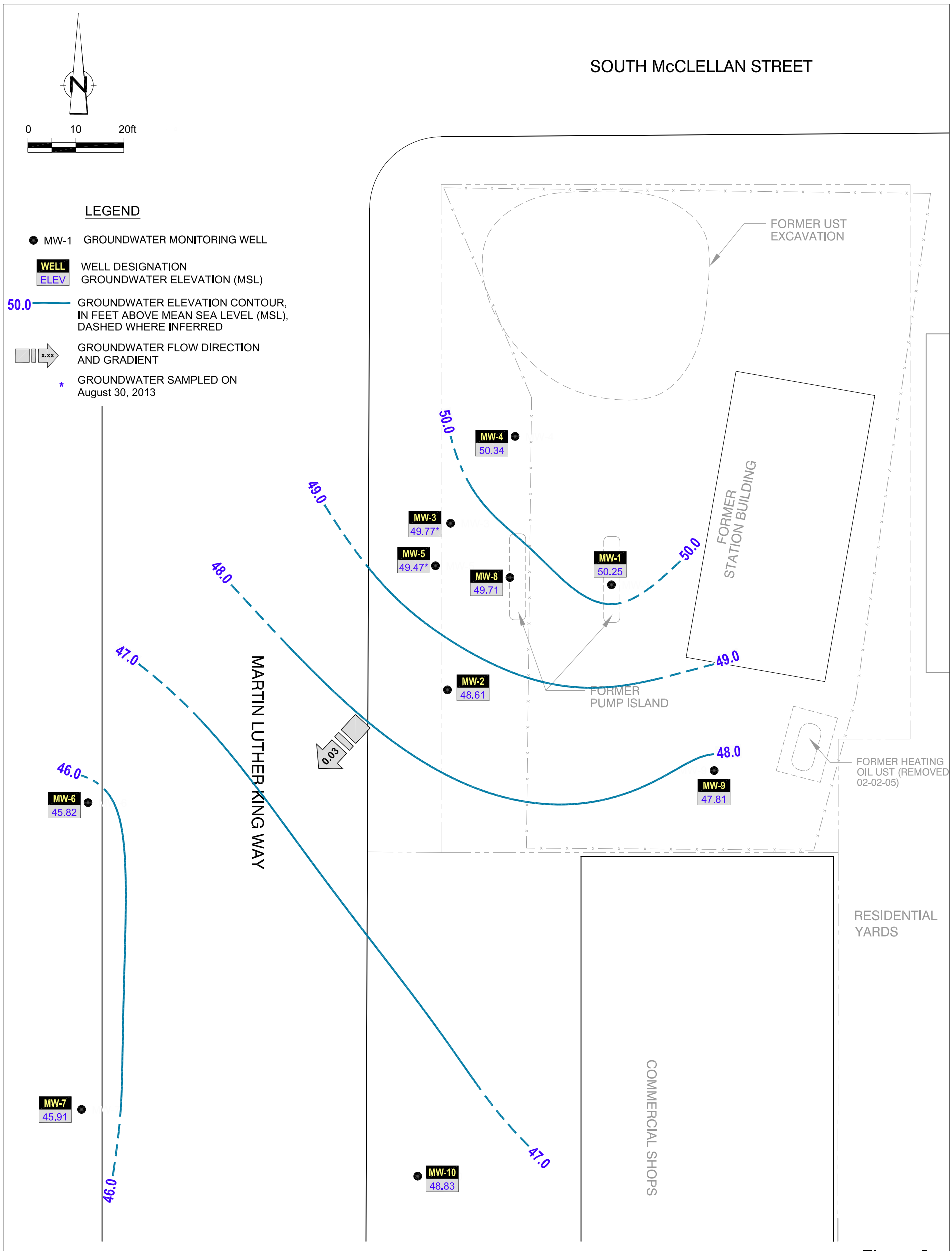
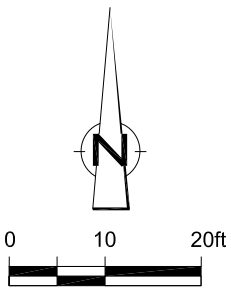


Figure 3

GROUNDWATER ELEVATION CONTOUR MAP
FORMER TIDEWATER SERVICE STATION
PHILLIPS 66 SITE 5173
CHEVRON SITE 301233
2800 MARTIN LUTHER KING WAY SOUTH
Seattle, Washington
August 29, 2013

061992-95(007)GN-EM003 NOV 19/2013



LEGEND

MW-1 GROUNDWATER MONITORING WELL

WELL
TPHg
TPHd
BENZ
TOUL
ETH
TOTAL

WELL DESIGNATION
TPHg CONCENTRATION (µg/L)
TPHd CONCENTRATION (µg/L)
BENZENE CONCENTRATION (µg/L)
TOULENE CONCENTRATION (µg/L)
ETHYLBENZENE CONCENTRATION (µg/L)
TOTAL XYLENES CONCENTRATION (µg/L)

* SAMPLED ON August 30, 2013

D DUPLICATE

SOUTH McCLELLAN STREET

MARTIN LUTHER KING WAY

COMMERCIAL SHOPS

RESIDENTIAL YARDS

FORMER UST EXCAVATION

FORMER STATION BUILDING

FORMER PUMP ISLAND

FORMER HEATING OIL UST (REMOVED 02-02-05)

MW-1: <50 / <29 / <0.5 / <0.5 / <0.5 / 0.8

MW-2: 740 / 200 / 0.6 / <0.5 / <0.5 / <0.5

MW-3*: 4,300 / 260 / <0.5 / <0.5 / 54 / 190

MW-4: <50 / <29 / <0.5 / <0.5 / <0.5 / <0.5

MW-5*: 3,200 / 340 / 0.7 / 1 / 49 / 89

MW-6: <50 / <28 / <0.5 / <0.5 / <0.5 / <0.5

MW-7: <50 / <29 / <0.5 / <0.5 / <0.5 / <0.5

MW-8: 6,600/3,500 D / 340/220 D / <0.5/<0.5 D / <0.5/<0.5 D / 60/47 D / 450/350 D

MW-9: <50 / 51 / <0.5 / <0.5 / <0.5 / <0.5

MW-10: <50 / 57 / 0.8 / <0.5 / <0.5 / 1

Figure 4

GROUNDWATER CONCENTRATION MAP
FORMER TIDEWATER SERVICE STATION
PHILLIPS 66 SITE 5173
CHEVRON SITE 301233
2800 MARTIN LUTHER KING WAY SOUTH
Seattle, Washington
August 29, 2013

CRA

061992-95(007)GN-EM004 NOV 19/2013

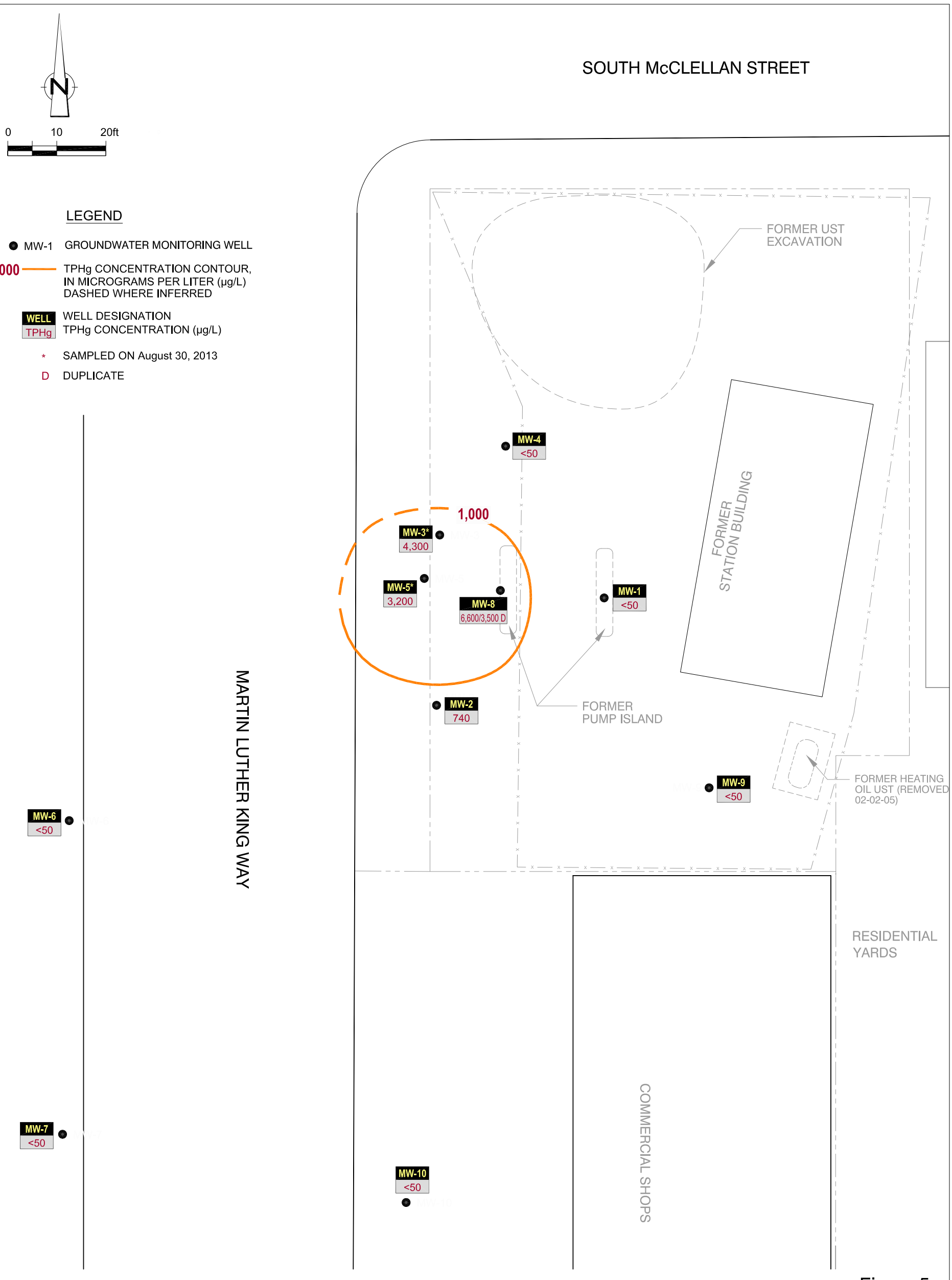
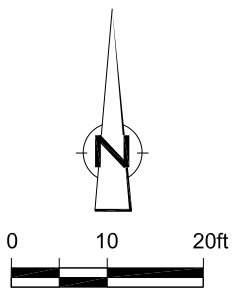


Figure 5

TPHg ISOCONCENTRATION CONTOUR MAP
FORMER TIDEWATER SERVICE STATION
PHILLIPS 66 SITE 5173
CHEVRON SITE 301233
2800 MARTIN LUTHER KING WAY SOUTH
Seattle, Washington
August 29, 2013

061992-95(007)GN-EM005 NOV 19/2013



LEGEND

- MW-1 GROUNDWATER MONITORING WELL
- 500 TPHd CONCENTRATION CONTOUR, IN MICROGRAMS PER LITER (µg/L) DASHED WHERE INFERRED
- WELL / TPHd — WELL DESIGNATION, TPHd CONCENTRATION (µg/L)
- * SAMPLED ON August 30, 2013
- D DUPLICATE

SOUTH McCLELLAN STREET

MARTIN LUTHER KING WAY

FORMER UST EXCAVATION

FORMER STATION BUILDING

FORMER PUMP ISLAND

FORMER HEATING OIL UST (REMOVED 02-02-05)

RESIDENTIAL YARDS

COMMERCIAL SHOPS

MW-4 <29

MW-3* 260

MW-5* 340

MW-1 <29

MW-8 340/220 D

MW-2 200

MW-9 51

MW-6 <28

MW-7 <29

MW-10 57

Figure 6

TPHd ISOCONCENTRATION CONTOUR MAP
FORMER TIDEWATER SERVICE STATION
PHILLIPS 66 SITE 5173
CHEVRON SITE 301233
2800 MARTIN LUTHER KING WAY SOUTH
Seattle, Washington
August 29, 2013

CRA

TABLE

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

					HYDROCARBONS			PRIMARY VOCS													
Location	Date	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	Isopropyl benzene	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	-	-
MW-1	05/30/2012	62.35	10.63	51.72	<50	35	170	<0.5	<0.7	<0.8	<0.8	<1	<1	<0.5	<1	<1	<1	<1	<1	1.7	0.007399
MW-1	08/08/2012	62.35	11.36	50.99	<50	<29[4]	<67[4]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.32	-
MW-1	12/05/2012	62.35	9.51	52.84	<50	<29[4]	<69[4]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	27.7	-
MW-1	02/26/2013	62.35	10.62	51.73	<50	<30[4]	<71[4]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.42	-
MW-1	05/23/2013	62.35	11.14	51.21	<50	<29[4]	<67[4]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	1.7	-
MW-1	**08/29/2013**	**62.35**	**12.10**	**50.25**	**<50**	**<29[4]**	**<67[4]**	**<0.5**	**<0.5**	**<0.5**	**0.8**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<1**	**<1**	**<1**	**<1**	**0.42**	**-**
MW-2	08/19/2005	96.25	13.02	83.23	2,000	-	-	ND	10	81	91	-	-	-	-	-	-	-	-	-	-

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

					HYDROCARBONS			PRIMARY VOCS													
Location	Date	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	Isopropyl benzene	Lead (Total)	cPAHs
	Units	ft	ft	ft-amsl	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-2	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	0.007173
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
PHILLIPS 66 SITE 5173
CHEVRON SITE 301233
2800 MARTIN LUTHER KING JUNIOR WAY SOUTH
SEATTLE, WASHINGTON

					HYDROCARBONS			PRIMARY VOCS													
Location	Date	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	Isopropyl benzene	Lead (Total)	cPAHs
	Units	ft	ft	ft-amsl	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-2	**08/29/2013**	**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-3	08/19/2005	97.43	12.72	84.71	44,000	-	-	4.1	18	780	3,600	-	-	-	-	-	-	-	-	-	-
MW-3	12/27/2005	97.43	13.42	84.01	17,000	-	-	ND	38	580	3,000	-	-	-	-	-	-	-	-	-	-
MW-3	12/28/2005	-	-	-	6,600	-	-	5	22	200	1,100	-	-	-	-	-	-	-	-	-	-
MW-3	01/12/2006	97.43	8.84	88.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	03/02/2006	97.43	10.90	86.53	22,000	-	-	ND	26	450	4,200	-	-	-	-	-	-	-	-	-	-
MW-3	04/13/2006	97.43	11.92	85.51	33,000	-	-	ND	3	700	3,100	-	-	-	-	-	-	-	-	-	-
MW-3	06/28/2006	97.43	12.17	85.26	53,000	-	-	ND	17	530	2,600	-	-	-	-	-	-	-	-	-	-
MW-3	08/13/2006	97.43	13.91	83.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	09/11/2006	97.43	13.77	83.66	14,000	-	-	ND	5.6	180	1,100	-	-	-	-	-	-	-	-	-	-
MW-3	10/13/2006	97.43	-	-	1,400	-	-	ND	1	26	98	-	-	-	-	-	-	-	-	-	-
MW-3	11/17/2006	97.43	10.56	86.87	48,000	-	-	ND	34	490	4,100	-	-	-	-	-	-	-	-	-	-
MW-3	12/01/2006	97.43	9.78	87.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	12/06/2006	97.43	10.01	87.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	01/12/2007	97.43	10.90	86.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	02/12/2007	97.43	-	-	36,000	-	-	ND	10	280	1,800	-	-	-	-	-	-	-	-	-	-
MW-3	02/28/2007	97.43	11.12	86.31	22,000	-	-	ND	6	200	1,400	-	-	-	-	-	-	-	-	-	-
MW-3	03/07/2007	97.43	11.17	86.26	21,000	-	-	ND	18	170	1,000	-	-	-	-	-	-	-	-	-	-
MW-3	04/11/2007	97.43	11.04	86.39	19,000	-	-	ND	6	110	1,100	-	-	-	-	-	-	-	-	-	-
MW-3	11/12/2009	97.43	11.98	85.45	71.7	-	-	ND	<1.0	<1.0	<3.0	-	-	-	-	-	-	-	-	-	-
MW-3	08/31/2011	61.81	12.10	49.71	7,400	370	<68	<1.0	<1	190	554	<2	<2	<1	67	1,300	330	140	47	-	-
MW-3	12/15/2011	61.81	11.38	50.43	5,400	<29	<67	<0.5	<0.7	120	400	<1	<1	<0.5	50	950	210	110	37	-	-

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

					HYDROCARBONS			*PRIMARY VOCS*													
Location	Date	*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*	*Isopropyl benzene*	*Lead (Total)*	*cPAHs*
	Units	*ft*	*ft*	*ft-amsl*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*
MW-3	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-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
MW-4	08/07/2012	62.75	11.76	50.99	<50	<29[4]	<68[4]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.34	-
MW-4	12/05/2012	62.75	10.19	52.56	<50	<32[4]	<75[4]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	4.0	-
MW-4	02/26/2013	62.75	11.15	51.60	<50	<28[4]	<66[4]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.16	-
MW-4	05/23/2013	62.75	11.35	51.40	<50	<29[4]	<67[4]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	0.74	-

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

					HYDROCARBONS			*PRIMARY VOCS*													
Location	Date	*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*	*Isopropyl benzene*	*Lead (Total)*	*cPAHs*
	Units	*ft*	*ft*	*ft-amsl*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*
MW-4	**08/29/2013**	**62.75**	**12.41**	**50.34**	**<50**	**<29[4]**	**<67[4]**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<1**	**<1**	**<1**	**<1**	**<0.085**	**-**
MW-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
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-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	-	-

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

					HYDROCARBONS			*PRIMARY VOCS*													
Location	Date	*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*	*Isopropyl benzene*	*Lead (Total)*	*cPAHs*
	Units	*ft*	*ft*	*ft-amsl*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*	*µg/L*
MW-6	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-7	08/31/2011	56.96	11.15	45.81	<50	<29	<67	<0.5	<0.7	<0.8	<0.8	<1	<1	<0.5	<1	<1	<1	<1	<1	-	-
MW-7	12/15/2011	56.96	10.93	46.03	<50	45	89	<0.5	<0.7	<0.8	<1.6	<1	<1	<0.5	<1	<1	<1	<1	<1	-	-
MW-7	02/06/2012	56.96	10.75	46.21	<50	<29	<68	<0.5	2	<0.8	<1.6	<1	<1	<0.5	<1	<1	<1	<1	<1	-	-
MW-7	05/30/2012	56.96	10.93	46.03	<50	37	160	<0.5	<0.7	<0.8	<0.8	<1	<1	<0.5	<1	<1	<1	<1	<1	13.8	0.097
MW-7	08/07/2012	56.96	11.70	45.26	<50	<28[4]	<66[4]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	31.7	-
MW-7	12/06/2012	56.96	10.46	46.50	<50	<29[4]	<67[4]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	40.3	-
MW-7	02/27/2013	56.96	10.69	46.27	<50	<29[4]	<68[4]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	76.5	-
MW-7	05/24/2013	56.96	10.81	46.15	<50	<31[4]	<72[4]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	1.9	-
MW-7	**08/29/2013**	**56.96**	**11.05**	**45.91**	**<50**	**<29[4]**	**<67[4]**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<1**	**<1**	**<1**	**<1**	**<1**	**2.9**	**-**
MW-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

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

					HYDROCARBONS			*PRIMARY VOCS*												
Location	Date	*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*	*Isopropyl benzene*	*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-8 DUP	05/30/2012	61.71	10.69	51.02	10,000	450	<66	<1	<1	110	1,300	<2	<2	<1	93	1,300	340	58	27	5.3	0.007248
MW-8	08/08/2012	61.71	11.30	50.41	9,300	290[4]	<66[4]	<1	<1	92	850	<1	<1	<1	73	910	190	49	22	3.4	-
MW-8 DUP	08/08/2012	61.71	11.30	50.41	11,000	240[4]	<66[4]	<1	<1	83	710	<1	<1	<1	67	680	140	44	20	3.6	-
MW-8	12/05/2012	61.71	9.61	52.10	13,000	2,600[4]	200[4]	<0.5	0.8	95	1,100	<0.5	<0.5	<0.5	93	1,400	380	61	27	27.6	-
MW-8 DUP	12/05/2012	61.71	9.61	52.10	12,000	2,600[4]	240[4]	<0.5	0.8	91	1,100	<0.5	<0.5	<0.5	91	1,400	360	58	26	27.4	-
MW-8	02/26/2013	61.71	10.71	51.00	12,000	780[4]	<70[4]	<0.5	0.6	100	800	<0.5	<0.5	<0.5	86	1,200	280	63	29	5.2	-
MW-8 DUP	02/26/2013	61.71	10.71	51.00	11,000	540[4]	<69[4]	<0.5	0.6	100	770	<0.5	<0.5	<0.5	72	1,100	280	60	29	5.3	-
MW-8	05/23/2013	61.71	10.87	50.84	6,800	380[4]	<68[4]	<0.5	<0.5	87	700	<0.5	<0.5	<0.5	86	1,200	190	62	25	4.0	-
MW-8 DUP	05/23/2013	61.71	10.87	50.84	7,000	380[4]	<68[4]	<0.5	0.5	100	810	<0.5	<0.5	<0.5	94	1,300	240	73	29	3.5	-
MW-8	**08/29/2013**	**61.71**	**12.00**	**49.71**	**6,600**	**340[4]**	**<66[4]**	**<0.5**	**<0.5**	**60**	**450**	**<0.5**	**<0.5**	**<0.5**	**49**	**680**	**110**	**47**	**20**	**2.1**	**-**
MW-8 DUP	**08/30/2013**	**61.71**	**12.00**	**49.71**	**3,500**	**220[4]**	**<66[4]**	**<0.5**	**<0.5**	**47**	**350**	**<0.5**	**<0.5**	**<0.5**	**39**	**510**	**83**	**45**	**18**	**1.2**	**-**
MW-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	-	-
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	-	-
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	-	-
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	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-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	-	-

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

					HYDROCARBONS			*PRIMARY VOCS*													
Location	Date	*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*	*Isopropyl benzene*	*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-10	12/15/2011	58.96	11.13	47.83	51	<28	<66	3	<0.7	<0.8	0.8	<1	<1	<0.5	<1	<1	<1	2	<1	-	-
MW-10	02/06/2012	58.96	10.44	48.52	<50[2]	<29	<68	1	<0.7	<0.8	<1.6	<1	<1	<0.5	<1	<1	<1	3	1	-	-
MW-10	05/30/2012	58.96	10.77	48.19	<50	74	<66	<0.5	<0.7	<0.8	<0.8	<1	<1	<0.5	<1	<1	<1	<1	<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**	**-**
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	-	-
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**	**-**	**-**

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

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

					HYDROCARBONS			*PRIMARY VOCS*													
Location	Date	*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*	*Isopropyl benzene*	*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*

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

EDB = 1,2 Dibromoethane analyzed by EPA Method 8011

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

MTBE = Methyl tert butyl ether

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

Total Lead analyzed by EPA Method 6020

-- = Not available / not applicable.I286

<x = Not detected above laboratory method detection limit.

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

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

3 Well not sampled - well not found.

4 Analysis with silica-gel cleanup.

5 Inaccessible.

ATTACHMENT A

MONITORING DATA PACKAGE

COP JOB HAZARD ANALYSIS (JHA)
REVIEW DOCUMENTATION FORM

Date: 8.29.13 Time: 7/5 Presenter: S. Rasmussen

Directions: JHAs are to be reviewed immediately before conducting the task(s). This form MUST be completed EACH time the task(s) is being completed by the work group. This form serves two purposes: first, to document any additional hazards that have been identified for that day and the mitigation to be used; and second, to confirm who has participated in the review of the JHA. This form shall be kept with the original JHA in the HASP.

For each JHA, document any additional specific hazards that were reviewed for the daily task, working conditions, and environment.

JHA Name: Peri Pump Sampling, GW leveling

Additional Specific Hazards and Hazard Mitigation:

JHA Name:

Additional Specific Hazards and Hazard Mitigation:

Site Personnel Participating:

I have participated in the review and discussion of the Job Hazard Analysis (JHA) listed on this document. As part of my work, I know I have the responsibility to STOP work with a Stop Work Authority (SWA) if conditions change and/or potential hazards have been identified.

Print Name	Signature	Company
Stephen Rasmussen		CRA
Brian Punke		CRA

TAILGATE SAFETY MEETING FORM
LARGE GROUP FORMAT - SINGLE DAY
[1625 NE LAFAYETTE AVENUE, MCMINNVILLE, OR]

Date: 8.29.13 Time: 715 Project No.: 06/992
Presenter: S. Rasmussen Project Name:

Safety topics/items discussed:
Sidewalk work, Traffic Pedestrian consideration, Weather - wet & Rainy, Body Positioning, walking between locations. Handling sample containers, bottle breakage,

Site personnel in attendance:

Print Name	Signature	Company
Stephen Rasmussen		CRA
Brian Party		CRA

COP JOB HAZARD ANALYSIS (JHA)
REVIEW DOCUMENTATION FORM

Date: 8.30.13 Time: 730 Presenter: S. Rasmussen

Directions: JHAs are to be reviewed immediately before conducting the task(s). This form MUST be completed EACH time the task(s) is being completed by the work group. This form serves two purposes: first, to document any additional hazards that have been identified for that day and the mitigation to be used; and second, to confirm who has participated in the review of the JHA. This form shall be kept with the original JHA in the HASP.

For each JHA, document any additional specific hazards that were reviewed for the daily task, working conditions, and environment.

JHA Name: GWM + Packing/Shipping Coolers

Additional Specific Hazards and Hazard Mitigation:

high Vehicle + pedestrian traffic, Setup adequate Traffic control, Don't keep back to traffic

JHA Name: Field level work gw sampling

Additional Specific Hazards and Hazard Mitigation:

Site Personnel Participating:

I have participated in the review and discussion of the Job Hazard Analysis (JHA) listed on this document. As part of my work, I know I have the responsibility to STOP work with a Stop Work Authority (SWA) if conditions change and/or potential hazards have been identified.

Print Name	Signature	Company
Stephen Rasmussen		CRA
Tim McMahon		CRA

1100

TAILGATE SAFETY MEETING FORM
LARGE GROUP FORMAT - SINGLE DAY
[2800 MLK WAY SOUTH, SEATTLE, WA]

Date: 8.30.13 Time: 730 Project No.: 061992
Presenter: S. Rasmussen Project Name:

Safety topics/items discussed:

Lone Site Workers, Awkward lifting, Vehicle + Pedestrian traffic, Slips trips and falls, Pinch points + sharp Edges

Site personnel in attendance:

Print Name	Signature	Company
Stephen Rasmussen		CRA

CONESTOGA-ROVERS & ASSOCIATES

DAILY FIELD REPORT

Submit copy to Company Safety Officer

Project Name: D66 MLK	CRA Mgr: Ed Turner	Field Rep: SR / BP
Project Number: 061992	Date: 8/29/13	Site Address: 2800 MLK Way South, Seattle
General Tasks: GWM		
Emergency Drill Conducted:		
HASP Meeting Conducted (Y/N): y	Equipment Checked (Y/N): y	PID Calibrated (Y/N): _____ppm

Time	Activity/Comments	SWA
615	load truck / Mobe to site.	
	5S, Exit 164, 90E, Exit 3, Rainier Ave S, Rt on Rainier S,	
	L on McClellan St, R on MLK Jr Way S, on left	
705	Arrive @ site Tailgate Meeting, JHA Reviews	
740	Setup on MW-6 + MW-7, Meet w/ Monica EPI	
	Calibrate Horibas	
0920	low flow sampled MW-6, 11 bottles (2-1L HCL)(2-250 unpres)(6-HCL Vials) (1-Poly Nitric)	
1015	low flow Sampled MW-7, 11 bottles	
1120	low flow Sampled MW-9, 11 bottles	
1200	low flow sampled MW-8, 22 bottles (duplicate)	
1330	low flow Sampled MW-2, 27 bottles (MS / MSD)	
1415	low flow Sampled MW-1, 11 bottles	
1540	low flow Sampled MW-4, 11 bottles	
1630	Mob off-site	
1740	Arrive @ home unload / Change Equip.	
1800	EOD	

SWA Key:	1: SPSA/Task Change	2: Pedestrian in Proximity	3: Unauthorized Personnel	4: Review Work Process
5: Inspection	6: Safety Orientation	7: Uncontrollable Factor	8: Minor First Aid	9: Major (explain in notes)

Hours 11.75 Miles _____ Other _____ Shared _____

CONESTOGA-ROVERS & ASSOCIATES

DAILY FIELD REPORT

Submit copy to Company Safety Officer

Project Name: P66 MLK	CRA Mgr: Ed Turner	Field Rep: S. Rasmussen
Project Number: 061992	Date: 8/30/13	Site Address: 2800 MLK Way S, Seattle
General Tasks: GWM		
Emergency Drill Conducted:		
HASP Meeting Conducted (Y/N): y	Equipment Checked (Y/N): y	PID Calibrated (Y/N): _____ppm

Time	Activity/Comments	SWA
700	Load Van, Mobilize to site	
730	Arrive @ site Review Hasp + Tailgate	
800	Pack Coolers w/ more Ice	
830	Setup on MW-10	
920	Low flow MW-10 11 Bottles 2-1L, 2-Rand Ambers, 1-Plastic Poly 6-HCL Voas.	
1015	Setup on MW-5 (	
	Low flow MW-10 (11 Samples)	
	Low flow MW-5 (11 Samples)	
	Low Flow MW-3 (11 Samples)	
300	Pack up / Pack Coolers / Mob to UPS Seattle	
400	Arrive @ UPS Drop coolers	
415	Mob to Enterprise Lynnwood	
520	Arrive @ " Drop Van	
550	Arrive @ office Unload Equip.	
600	EOD	

MW-10, MW-5, MW-3

S' Key:	1: SPSA/Task Change	2: Pedestrian in Proximity	3: Unauthorized Personnel	4: Review Work Process
5: Inspection	6: Safety Orientation	7: Uncontrollable Factor	8: Minor First Aid	9: Major (explain in notes)

Hours 11.0 Miles 65 Other _____ Shared _____

Former Tidewater Site
Seattle, WA

Water Quality Meter S/N: 986V4X23 03550

Date: 8/29/13

Location: MW-2
Name of Sampler: BP
Weather: rain

Depth to Water: 12.11
Depth to Bottom: ______

Sample Depth: 11.00

QA/QC	
MS/MSD	✓
Duplicate	
Blank	

QA/QC Sample ID
(GW-mmddyy-AA-XXX)

Sample IDs (GW-mmddyy-AA-XXX)

A Samplers Initials
x Location ID

GW- 082913 - BP - MW-2

Sample Method: low flo
Purge Start: 1315
Sample Time: 1330

1 Well Volume: ______
3 Well Volumes: ______

water column height(ft) X 0.162(2" casing)

Time	pH (+/- 0.1 S.U.)	Cond (mS/cm) 3%	Turb. (NTU)	DO (mg/L) 10%	Temp (C°) 3%	ORP (mV) 10%	Salinity (%)	TDS (ppm)	Total Volume Removed (gallons)	Flow (ml/min) < 0.2 LPM	W/L (Feet BTOC)	Water Quality/Description
1318	6.29	0.561	105.0	2.96	17.6	-7.0	0.0	0.36	0.1			
1321	6.25	0.588	103.0	2.86	17.4	-28	0.0	0.40	0.2		12.89	
1323	6.27	0.827	108.0	2.60	17.4	-40	0.0	0.40	0.3			
1326	6.32	0.90	107.0	2.75	17.4	-53	0.1	1.2	0.4		13.00	
1329	636		104.0	2.64	18.1		...	....				

Analysis:

Groundwater		**Preservative**
GRO	X	HCL
DRO	X	HCL
VOCs	X	HCL
SVOCs	X	
Total Lead	X	

Signed Brian [signature]

Notes:

... erratic reading from random - blink 99,40

Former Tidewater Site
Seattle, WA

Water Quality Meter S/N: 03550

Date: 8.29.13

Location: MW-9
Name of Sampler: DP
Weather: rain

Depth to Water: 14.77
Depth to Bottom: _____

Sample Depth: _____

QA/QC
MS/MSD _____
Duplicate _____
Blank _____

QA/QC Sample ID
(GW-mmddyy-AA-XXX)
_____

Sample IDs (GW-mmddyy-AA-XXX)

A Samplers Initials
x Location ID

GW- 082913 - BP - MW-9

Sample Method: Low Flow
Purge Start: 1103
Sample Time: 1120

1 Well Volume: _____
3 Well Volumes: _____

water column height(ft) X
0.162(2" casing)

Time	pH (+/- 0.1 S.U.)	Cond (mS/cm) 3%	Turb. (NTU)	DO (mg/L) 10%	Temp (C°) 3%	ORP (mV) 10%	Salinity (%)	TDS (ppm)	Total Volume Removed (gallons)	Flow (ml/min) < 0.2 LPM	W/L (Feet BTOC)	Water Quality/Description
1103	6.82	0.83	257	3.07	15.1	-32	0.0	0.53	0.1			
1106	6.83	2.26	231	2.85	14.4	-30	0.0	0.43	0.2		15.15	
11:09	6.86	1.05	2.57	0.0	14.5	3	4.0		0.3			
11:12	6.18	....	203	0.0	14.5	4	4.0	99	0.4			
1115	6.20	....	90.7	0.0	14.6	8	4.0	99			15.18	

Analysis:

Groundwater		**Preservative**
GRO	X	HCL
DRO	X	HCL
VOCs	X	HCL
SVOCs	X	
Total Lead	X	

Signed _____

Notes:

* horiba gave erratic readings for cond. & Sal - water was clear

Former Tidewater Site
Seattle, WA

Water Quality Meter S/N: 06155

Date: 8.29.13

Location: MW-7
Name of Sampler: Brian Pawley
Weather: Rainy

Depth to Water: 11.05
Depth to Bottom: _____

Sample Depth: _____

QA/QC
MS/MSD _____
Duplicate _____
Blank _____

QA/QC Sample ID
(GW-mmddyy-AA-XXX)
_____

Sample IDs (GW-mmddyy-AA-XXX)

A Samplers Initials
x Location ID

GW-082913-BP-MW-7

Sample Method: Low flow
Purge Start: 10:00
Sample Time: 1015

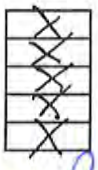
1 Well Volume: _____
3 Well Volumes: _____

water column height(ft) X
0.162(2" casing)

Time	pH (+/- 0.1 S.U.)	Cond (mS/cm) 3%	Turb. (NTU)	DO (mg/L) 10%	Temp (C°) 3%	ORP (mV) 10%	Salinity (%)	TDS (ppm)	Total Volume Removed (gallons)	Flow (ml/min) < 0.2 LPM	W/L (Feet BTOC)	Water Quality/Description
~~1000~~												
1003	5.9	0.94	486	2.37	17.9	-62	0.0	0.6	0.1			
1006	6.31	0.79	369	0.84	17.63	-86	0.0	0.50	0.2		11.05	
10:09	6.40	0.75	360	0.61	17.66	-104	0.0	0.48	0.3			
1012	6.43	0.73	349	0.58	17.71	-105	0.0	0.47	0.4		11.06	

Analysis:

Groundwater	**Preservative**
GRO	HCL
DRO	HCL
VOCs	HCL
SVOCs	
Total Lead	



Signed _____

Notes:

Former Tidewater Site
Seattle, WA

Water Quality Meter S/N: 06155

Date: 8.30.13

Location: MW-3
Name of Sampler: Stephen Rasmussen
Weather: Sunny

Depth to Water: 12.64
Depth to Bottom: _____

Sample Depth: _____

QA/QC
MS/MSD _____
Duplicate _____
Blank _____

QA/QC Sample ID
(GW-mmddyy-AA-XXX)
_____

Sample IDs (GW-mmddyy-AA-XXX)

A Samplers Initials
x Location ID

GW- 083013-SR-MW-3

Sample Method: low flow
Purge Start: 1225
Sample Time: 1250

1 Well Volume: _____
3 Well Volumes: _____

water column height(ft) X
0.162(2" casing)

Time	pH (+/- 0.1 S.U.)	Cond (mS/cm) 3%	Turb. (NTU)	DO (mg/L) 10%	Temp (C°) 3%	ORP (mV) 10%	Salinity (%)	TDS (ppm)	Total Volume Removed (gallons)	Flow (ml/min) < 0.2 LPM	W/L (Feet BTOC)	Water Quality/Description
1230	6.66	.458	111	2.85	21.26	-109	0.0	.30		.1		
1235	6.53	.452	56.5	2.00	21.00	-111	0.0	.29		.1	12.20	
1240	6.50	.441	66.1	1.19	20.82	-116	0.0	.29		.1		
1243	6.49	.438	34.7	1.01	20.62	-118	0.0	.28		.1	12.22	
1246	6.48	.436	15.4	.95	20.29	-120	0.0	.28		.1	12.24	Clear
												Begin Sampling

Analysis:

Groundwater		**Preservative**
GRO	X	HCL
DRO	X	HCL
VOCs	X	HCL
SVOCs	X	
Total Lead	X	

Signed Stephen R

Notes:

Former Tidewater Site
Seattle, WA

Water Quality Meter S/N: 06155

Date: 8.30.13

Location: MW-5
Name of Sampler: Stephen Rasmussen
Weather: Sunny

Depth to Water: 12.19
Depth to Bottom: _____

Sample Depth: _____

QA/QC
MS/MSD _____
Duplicate _____
Blank _____

QA/QC Sample ID
(GW-mmddyy-AA-XXX)
_____

Sample IDs (GW-mmddyy-AA-XXX)

A Samplers Initials
x Location ID

GW- 083013-SR-MW-5

Sample Method: low flow
Purge Start: 1040
Sample Time: 1110

1 Well Volume: _____
3 Well Volumes: _____

water column height(ft) X
0.162(2" casing)

Time	pH (+/- 0.1 S.U.)	Cond (mS/cm) 3%	Turb. (NTU)	DO (mg/L) 10%	Temp (C°) 3%	ORP (mV) 10%	Salinity (%)	TDS (ppm)	Total Volume Removed (gallons)	Flow (ml/min) < 0.2 LPM	W/L (Feet BTOC)	Water Quality/Description
1045	7.02	.583	990	9.31	20.32	-88	0.0	.36		.10		Murky
1050	6.59	.581	527	1.47	19.82	-91	0.0	.34		.10		
1055	6.55	.526	254	.89	19.68	-93	0.0	.33		.10		
1100	6.47	.520	108	.74	19.38	-93	0.0	.33		.10		Clear
1103	6.46	.529	80.3	.70	19.41	-92	0.0	.34		.10		

Analysis:

Groundwater		**Preservative**
GRO	X	HCL
DRO	X	HCL
VOCs	X	HCL
SVOCs	X	
Total Lead	X	

Signed _____

Notes:

Former Tidewater Site
Seattle, WA

Water Quality Meter S/N: 03550

Date: 8.29.13

Location: MW-6
Name of Sampler: Brian Pauley / SRasmussen
Weather: Rainy

Depth to Water: 12.21
Depth to Bottom: _____

Sample Depth: _____

QA/QC
MS/MSD _____
Duplicate _____
Blank _____

Sample IDs (GW-mmddyy-AA-XXX)

A Samplers Initials
x Location ID

GW- 082913. BP. MW-6

QA/QC Sample ID
(GW-mmddyy-AA-XXX)

_____

Sample Method: low flow
Purge Start: 0905
Sample Time: 0920

1 Well Volume: _____
3 Well Volumes: _____

water column height(ft) X
0.162(2" casing)

Time	pH (+/- 0.1 S.U.)	Cond (mS/cm) 3%	Turb. (NTU)	DO (mg/L) 10%	Temp (C°) 3%	ORP (mV) 10%	Salinity (%)	TDS (ppm)	Total Volume Removed (gallons)	Flow (ml/min) < 0.2 LPM	W/L (Feet BTOC)	Water Quality/Description
910	6.47	99.9	207									
915	6.52	41.7	219	2.29	17.6	-109	3.5	27		0.2		
920	6.52	20.2	226	3.00	17.8	-116	1.1	11		0.2	12.25	
923	6.52	11.7	217	2.90	17.9	-120	0.7	8		0.2		
926	6.53	4.75	226	2.60	17.9	-122	0.2	2.3		0.2	12.25	
929	6.55	4.39	228	2.78	17.9	-125	0.2	2.5				
												Collect Sample

Analysis:

Groundwater		**Preservative**
GRO	X	HCL
DRO	X	HCL
VOCs	X	HCL
SVOCs	X	
Total Lead	X	

Signed _____

Notes:
~1.3 gals purged.

Former Tidewater Site
Seattle, WA

Water Quality Meter S/N: 06155

Date: 8.29.13

Location: MW-8
Name of Sampler: Brian Pauley / J. Rasmussen
Weather: Rain

Depth to Water: 12.00
Depth to Bottom: _____

Sample Depth: _____

QA/QC
MS/MSD _____
Duplicate ✓
Blank _____

QA/QC Sample ID
(GW-mmddyy-AA-XXX)
_____

Sample IDs (GW-mmddyy-AA-XXX)

A Samplers Initials
x Location ID

GW- 082913BR·MW·8
DUP

Sample Method: low-flow
Purge Start: 1130
Sample Time: 1200

1 Well Volume: _____
3 Well Volumes: _____

water column height(ft) X 0.162(2" casing)

Time	pH (+/- 0.1 S.U.)	Cond (mS/cm) 3%	Turb. (NTU)	DO (mg/L) 10%	Temp (C°) 3%	ORP (mV) 10%	Salinity (%)	TDS (ppm)	Total Volume Removed (gallons)	Flow (ml/min) < 0.2 LPM	W/L (Feet BTOC)	Water Quality/Description
1135	6.44	.565	28	1.86	18	-60	0.0	.36		.2		
1138	6.40	.545	15.0	1.09	17.32	-72	0.0	.35		.2	12.30	
1141	6.38	.540	14.0	.84	17.65	-80	0.0	.34		.2		
1144	6.36	.522	11.1	.86	18.10	-82	0.0	.33		.2	11.32	
												Begin Sampling

Analysis:

Groundwater		**Preservative**
GRO	X	HCL
DRO	X	HCL
VOCs	X	HCL
SVOCs	X	
Total Lead	X	

Signed _____

Notes:
Collect DUP

Former Tidewater Site
Seattle, WA

Water Quality Meter S/N: 06155

Date: 8.30.13

Location: MW-10
Name of Sampler: S. Rasmussen
Weather: Sunny

Depth to Water: 12.13
Depth to Bottom:

Sample Depth:

QA/QC
MS/MSD
Duplicate
Blank

Sample IDs (GW-mmddyy-AA-XXX)

A Samplers Initials
x Location ID

GW- 083013-SR-MW-10

QA/QC Sample ID
(GW-mmddyy-AA-XXX)

Sample Method: low flow
Purge Start: 900
Sample Time: 920

1 Well Volume:
3 Well Volumes:

water column height(ft) X
0.162(2" casing)

Time	pH (+/- 0.1 S.U.)	Cond (mS/cm) 3%	Turb. (NTU)	DO (mg/L) 10%	Temp (C^0) 3%	ORP (mV) 10%	Salinity (%)	TDS (ppm)	Total Volume Removed (gallons)	Flow (ml/min) < 0.2 LPM	W/L (Feet BTOC)	Water Quality/Description
903	6.42	2.49	33.5	1.05	19.34	~~6~~108	0.1	1.6				Clear
906	6.51	2.56	23	.79	18.71	-115	0.1	1.6			12.23	
909	6.54	2.56	19.3	1.40	18.59	-122	0.1	1.6				
912	6.55	2.57	11.4	1.00	18.69	-126	0.1	1.6			12.26	
915	6.58	2.57	8.8	.89	18.79	-126	0.1	1.6				
												Begin Sampling

Analysis:

Groundwater		**Preservative**
GRO	X	HCL
DRO	X	HCL
VOCs	X	HCL
SVOCs	X	
Total Lead	X	

Signed

Notes:

Former Tidewater Site
Seattle, WA

Water Quality Meter S/N: 06155

Date: 8.29.13

Location: MW-4
Name of Sampler: S. Rushworth
Weather: Cloudy/Rainy

Depth to Water: 12.41
Depth to Bottom: _____

Sample Depth: _____

QA/QC
MS/MSD _____
Duplicate _____
Blank _____

QA/QC Sample ID
(GW-mmddyy-AA-XXX)
_____

Sample IDs (GW-mmddyy-AA-XXX)

A Samplers Initials
x Location ID

GW- 082913 · BP · MW-4

Sample Method: low flow
Purge Start: 1512
Sample Time: 1540

1 Well Volume: _____
3 Well Volumes: _____

water column height(ft) X
0.162(2" casing)

Time	pH (+/- 0.1 S.U.)	Cond (mS/cm) 3%	Turb. (NTU)	DO (mg/L) 10%	Temp (C°) 3%	ORP (mV) 10%	Salinity (%)	TDS (ppm)	Total Volume Removed (gallons)	Flow (ml/min) < 0.2 LPM	W/L (Feet BTOC)	Water Quality/Description
1515	6.58	.620	70	4.85	17.90	-90	0.0	.40		.2		
1520	6.53	.611	45.9	1.39	17.37	-96	0.0	.39		.2	12.6	
1523	6.52	.606	24	1.00	17.38	-99	0.0	.39		.2		
1526	6.51	.605	18.6	.79	17.28	-100	0.0	.39		.2	12.64	
1529	6.51	.603	11.8	.70	17.28	-100	0.0	.39				
												Begin Sampling

Analysis:

Groundwater		**Preservative**
GRO	X	HCL
DRO	X	HCL
VOCs	X	HCL
SVOCs	X	
Total Lead	X	

Signed _____

Notes:

Former Tidewater Site
Seattle, WA

Water Quality Meter S/N: 06155

Date: 8.29.13

Location: MW-1
Name of Sampler: BPauley / S. Rasmussen
Weather: Rainy

Depth to Water: 12.10
Depth to Bottom:

Sample Depth:

QA/QC
MS/MSD
Duplicate
Blank

Sample IDs (GW-mmddyy-AA-XXX)

A Samplers Initials
x Location ID

GW- 082913 . BP . MW . 1

QA/QC Sample ID
(GW-mmddyy-AA-XXX)

Sample Method: Low flow
Purge Start: 1340
Sample Time: 1415

1 Well Volume:
3 Well Volumes:

water column height(ft) X 0.162(2" casing)

Time	pH (+/- 0.1 S.U.)	Cond (mS/cm) 3%	Turb. (NTU)	DO (mg/L) 10%	Temp (C°) 3%	ORP (mV) 10%	Salinity (%)	TDS (ppm)	Total Volume Removed (gallons)	Flow (ml/min) < 0.2 LPM	W/L (Feet BTOC)	Water Quality/Description
1343	6.44	456	21.2	1.14	17.45	27	0.0	.30		.2		
1346	6.42	.459	13.6	.82	17.25	32	0.0	.30		.2		
1350	6.39	.458	6.7	.65	17.65	49	0.0	.50		.2	12.7	lower flow Rate
1353	6.37	.525	27.0	.70	18.71	55	0.0	.335		.15		
1357	6.36	.496	17.8	.76	19.44	37	0.0	.31		.15	12.71	
1400	6.36	.500	30.0	.70	19.53	34	0.0	.41		.15		Begin Sampling

Analysis:

Groundwater		Preservative
GRO	X	HCL
DRO	X	HCL
VOCs	X	HCL
SVOCs		
Total Lead	X	

Signed

Notes:

WATER LEVEL RECORD

PROJECT NAME: MLK P66 LOCATION: 2800 MLK Way S, Seattle

JOB NO. : 061992 DATE: 8.29.13

CLIENT: P66 ENGINEER/GEOLOGIST: S. Rasmussen

OBSERVATION WELL	TOP OF CASING ELEVATION A		DEPTH TO WATER B		WATER LEVEL ELEVATION A-B	
	feet	metres	feet	metres	feet	metres
MW-7			11.05			
MW-6			12.21			
MW-8			12.00			
MW-9			14.77			
MW-2			12.11			
MW-1			12.10			
MW-4			12.41			
MW-10			12.13			
MW-5			12.19			
MW-3			12.04			

CRA

DAILY OPERATOR CHECKLIST

Date:	8/29 8/30		Vehicle/License Number:	Rental	
Odometer:	16614 - 16679		Driver:	S. Rasmussen	
PRE-DEPARTURE CHECK				Status (√)	
				OK	Needs Attention
1. Lights	a. Headlights			✓	
	b. Tail Lights/Rear Lights			✓	
	c. Turn Signals/Indicator			✓	
	d. Brake Lights			✓	
	e. Emergency Flashers/Hazard Light			✓	
	f. Service Indicator Lights (e.g. check engine, oil check, etc.)			✓	
2. Tires - Gauge Check		Actual PSI	Recommended PSI (inside vehicle driver door)		
				✓	
3. Windshield/Windscreen and Windows (cracks or chips)				✓	
4. Mirrors (cracks, broken)				✓	
5. Horn				✓	
6. Paperwork (registration, insurance card, inspection sticker, tax disc)				✓	
7. Safety Items (first aid kit, fire extinguisher, road hazard kit)				✓	
8. Vehicle Requirements Met (3-point seatbelt, head restraints, ABS brakes, side-impact protection, and airbags)				✓	
POST-DEPARTURE CHECK				Status (√)	
				OK	Needs Attention
1. Engine	a. Overheating			✓	
	b. Oil Leaks			✓	
	c. Knocks			✓	
	d. Engine Lights			✓	
	e. Emergency Flashers/Hazard Light			✓	
2. Transmission (Shifting)				✓	
3. Service Indicator Lights (e.g. check engine light, oil check, etc.)				✓	
4. Brakes	a. Squeaking			✓	
	b. Excessive Pedal Travel			✓	
	c. Grinding			✓	
5. Steering	a. Alignment			✓	
	b. Grinding			✓	
	c. Steering Wheel Vibrations			✓	

Please note any observations on the maintenance board and report to your vehicle manager.

Additional Comments:

06/992 - 2013.1 (65 mi)

Printed Name Stephen Rasmussen Signature

Field Calibration Sheet: HORIBA U-20XD series Multimeter

pH, Conductivity, Turbidity, Dissolved Oxygen, Temperature, Salinity, Total Dissolved Solids, and ORP

DATE	8/30/13				
PROJECT NAME	MCK				
PROJECT #	061992	PHASE		TASK	
Unit Control #	0655				

TIME 830

PAGE _____ of _____

Auto Calibration

1 Place some of the pH 4 standard AutoCal solution into the calibration cup.
2 Wash the sensors in distilled water several times
3 Immerse the sensors into the solution and wait several minutes for the reading to stabilize.
4 Press the **CAL** button once while in the pH measurement mode. Look for the **AUTO** and **CAL** functions to appear in the LCD display
5 Press **ENT** to start the auto calibration. The sensors must remain within the calibration solution during this time.
The auto cal process is complete when **END** is displayed
6 Press **MEAS** to return to measurement mode
7 Cycle through the 5 parameters being calibrated and record the readings in the following table:
8 Repeat as necessary

AUTO 4 CALIBRATION					
Time	pH	Cond	Turb	DO	Temp
830	3.98	4.49	0.1	9.35	18.54

Manual 2 point pH calibration

1 After the AutoCal procedure, rinse the sensors with distilled water several times.
2 Place pH 7.0 buffer solution into another calibration cup. If only one calibration cup is available, completely wash the cup with distilled water several times.
3 Immerse the sensor into the solution and wait several minutes for the reading to stabilize.
4 Press the **CAL** button twice while in the pH measurement mode. Look for the **MAN, ZERO** and **CAL** functions to appear in the LCD display
5 Use the **UP/DOWN** keys to adjust the pH value for temperature variations using the table at the end of this sheet
6 Press the **ENT** key to start the calibration. The measured value and the **DATA IN** will blink until the calibration finishes.
7 When the values stop flashing record the pH reading being displayed.
8 Remove the sensors and rinse several tims with distilled water.
9 Place pH 10.0 buffer solution into another calibration cup. If only one calibration cup is available, completely wash the cup with distilled water several times.
10 Immerse the sensors into the solution and wait several minutes for the reading to stabilize.
11 Press the **CAL** button once. Look for the **MAN, SPAN** and **CAL** functions to appear in the LCD display
12 Use the **UP/DOWN** keys to adjust the pH value for temperature variations using the table at the end of this sheet
13 Press the **ENT** key to start the calibration. The measured value and the **DATA IN** will blink until the calibration finishes.
14 When the values stop flashing record the pH reading being displayed.
15 Press the **MEAS** button to return to the measurement mode.

pH Calibration Buffer Temperature Adjustment Table				
Temperature Celsius	pH 4 Phthalate	pH 7 N. phosphat	pH 9 Borate	pH 10
0	4.01	6.98	9.46	
5	4.01	6.95	9.39	
10	4.00	6.92	9.33	10.18
15	4.00	6.90	9.27	10.14
20	4.00	6.88	9.22	10.06
25	4.01	6.86	9.18	10.00
30	4.01	6.85	9.14	9.95
35	4.02	6.84	9.10	9.91
40	4.03	6.84	9.07	9.85
45	4.04	6.84	9.04	

MANUAL CALIBRATION				
Time	pH 7	pH 9	pH 10	Temp

Midday and as needed calibration check record

Time	Temperature	pH 4	pH 7	pH 9	pH 10	Initials

SIGNATURE [signature] NAME Stephen Rasmussen DATE 8/30/13

Field Calibration Sheet: HORIBA U-20XD series Multimeter

pH, Conductivity, Turbidity, Dissolved Oxygen, Temperature, Salinity, Total Dissolved Solids, and ORP

DATE	8.29.13				
PROJECT NAME	MCK				
PROJECT #	061992	PHASE		TASK	
Unit Control #					

TIME 800

PAGE _____ of _____

Auto Calibration

1 Place some of the pH 4 standard AutoCal solution into the calibration cup.
2 Wash the sensors in distilled water several times
3 Immerse the sensors into the solution and wait several minutes for the reading to stabilize.
4 Press the **CAL** button once while in the pH measurement mode. Look for the **AUTO** and **CAL** functions to appear in the LCD display
5 Press **ENT** to start the auto calibration. The sensors must remain within the calibration solution during this time.
The auto cal process is complete when **END** is displayed
6 Press **MEAS** to return to measurement mode
7 Cycle through the 5 parameters being calibrated and record the readings in the following table:
8 Repeat as necessary

	AUTO 4 CALIBRATION				
Time	pH	Cond	Turb	DO	Temp
800	4	4.57	0.6	8.64	22.55

Manual 2 point pH calibration

1 After the AutoCal procedure, rinse the sensors with distilled water several times.
2 Place pH 7.0 buffer solution into another calibration cup. If only one calibration cup is available, completely wash the cup with distilled water several times.
3 Immerse the sensor into the solution and wait several minutes for the reading to stabilize.
4 Press the **CAL** button twice while in the pH measurement mode. Look for the **MAN, ZERO** and **CAL** functions to appear in the LCD display
5 Use the **UP/DOWN** keys to adjust the pH value for temperature variations using the table at the end of this sheet
6 Press the **ENT** key to start the calibration. The measured value and the **DATA IN** will blink until the calibration finishes.
7 When the values stop flashing record the pH reading being displayed.
8 Remove the sensors and rinse several tims with distilled water.
9 Place pH 10.0 buffer solution into another calibration cup. If only one calibration cup is available, completely wash the cup with distilled water several times.
10 Immerse the sensors into the solution and wait several minutes for the reading to stabilize.
11 Press the **CAL** button once. Look for the **MAN, SPAN** and **CAL** functions to appear in the LCD display
12 Use the **UP/DOWN** keys to adjust the pH value for temperature variations using the table at the end of this sheet
13 Press the **ENT** key to start the calibration. The measured value and the **DATA IN** will blink until the calibration finishes.
14 When the values stop flashing record the pH reading being displayed.
15 Press the **MEAS** button to return to the measurement mode.

pH Calibration Buffer Temperature Adjustment Table				
Temperature Celsius	pH 4 Phthalate	pH 7 N. phosphat	pH 9 Borate	pH 10
0	4.01	6.98	9.46	
5	4.01	6.95	9.39	
10	4.00	6.92	9.33	10.18
15	4.00	6.90	9.27	10.14
20	4.00	6.88	9.22	10.06
25	4.01	6.86	9.18	10.00
30	4.01	6.85	9.14	9.95
35	4.02	6.84	9.10	9.91
40	4.03	6.84	9.07	9.85
45	4.04	6.84	9.04	

	MANUAL CALIBRATION			
Time	pH 7	pH 9	pH 10	Temp

Midday and as needed calibration check record

Time	Temperature	pH 4	pH 7	pH 9	pH 10	Initials

SIGNATURE _____ NAME Stephen Rasmussen DATE 8/29/13

Well	*Hydraulic Monitoring and Product Thickness Gauging*	*Groundwater Monitoring*			
		TPHg, TPHd	*Semi-volatiles*	*VOCs Full Scan*	*Total Lead*
MW-1	X	X	X	X	X
MW-2	X	X	X	X	X
MW-3	X	X	X	X	X
MW-4	X	X	X	X	X
MW-6	X	X	X	X	X
MW-7	X	X	X	X	X
MW-8	X	X	X	X	X
MW-9	X	X	X	X	X
MW-10	X	X	X	X	X
Totals:	10	10	10	10	10

Note:

If well has product, do not sample.

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

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

1 Client Information

Facility # 0601992-2013.1-[illegible]
WBS
Site Address 2800 MLK Jr. Way, Seattle, WA
Chevron PM TM 8/30/13 P66
Lead Consultant CRA
Rich Solomon
Consultant/Office 20518 44th Ave W, Ste 190, Lynnwood WA 98036
Consultant Project Mgr. Ed Turner
Consultant Phone # 425-563-6500
Sampler S. Rasmussen, B. Pauley

2 Sample Identification / 3 Collected

Sample Identification	Date	Time	Grab	Composite
GW-082913-BP-MW-6	8/29/13	920	X	
GW-082913-BP-MW-7	8/29/13	1015	X	
GW-082913-BP-MW-9	8/29/13	1120	X	
GW-082913-BP-MW-8	8/29/13	1200	X	
GW-082913-BP-MW-2	8/29/13	1330	X	
GW-082913-BP-MW-1	8/29/13	1415	X	
GW-082913-BP-MW-4	8/29/13	1540	X	
GW-083013-SR-MW-10	8/30/13	920	X	
GW-083013-SR-MW-5	8/30/13	1110	X	
GW-083013-SR-MW-3	8/30/13	1250	X	
DUP	8/30/13		X	
TRIP Blank				

4 Matrix

Soil ☐ Water: Sediment ☐ Potable ☒ Ground ☐ NPDES ☐ Surface ☐ Oil ☐ Air ☐

Total Number of Containers

Total Number of Containers
6
6
6
6
18
6
6
6
6
6
6
6

5 Analyses Requested

BTEX + MTBE 8021 ☐ 8260 ☒ Naphth ☐	8260 full scan	Oxygenates ____	NWTPH GX	NWTPH DX	Silica Gel Cleanup ☒	Lead Total ☐ Diss. ☐ Method ____	WAVPH ☐ WAEPH ☐
X			X	~~X~~ SR	SR	~~SR~~	
X			X				
X			X				
X			X				
X			X				
X			X				
X			X				
X			X				
X			X				
X			X				
X			X				
X			X				

SCR #: _____

- ☐ Results in Dry Weight
- ☐ J value reporting needed
- ☐ Must meet lowest detection limits possible for 8260 compounds
- ☐ 8021 MTBE Confirmation
- ☐ Confirm MTBE + Naphthalene
- ☐ Confirm highest hit by 8260
- ☐ Confirm all hits by 8260
- ☐ Run _____ oxy's on highest hit
- ☐ Run _____ oxy's on all hits

6 Remarks

Sent UPS
NWTPH-Dx w/ SGC
includes TPHd
and TPHO

CRA chemist: Jeff Cloud
jcloud@craworld.com
eturner@craworld.com
mdavis@craworld.com

7 Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | 24 hour

8 Data Package Options (please circle if required)

Type I - Full | Type VI (Raw Data)
CRA Equis/EDD per SOW

Relinquished by	Date	Time	Received by	Date	Time
[signature]	8/30/13				
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by Commerical Carrier: UPS X FedEx ____ Other ____			Received by	Date	Time
Temperature Upon Receipt ____ °C			Custody Seals Intact? Yes No		

9

Lancaster Laboratories, Inc. • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300
The white copy should accompany samples to Lancaster Laboratories. The yellow copy should be retained by the client.

Issued by Dept. 40 Management
7051.01

CHAIN OF CUSTODY RECORD

COC NO.: 38660

PAGE 1 OF 1

(See Reverse Side for Instructions)

CONESTOGA-ROVERS & ASSOCIATES

Address: 20518 44th Ave W, Ste 310

Phone: 425-563-6500 Fax: 425-563-6599

Project No/ Phase/Task Code: 061992-2013.1-AMW	**Laboratory Name:** Lancaster Lab	**Lab Location:** 2425 New Holland Pike	**SSOW ID:** ID # 404399
Project Name: Former Tidewater Site	**Lab Contact:** J. Parker	**Lab Quote No:** Lancaster, PA 17601	**Cooler No:**
Project Location: 2800 MLK Jr. Way Seattle WA			**Carrier:** UPS TM FedEx 8/30/13
Chemistry Contact: Jeff Cloud			**Airbill No:**
Sampler(s): S Rasmussen, B Fawley			**Date Shipped:** 8/30/13

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd//yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	(NW TPH-Dx w/sgc)	TEMP	MS/MSD Request	Comments/ Special Instructions:
1	TM 8/30/13	—	—															NW TPH-Dx w/sgc
2	TM 8/30/13	—	—															is TPHd and TPHo
3	GW-082913-BP-MW-9	8/29/13	1120		G		X							2	X			this report
4	GW-082913-BF-MW-2	8/29/13	1330		G		X							4	X		X	
5	GW-082913-SR-MW-4	8/29/13	1540		G		X							2	X			MW-2 is MS/MSD sample
6	GW-082913-SR-MW-5	8/30/13			G		X							2	X			
7	TEMP													1		X		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15														11				

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☒ Other: standard

Total Number of Containers: 11

All Samples in Cooler must be on COC

Notes/ Special Requirements:

8/30/13

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	CRA	8/30/13	4PM	1.			
2.				2.			
3.				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

CONESTOGA-ROVERS & ASSOCIATES (CRA)

CHAIN OF CUSTODY RECORD

Address: 20818 44th Ave W, Ste 190, Lynnwood WA 98036

Phone: 425-563-6500 Fax: 425-563-6599

COC NO.: 38664

PAGE 1 OF 1

(See Reverse Side for Instructions)

Project No/ Phase/Task Code:	061992-2013.1-[illegible]
Project Name:	Former Tidewater Site
Project Location:	2800 MLK Jr. Way, Seattle, WA
Chemistry Contact:	Jeff Cloud
Sampler(s):	S Rasmussen, B Pauley
Laboratory Name:	Lancaster Laboratories
Lab Contact:	Jill Parker
Lab Location:	2425 New Holland Pike, Lancaster, PA 17601
Lab Quote No:	
SSOW ID:	PO #4048992
Cooler No:	
Carrier:	FedEx
Airbill No:	
Date Shipped:	8/30/13

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	PAHs/cPAHs 8270C-SIM	Total Lead 6010	TEMP	MS/MSD Request	Comments/ Special Instructions:
1																			~~IH-Dx includes~~
2	GW-082913-BP-MW-9	8/29/13	1120	AQ	G	X		X						3	X	X			~~[illegible]~~ JM 8/31/13
3	GW-082913-BP-MW-8	8/29/13	1200	AQ	G	X		X						3	X	X			
4	GW-082913-BP-MW-1	8/29/13	1415	AQ	G	X								2	X	X			
5	GW-082913-BP-MW-2	8/29/13	1330	AQ	G	X		X						3	X	X		X	MW-2 is MS/MSD sample
6	DUP			AQ	G	X								2	X	X			
7	GW-082913-BP-MW-4	8/29/13	1540	AQ	G	X		X						3	X	X			
8	GW-082913-SR-MW-10	8/30/13	0920	AQ	G	X								2	X	X			
9	TEMP													1			X		
10																			
11																			CRA PM: Ed Turner
12																			eturner@craworld.com
13																			mdavis@craworld.com
14																			
15																			

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☒ Other: Standard

Total Number of Containers: 19

All Samples in Cooler must be on COC

Notes/ Special Requirements:

	Relinquished By	Company	Date	Time		Received By	Company	Date	Time
1.	[illegible signature]	[illegible]	8/[illegible]/13	[illegible]	1.				
2.					2.				
3.					3.				

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

INSTRUCTIONS

1. Complete all project, lab and shipping information on top of the form: Project No, Phase/Task, Name, Location, Chemistry Contact and Samplers; Laboratory Name, Location, Contact, and Quote No if relevant; SSOW ID, Cooler No., Carrier, Airbill No., and Date Shipped.
2. A separate COC should be filled out for each cooler shipped. Complete separate COCs if separate reports or TAT are desired.
3. Complete Sample Identification as it appears on the sample label using the agreed upon format for the project (use CRA standard if not defined), identify sample collection date and time of sampling, indicate if sample is a Grab (G) or Composite (C), identify Matrix Code (see below for matrix codes), indicate number of containers by preservative used and the total containers per sample.
4. Complete the analysis requested (see SSOW or parameter codes below) and mark which samples require the analysis. Indicate which samples should be processed for matrix spikes in last column. It may be necessary to use the space provided for additional comments.
5. Identify the TAT required (separate COCs if multiple TATs) and any special notes or requirements.
6. Transfer Custody by signing "relinquished by" and identifying company affiliation with date and time of transfer at bottom of page.

Commonly used Matrix Codes*:

LIQUID		SOLID	
WB	Borehole Water	SE	Sediment
WG	Groundwater	CC	Concrete
WM	Stormwater	SL	Sludge
WP	Drinking Water	SLRY	Slurry
WS	Surface Water	SO	Soil
WSW	Sump Water	ST	Solid Waste
WT	Treated Effluent		
WW	Waste Water		
FP	Free Phase Liquid		
O	Oil		
AIR		**OTHER**	
GE	Gaseous Effluent (Stack Gas)	SW	Surface Wipe
GS	Soil Gas	TA	Animal Tissue
AA	Ambient Air	TP	Plant Tissue
		TF	Fish Tissue
		TB	Trip Blank

* Quality Control (QC) Sample Identification:

- Field duplicates and blanks should be assigned the base matrix code (such as WG for groundwater QC).
- MS/MSDs should **not** be assigned separate sample IDs.

Commonly used Parameter Codes:

ACRONYM	DEFINITION
TCL	Target Compound List
TAL	Target Analyte List
TCLP	Toxic Characteristics Leachate Procedure
VOC	Volatile Organic Compounds
SVOC	Semi-volatile Organic Compounds
PCB	Polychlorinated Biphenyls
PEST	Pesticides
HERB	Herbicides
PCDD/PCDF	Polychlorinated Dibenzodioxins/Polychlorinated Dibenzofurans
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
PNA/PAH	Polynuclear Aromatics/Polynuclear Aromatic Hydrocarbons
TPH	Total Petroleum Hydrocarbons
BOD/CBOD	Biochemical Oxygen Demand or Carbonaceous BOD
TSS	Total Suspended Solids
TDS	Total Dissolved Solids
TOC/DOC	Total or Dissolved Organic Carbon
TKN	Total Kjeldahl Nitrogen
RCRA	Resource Conservation and Recovery Act
Hx Cr (Cr6)	Hexavalent Chromium
NPN	Nitrate plus Nitrite

CONESTOGA-ROVERS & ASSOCIATES

CHAIN OF CUSTODY RECORD

Address: 20818 44th Ave W, Ste 190, Lynnwood, WA
Phone: 425-563-6500 Fax: 425-563-6599 98036

COC NO.: 38663
PAGE 1 OF 2
(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 061992-2013.1-4900	Laboratory Name: Lancaster Laboratories
Project Name: Former Tidewater Site	Lab Contact:
Project Location: 2800 MLK Jr. Way, Seattle, WA	Chemistry Contact: Jeff Clout, jclout@cramw.com
Sampler(s): S Rasmussen, B Pauley	

Lab Location: 2425 New Holland Pike, Lancaster PA 17601
Lab Quote No:
SSOW ID: PO # 40-48992
Cooler No:
Carrier: ~~Fed Ex~~ UPS
Airbill No:
Date Shipped: 8/30/13

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Sample Type: Matrix Code (see back of COC)	Sample Type: Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	HCl	HNO_3	H_2SO_4	NaOH	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Analysis Requested: PAHs by 8270C SIM	Total Lead (Pb)	TPH-Dx (NWTPH-Dx w/ SGC)	TPH (NWTPH-Dx)	TEMP	MS/MSD Request	Comments/ Special Instructions:
1																					NWTPH-Dx please report TPH and TPHD
2	GW-082913-BP-MW-6	8/29/13	0920	AQ	G	X								3	X		X				
3	GW-082913-BP-MW-1	8/29/13	1415	AQ	G									1			X				
4	GW-083013-SR-MW-10	8/30/13	0920	AQ	G									2			X				
5	GW-083013-SR-MW-5	8/30/13	1110	AQ	G	X								3	X		X				
6	GW-083013-SR-MW-3	8/30/13	1250	AQ	G		X								X			X	X		
7																					
8	DUP			AQ	G			X						1			X				
9	TEMP			QC	-									1					X		
10																					
11																					CRA PM: EJ Turner
12																					eturner@craworld.com
13																					mtaus@craworld.com
14																					
15																					

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☒ Other: Standard

Total Number of Containers:
All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	CRA			1.			
2.				2.			
3.				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

CHAIN OF CUSTODY RECORD

COC NO.: 38661

PAGE 1 OF 1

(See Reverse Side for Instructions)

CONESTOGA-ROVERS & ASSOCIATES

Address: 2055 [illegible] Suite 100 Lynnwood WA 98036

Phone: 425-[illegible] Fax: 425-[illegible]

Project No/ Phase/Task Code: 001992-2013-1 - Farm	**Laboratory Name:** Lancaster Labs	**Lab Location:** [illegible]	**SSOW ID:**
Project Name: Former Tenneco Site	**Lab Contact:** [illegible]	**Lab Quote No:**	**Cooler No:**
Project Location: 2500 MLK Jr Way South WA			**Carrier:** Fed Ex 5/30/13 UPS
Chemistry Contact: Jeff Pekul, jcloud@craworld.com			**Airbill No:**
Sampler(s): S Rasmussen, B Pawlowy			**Date Shipped:** 5/30

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	HCl	HNO_3	H_2SO_4	NaOH	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Analysis Requested: TPH 7041	NWTPH-Dx w/SGC	TEMP	MS/MSD Request	Comments/ Special Instructions:
1	GW-082913-BP-MW-6	8/29/13	0920	AQ	G									2	X				TPHd and TPHo
2	GW-082913-BP-~~MW-1~~	8/29/13	1415	AQ	G									2	X				for NWTPH-Dx w/SGC
3																			
4	GW-082913-BP-MW-8	8/29/13	1200	AQ	G									2	X				MS/MSD request
5	GW-082913-BP-MW-2	8/29/13	1330	AQ	G									2	X			* X	for MW-2 sample
6	DUP	—	—	AQ	G									2	X				
7	TEMP			AQ	—									1				X	
8																			
9																			
10																			CRA PM: Ed Turner
11																			eturner@craworld.com,
12																			mdavis@craworld.
13																			com
14																			
15																			

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☒ Other: Standard

Total Number of Containers: 11

All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	CRA	5/30/13	1700	1.			
2.				2.			
3.				3.			

The Chain Of Custody is a Legal Document – All Fields Must Be Completed Accurately

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

ATTACHMENT B

LABORATORY ANALYTICAL REPORT

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

September 13, 2013

Project: 301233 Tidewater Seattle

Submittal Date: 08/31/2013
Group Number: 1415909
PO Number: 4058681
State of Sample Origin: WA

Client Sample Description	Lancaster Labs (LL) #
GW-082913-BP-MW-6 Grab Groundwater	7183632
GW-082913-BP-MW-7 Grab Groundwater	7183633
GW-082913-BP-MW-9 Grab Groundwater	7183634
GW-082913-BP-MW-8 Grab Groundwater	7183635
GW-082913-BP-MW-2 Grab Groundwater	7183636
GW-082913-BP-MW-2 MS Grab Groundwater	7183637
GW-082913-BP-MW-2 MSD Grab Groundwater	7183638
GW-082913-BP-MW-1 Grab Groundwater	7183639
GW-082913-BP-MW-4 Grab Groundwater	7183640
GW-083013-SR-MW-10 Grab Groundwater	7183641
GW-083013-SR-MW-5 Grab Groundwater	7183642
GW-083013-SR-MW-3 Grab Groundwater	7183643
DUP Grab Groundwater	7183644
TRIP BLANK Water	7183645

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

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

Respectfully Submitted,

Jill M. Parker
Senior Specialist

(717) 556-7262

Sample Description: GW-082913-BP-MW-6 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183632
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 09:20 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE06

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.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	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.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	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.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	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.	2	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	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.	1	1

Sample Description: GW-082913-BP-MW-6 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183632
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 09:20 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE06

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	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	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.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	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.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	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.	0.031	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
02211	DRO C12-C24 w/Si Gel	n.a.	N.D.	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	0.087	0.085	1

Sample Description: GW-082913-BP-MW-6 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183632
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 09:20 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE06

General Sample Comments

State of Washington Lab Certification No. C259
Carcinogenic PAHs have been reported for this sample
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8-13.7C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.6-12.5 C.

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	W132482AA	09/05/2013 21:59	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W132482AA	09/05/2013 21:59	Emily R Styer	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13247WAC026	09/06/2013 17:26	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13247WAC026	09/04/2013 16:00	David S Schrum	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13247B20A	09/05/2013 12:33	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13247B20A	09/05/2013 12:33	Catherine J Schwarz	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	132490022A	09/11/2013 03:58	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	132490022A	09/08/2013 12:25	Denise L Trimby	1
06035	Lead	SW-846 6020	1	132506050006A	09/10/2013 12:28	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	132506050006	09/09/2013 23:30	Annamaria Stipkovits	1

Sample Description: GW-082913-BP-MW-7 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183633
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 10:15 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE07

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.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	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.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	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.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	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.	2	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	12	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	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.	1	1

Sample Description: GW-082913-BP-MW-7 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183633
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 10:15 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE07

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	1
10335	Tetrachloroethene	127-18-4	3	0.8	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.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	5	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	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	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	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	0.043	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.	0.031	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
02211	DRO C12-C24 w/Si Gel	n.a.	N.D.	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
Metals	**SW-846 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	2.9	0.085	1

Sample Description: GW-082913-BP-MW-7 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183633
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 10:15 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE07

General Sample Comments

State of Washington Lab Certification No. C259
Carcinogenic PAHs have been reported for this sample
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8-13.7C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.6-12.5 C.

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	W132482AA	09/05/2013 22:23	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W132482AA	09/05/2013 22:23	Emily R Styer	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13247WAC026	09/06/2013 17:56	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13247WAC026	09/04/2013 16:00	David S Schrum	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13247B20A	09/05/2013 12:54	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13247B20A	09/05/2013 12:54	Catherine J Schwarz	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	132490022A	09/11/2013 04:18	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	132490022A	09/08/2013 12:25	Denise L Trimby	1
06035	Lead	SW-846 6020	1	132506050006A	09/10/2013 12:29	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	132506050006	09/09/2013 23:30	Annamaria Stipkovits	1

Sample Description: GW-082913-BP-MW-9 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183634
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 11:20 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE09

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.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	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.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	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.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	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.	2	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	84	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	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.	1	1

Sample Description: GW-082913-BP-MW-9 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183634
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 11:20 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE09

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	1
10335	Tetrachloroethene	127-18-4	65	0.8	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.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	43	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	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	7	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	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**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
02211	DRO C12-C24 w/Si Gel	n.a.	51	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	N.D.	0.085	1

Sample Description: GW-082913-BP-MW-9 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183634
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 11:20 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE09

General Sample Comments

State of Washington Lab Certification No. C259
Carcinogenic PAHs have been reported for this sample
The temperature of the temperature blank bottle(s) for the 8260, Gx, Dx, and Lead containers upon receipt at the lab was 6.8-13.7C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.6-12.5 C.

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	W132482AA	09/05/2013 22:47	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W132482AA	09/05/2013 22:47	Emily R Styer	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13247WAC026	09/06/2013 18:26	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13247WAC026	09/04/2013 16:00	David S Schrum	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13247B20A	09/05/2013 13:16	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13247B20A	09/05/2013 13:16	Catherine J Schwarz	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	132490022A	09/11/2013 04:38	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	132490022A	09/08/2013 12:25	Denise L Trimby	1
06035	Lead	SW-846 6020	1	132506050006A	09/10/2013 12:34	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	132506050006	09/09/2013 23:30	Annamaria Stipkovits	1

Sample Description: GW-082913-BP-MW-8 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183635
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 12:00 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE08

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.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	11	1	1
10335	sec-Butylbenzene	135-98-8	7	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.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	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.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	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.	2	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	2	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10335	Ethylbenzene	100-41-4	60	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	20	1	1
10335	p-Isopropyltoluene	99-87-6	5	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	49	1	1
10335	n-Propylbenzene	103-65-1	47	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	1

Sample Description: GW-082913-BP-MW-8 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183635
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 12:00 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE08

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	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	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.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	680	10	10
10335	1,3,5-Trimethylbenzene	108-67-8	110	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	1
10335	m+p-Xylene	179601-23-1	350	0.5	1
10335	o-Xylene	95-47-6	98	0.5	1
10335	Xylene (Total)	1330-20-7	450	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
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	16	0.20	20
08357	2-Methylnaphthalene	91-57-6	20	0.20	20
08357	Naphthalene	91-20-3	43	0.60	20
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	6,600	250	5
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
02211	DRO C12-C24 w/Si Gel	n.a.	340	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	2.1	0.085	1

Sample Description: GW-082913-BP-MW-8 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183635
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 12:00 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE08

General Sample Comments

State of Washington Lab Certification No. C259
Carcinogenic PAHs have been reported for this sample
The temperature of the temperature blank bottle(s) for the 8260, Gx, Dx, and Lead containers upon receipt at the lab was 6.8-13.7C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.6-12.5 C.

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	W132482AA	09/05/2013 23:11	Emily R Styer	1
10335	8260 Solvent Compound - Water	SW-846 8260B	1	W132521AA	09/09/2013 19:05	Emily R Styer	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W132482AA	09/05/2013 23:11	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	W132521AA	09/09/2013 19:05	Emily R Styer	10
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13247WAC026	09/06/2013 18:55	Chad A Moline	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13247WAC026	09/09/2013 15:01	Chad A Moline	20
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13247WAC026	09/04/2013 16:00	David S Schrum	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13247B20A	09/05/2013 16:54	Catherine J Schwarz	5
01146	GC VOA Water Prep	SW-846 5030B	1	13247B20A	09/05/2013 16:54	Catherine J Schwarz	5
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	132490021A	09/11/2013 05:57	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	132490021A	09/08/2013 12:25	Denise L Trimby	1
06035	Lead	SW-846 6020	1	132506050006A	09/10/2013 12:36	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	132506050006	09/09/2013 23:30	Annamaria Stipkovits	1

Sample Description: GW-082913-BP-MW-2 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183636
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 13:30 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE02

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	0.6	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.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	3	1	1
10335	sec-Butylbenzene	135-98-8	4	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.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	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.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	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.	2	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	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	17	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	1	1
10335	n-Propylbenzene	103-65-1	36	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	1

Sample Description: GW-082913-BP-MW-2 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183636
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 13:30 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE02

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	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	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.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	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.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	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	0.36	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.10	0.010	1
08357	Naphthalene	91-20-3	N.D.	0.031	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	740	50	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
02211	DRO C12-C24 w/Si Gel	n.a.	200	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
Metals	**SW-846 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	0.36	0.085	1

Sample Description: GW-082913-BP-MW-2 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183636
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 13:30 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE02

General Sample Comments

State of Washington Lab Certification No. C259
Carcinogenic PAHs have been reported for this sample
The temperature of the temperature blank bottle(s) for the 8260, Gx, and Dx containers upon receipt at the lab was 6.8-13.7C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.6-12.5 C.

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	N132481AA	09/05/2013 09:18	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	N132481AA	09/05/2013 09:18	Christopher G Torres	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13247WAC026	09/06/2013 19:25	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13247WAC026	09/04/2013 16:00	David S Schrum	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13247B20A	09/05/2013 15:05	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13247B20A	09/05/2013 15:05	Catherine J Schwarz	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	132490021A	09/11/2013 06:17	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	132490021A	09/08/2013 12:25	Denise L Trimby	1
06035	Lead	SW-846 6020	1	132506050006A	09/10/2013 12:17	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	132506050006	09/09/2013 23:30	Annamaria Stipkovits	1

Sample Description: GW-082913-BP-MW-2 MS Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183637
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 13:30 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE02

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	130	6	1
10335	Benzene	71-43-2	20	0.5	1
10335	Bromobenzene	108-86-1	19	1	1
10335	Bromochloromethane	74-97-5	19	1	1
10335	Bromodichloromethane	75-27-4	20	1	1
10335	Bromoform	75-25-2	18	1	1
10335	Bromomethane	74-83-9	18	1	1
10335	2-Butanone	78-93-3	120	3	1
10335	n-Butylbenzene	104-51-8	21	1	1
10335	sec-Butylbenzene	135-98-8	23	1	1
10335	tert-Butylbenzene	98-06-6	17	1	1
10335	Carbon Disulfide	75-15-0	19	1	1
10335	Carbon Tetrachloride	56-23-5	23	1	1
10335	Chlorobenzene	108-90-7	20	0.8	1
10335	Chloroethane	75-00-3	18	1	1
10335	Chloroform	67-66-3	22	0.8	1
10335	Chloromethane	74-87-3	18	1	1
10335	2-Chlorotoluene	95-49-8	19	1	1
10335	4-Chlorotoluene	106-43-4	19	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	17	2	1
10335	Dibromochloromethane	124-48-1	20	1	1
10335	1,2-Dibromoethane	106-93-4	19	0.5	1
10335	Dibromomethane	74-95-3	19	1	1
10335	1,2-Dichlorobenzene	95-50-1	19	1	1
10335	1,3-Dichlorobenzene	541-73-1	19	1	1
10335	1,4-Dichlorobenzene	106-46-7	19	1	1
10335	Dichlorodifluoromethane	75-71-8	20	2	1
10335	1,1-Dichloroethane	75-34-3	20	1	1
10335	1,2-Dichloroethane	107-06-2	21	0.5	1
10335	1,1-Dichloroethene	75-35-4	21	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	20	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	21	0.8	1
10335	1,2-Dichloropropane	78-87-5	19	1	1
10335	1,3-Dichloropropane	142-28-9	18	1	1
10335	2,2-Dichloropropane	594-20-7	21	1	1
10335	1,1-Dichloropropene	563-58-6	22	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	20	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	20	1	1
10335	Ethylbenzene	100-41-4	19	0.5	1
10335	Hexachlorobutadiene	87-68-3	18	2	1
10335	2-Hexanone	591-78-6	77	3	1
10335	Isopropylbenzene	98-82-8	35	1	1
10335	p-Isopropyltoluene	99-87-6	18	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	19	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	78	3	1
10335	Methylene Chloride	75-09-2	20	2	1
10335	Naphthalene	91-20-3	17	1	1
10335	n-Propylbenzene	103-65-1	49	1	1
10335	Styrene	100-42-5	19	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	20	1	1

Sample Description: **GW-082913-BP-MW-2 MS Grab Groundwater**
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183637
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 13:30 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE02

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	17	1	1
10335	Tetrachloroethene	127-18-4	21	0.8	1
10335	Toluene	108-88-3	20	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	17	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	18	1	1
10335	1,1,1-Trichloroethane	71-55-6	19	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	20	0.8	1
10335	Trichloroethene	79-01-6	21	1	1
10335	Trichlorofluoromethane	75-69-4	22	2	1
10335	1,2,3-Trichloropropane	96-18-4	19	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	19	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	19	1	1
10335	Vinyl Chloride	75-01-4	20	1	1
10335	m+p-Xylene	179601-23-1	39	0.5	1
10335	o-Xylene	95-47-6	19	0.5	1
10335	Xylene (Total)	1330-20-7	58	0.5	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	1,900	50	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
02211	DRO C12-C24 w/Si Gel	n.a.	1,100	28	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	65	1

General Sample Comments

State of Washington Lab Certification No. C259
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8-13.7C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.6-12.5 C.

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	N132481AB	09/05/2013 14:24	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	N132481AB	09/05/2013 14:24	Linda C Pape	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13247B20A	09/05/2013 15:27	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13247B20A	09/05/2013 15:27	Catherine J Schwarz	1

Sample Description: GW-082913-BP-MW-2 MS Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183637
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 13:30 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	132490021A	09/11/2013 08:39	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	132490021A	09/08/2013 12:25	Denise L Trimby	1

Sample Description: GW-082913-BP-MW-2 MSD Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183638
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 13:30 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE02

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	130	6	1
10335	Benzene	71-43-2	20	0.5	1
10335	Bromobenzene	108-86-1	19	1	1
10335	Bromochloromethane	74-97-5	19	1	1
10335	Bromodichloromethane	75-27-4	20	1	1
10335	Bromoform	75-25-2	18	1	1
10335	Bromomethane	74-83-9	18	1	1
10335	2-Butanone	78-93-3	120	3	1
10335	n-Butylbenzene	104-51-8	22	1	1
10335	sec-Butylbenzene	135-98-8	23	1	1
10335	tert-Butylbenzene	98-06-6	18	1	1
10335	Carbon Disulfide	75-15-0	19	1	1
10335	Carbon Tetrachloride	56-23-5	23	1	1
10335	Chlorobenzene	108-90-7	20	0.8	1
10335	Chloroethane	75-00-3	19	1	1
10335	Chloroform	67-66-3	21	0.8	1
10335	Chloromethane	74-87-3	18	1	1
10335	2-Chlorotoluene	95-49-8	19	1	1
10335	4-Chlorotoluene	106-43-4	19	1	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	17	2	1
10335	Dibromochloromethane	124-48-1	19	1	1
10335	1,2-Dibromoethane	106-93-4	19	0.5	1
10335	Dibromomethane	74-95-3	19	1	1
10335	1,2-Dichlorobenzene	95-50-1	19	1	1
10335	1,3-Dichlorobenzene	541-73-1	19	1	1
10335	1,4-Dichlorobenzene	106-46-7	19	1	1
10335	Dichlorodifluoromethane	75-71-8	21	2	1
10335	1,1-Dichloroethane	75-34-3	20	1	1
10335	1,2-Dichloroethane	107-06-2	21	0.5	1
10335	1,1-Dichloroethene	75-35-4	21	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	20	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	21	0.8	1
10335	1,2-Dichloropropane	78-87-5	19	1	1
10335	1,3-Dichloropropane	142-28-9	18	1	1
10335	2,2-Dichloropropane	594-20-7	21	1	1
10335	1,1-Dichloropropene	563-58-6	21	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	20	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	20	1	1
10335	Ethylbenzene	100-41-4	19	0.5	1
10335	Hexachlorobutadiene	87-68-3	19	2	1
10335	2-Hexanone	591-78-6	76	3	1
10335	Isopropylbenzene	98-82-8	37	1	1
10335	p-Isopropyltoluene	99-87-6	18	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	19	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	80	3	1
10335	Methylene Chloride	75-09-2	20	2	1
10335	Naphthalene	91-20-3	18	1	1
10335	n-Propylbenzene	103-65-1	55	1	1
10335	Styrene	100-42-5	19	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	20	1	1

Sample Description: **GW-082913-BP-MW-2 MSD Grab Groundwater**
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183638
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 13:30 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE02

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	17	1	1
10335	Tetrachloroethene	127-18-4	21	0.8	1
10335	Toluene	108-88-3	19	0.5	1
10335	1,2,3-Trichlorobenzene	87-61-6	18	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	18	1	1
10335	1,1,1-Trichloroethane	71-55-6	19	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	20	0.8	1
10335	Trichloroethene	79-01-6	22	1	1
10335	Trichlorofluoromethane	75-69-4	23	2	1
10335	1,2,3-Trichloropropane	96-18-4	19	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	19	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	19	1	1
10335	Vinyl Chloride	75-01-4	20	1	1
10335	m+p-Xylene	179601-23-1	39	0.5	1
10335	o-Xylene	95-47-6	19	0.5	1
10335	Xylene (Total)	1330-20-7	57	0.5	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	1,700	50	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
02211	DRO C12-C24 w/Si Gel	n.a.	1,800	28	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	66	1

General Sample Comments

State of Washington Lab Certification No. C259
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8-13.7C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.6-12.5 C.

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	N132481AB	09/05/2013 14:48	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	N132481AB	09/05/2013 14:48	Linda C Pape	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13247B20A	09/05/2013 15:48	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13247B20A	09/05/2013 15:48	Catherine J Schwarz	1

Sample Description: GW-082913-BP-MW-2 MSD Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183638
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 13:30 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	132490021A	09/11/2013 08:59	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	132490021A	09/08/2013 12:25	Denise L Trimby	1

Sample Description: GW-082913-BP-MW-1 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183639
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 14:15 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE01

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.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	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.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	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.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	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.	2	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	13	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	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.	1	1

Sample Description: GW-082913-BP-MW-1 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183639
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 14:15 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE01

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	1
10335	Tetrachloroethene	127-18-4	7	0.8	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.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	6	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	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.	1	1
10335	m+p-Xylene	179601-23-1	0.8	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	0.8	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
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.	0.031	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
02211	DRO C12-C24 w/Si Gel	n.a.	N.D.	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
Metals	**SW-846 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	0.42	0.085	1

Sample Description: GW-082913-BP-MW-1 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183639
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 14:15 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE01

General Sample Comments

State of Washington Lab Certification No. C259
Carcinogenic PAHs have been reported for this sample
The temperature of the temperature blank bottle(s) for the 8260, Gx, Dx, and Lead containers upon receipt at the lab was 6.8-13.7C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.6-12.5 C.

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	W132521AA	09/09/2013 19:29	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W132521AA	09/09/2013 19:29	Emily R Styer	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13247WAC026	09/06/2013 19:54	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13247WAC026	09/04/2013 16:00	David S Schrum	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13247B20A	09/05/2013 13:38	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13247B20A	09/05/2013 13:38	Catherine J Schwarz	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	132490021A	09/11/2013 06:37	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	132490021A	09/08/2013 12:25	Denise L Trimby	1
06035	Lead	SW-846 6020	1	132506050006A	09/10/2013 12:38	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	132506050006	09/09/2013 23:30	Annamaria Stipkovits	1

Sample Description: GW-082913-BP-MW-4 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183640
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 15:40 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE04

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.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	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.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	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.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	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.	2	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	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.	1	1

Sample Description: GW-082913-BP-MW-4 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183640
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 15:40 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE04

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	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	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.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	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.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	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.	0.031	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
02211	DRO C12-C24 w/Si Gel	n.a.	N.D.	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	67	1
Metals	**SW-846 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	N.D.	0.085	1

Sample Description: GW-082913-BP-MW-4 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183640
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013 15:40 by BP

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE04

General Sample Comments

State of Washington Lab Certification No. C259
Carcinogenic PAHs have been reported for this sample
The temperature of the temperature blank bottle(s) for the Dx and Lead containers upon receipt at the lab was 6.8-13.7C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.6-12.5 C.

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	W132482AA	09/05/2013 23:59	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W132482AA	09/05/2013 23:59	Emily R Styer	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13247WAC026	09/06/2013 20:23	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13247WAC026	09/04/2013 16:00	David S Schrum	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13247B20A	09/05/2013 13:59	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13247B20A	09/05/2013 13:59	Catherine J Schwarz	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	132490021A	09/11/2013 06:57	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	132490021A	09/08/2013 12:25	Denise L Trimby	1
06035	Lead	SW-846 6020	1	132506050006A	09/10/2013 12:39	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	132506050006	09/09/2013 23:30	Annamaria Stipkovits	1

Sample Description: GW-083013-SR-MW-10 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183641
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/30/2013 09:20 by SR

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE10

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	0.8	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.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	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.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	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.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	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.	2	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	2	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	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	1	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	3	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	1

Sample Description: GW-083013-SR-MW-10 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183641
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/30/2013 09:20 by SR

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE10

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	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	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.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	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	41	1	1
10335	m+p-Xylene	179601-23-1	1	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
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	0.071	0.010	1
08357	2-Methylnaphthalene	91-57-6	0.039	0.010	1
08357	Naphthalene	91-20-3	0.051	0.031	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
02211	DRO C12-C24 w/Si Gel	n.a.	57	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	0.10	0.085	1

Sample Description: GW-083013-SR-MW-10 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183641
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/30/2013 09:20 by SR

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE10

General Sample Comments

State of Washington Lab Certification No. C259
Carcinogenic PAHs have been reported for this sample
The temperature of the temperature blank bottle(s) for the 8260, Gx, and Lead containers upon receipt at the lab was 6.8-13.7C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.6-12.5 C.

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	W132521AA	09/09/2013 19:53	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W132521AA	09/09/2013 19:53	Emily R Styer	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13247WAC026	09/06/2013 20:53	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13247WAC026	09/04/2013 16:00	David S Schrum	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13247B20A	09/05/2013 14:21	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13247B20A	09/05/2013 14:21	Catherine J Schwarz	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	132490021A	09/11/2013 07:17	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	132490021A	09/08/2013 12:25	Denise L Trimby	1
06035	Lead	SW-846 6020	1	132506050006A	09/10/2013 12:41	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	132506050006	09/09/2013 23:30	Annamaria Stipkovits	1

Sample Description: GW-083013-SR-MW-5 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183642
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/30/2013 11:10 by SR

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE05

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	7	6	1
10335	Benzene	71-43-2	0.7	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.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	1
10335	2-Butanone	78-93-3	4	3	1
10335	n-Butylbenzene	104-51-8	12	1	1
10335	sec-Butylbenzene	135-98-8	10	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.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	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.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	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.	2	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10335	Ethylbenzene	100-41-4	49	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	59	1	1
10335	p-Isopropyltoluene	99-87-6	1	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	92	1	1
10335	n-Propylbenzene	103-65-1	160	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	1

Sample Description: GW-083013-SR-MW-5 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183642
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/30/2013 11:10 by SR

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE05

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	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	1
10335	Toluene	108-88-3	1	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.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	92	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	16	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	1
10335	m+p-Xylene	179601-23-1	85	0.5	1
10335	o-Xylene	95-47-6	4	0.5	1
10335	Xylene (Total)	1330-20-7	89	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
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	15	0.26	25
08357	2-Methylnaphthalene	91-57-6	15	0.26	25
08357	Naphthalene	91-20-3	86	0.77	25
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	3,200	50	1
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
02211	DRO C12-C24 w/Si Gel	n.a.	340	29	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	69	1
Metals	**SW-846 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	1.2	0.085	1

Sample Description: GW-083013-SR-MW-5 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183642
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/30/2013 11:10 by SR

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE05

General Sample Comments

State of Washington Lab Certification No. C259
Carcinogenic PAHs have been reported for this sample
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8-13.7C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.6-12.5 C.

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	W132521AA	09/09/2013 20:17	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W132521AA	09/09/2013 20:17	Emily R Styer	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13247WAC026	09/06/2013 21:22	Chad A Moline	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13247WAC026	09/09/2013 15:31	Chad A Moline	25
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13247WAC026	09/04/2013 16:00	David S Schrum	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13247B20A	09/05/2013 14:43	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13247B20A	09/05/2013 14:43	Catherine J Schwarz	1
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	132490021A	09/11/2013 07:37	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	132490021A	09/08/2013 12:25	Denise L Trimby	1
06035	Lead	SW-846 6020	1	132506050006A	09/10/2013 12:43	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	132506050006	09/09/2013 23:30	Annamaria Stipkovits	1

Sample Description: GW-083013-SR-MW-3 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183643
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/30/2013 12:50 by SR

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE03

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.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	9	1	1
10335	sec-Butylbenzene	135-98-8	8	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Carbon Disulfide	75-15-0	N.D.	1	1
10335	Carbon Tetrachloride	56-23-5	N.D.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	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.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	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.	2	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	4	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10335	Ethylbenzene	100-41-4	54	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	33	1	1
10335	p-Isopropyltoluene	99-87-6	3	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	33	1	1
10335	n-Propylbenzene	103-65-1	81	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	1

Sample Description: GW-083013-SR-MW-3 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183643
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/30/2013 12:50 by SR

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE03

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	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	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.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	680	10	10
10335	1,3,5-Trimethylbenzene	108-67-8	52	1	1
10335	Vinyl Chloride	75-01-4	1	1	1
10335	m+p-Xylene	179601-23-1	170	0.5	1
10335	o-Xylene	95-47-6	17	0.5	1
10335	Xylene (Total)	1330-20-7	190	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	1
08357	Chrysene	218-01-9	N.D.	0.011	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	1
08357	1-Methylnaphthalene	90-12-0	7.5	0.011	1
08357	2-Methylnaphthalene	91-57-6	4.4	0.011	1
08357	Naphthalene	91-20-3	31	0.32	10
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	4,300	250	5
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
02211	DRO C12-C24 w/Si Gel	n.a.	260	30	1
02211	HRO C24-C40 w/Si Gel	n.a.	N.D.	70	1
Metals	**SW-846 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	0.26	0.085	1

Sample Description: GW-083013-SR-MW-3 Grab Groundwater
MLK Tidewater Site
2800 Martin Luther King Jr Way - Seattle, WA

LL Sample # WW 7183643
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/30/2013 12:50 by SR

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSE03

General Sample Comments

State of Washington Lab Certification No. C259
Carcinogenic PAHs have been reported for this sample
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8-13.7C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.6-12.5 C.

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	W132521AA	09/09/2013 20:41	Emily R Styer	1
10335	8260 Solvent Compound - Water	SW-846 8260B	1	W132521AA	09/09/2013 21:05	Emily R Styer	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W132521AA	09/09/2013 20:41	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	W132521AA	09/09/2013 21:05	Emily R Styer	10
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13247WAC026	09/06/2013 21:51	Chad A Moline	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13247WAC026	09/09/2013 16:00	Chad A Moline	10
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13247WAC026	09/04/2013 16:00	David S Schrum	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13247B20A	09/05/2013 17:19	Catherine J Schwarz	5
01146	GC VOA Water Prep	SW-846 5030B	1	13247B20A	09/05/2013 17:19	Catherine J Schwarz	5
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	132490021A	09/11/2013 07:57	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	132490021A	09/08/2013 12:25	Denise L Trimby	1
06035	Lead	SW-846 6020	1	132506050006A	09/10/2013 12:45	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	132506050006	09/09/2013 23:30	Annamaria Stipkovits	1

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

LL Sample # WW 7183644
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/30/2013 by SR

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSEDP

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.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	1
10335	2-Butanone	78-93-3	N.D.	3	1
10335	n-Butylbenzene	104-51-8	10	1	1
10335	sec-Butylbenzene	135-98-8	7	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.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	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.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	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.	2	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	2	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	1
10335	Ethylbenzene	100-41-4	47	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	18	1	1
10335	p-Isopropyltoluene	99-87-6	5	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	39	1	1
10335	n-Propylbenzene	103-65-1	45	1	1
10335	Styrene	100-42-5	N.D.	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1	1

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

LL Sample # WW 7183644
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/30/2013 by SR

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSEDP

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	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	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.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	1
10335	1,2,3-Trichloropropane	96-18-4	N.D.	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	510	10	10
10335	1,3,5-Trimethylbenzene	108-67-8	83	1	1
10335	Vinyl Chloride	75-01-4	N.D.	1	1
10335	m+p-Xylene	179601-23-1	280	0.5	1
10335	o-Xylene	95-47-6	74	0.5	1
10335	Xylene (Total)	1330-20-7	350	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	
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	12	0.10	10
08357	2-Methylnaphthalene	91-57-6	11	0.10	10
08357	Naphthalene	91-20-3	27	0.30	10
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	3,500	250	5
GC Petroleum Hydrocarbons w/Si	**ECY 97-602 NWTPH-Dx modified**		**ug/l**	**ug/l**	
02211	DRO C12-C24 w/Si Gel	n.a.	220	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	1.2	0.085	1

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

LL Sample # WW 7183644
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/30/2013 by SR

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSEDP

General Sample Comments

State of Washington Lab Certification No. C259
Carcinogenic PAHs have been reported for this sample
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8-13.7C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.6-12.5 C.

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	W132521AA	09/09/2013 21:28	Emily R Styer	1
10335	8260 Solvent Compound - Water	SW-846 8260B	1	W132542AA	09/11/2013 23:27	Emily R Styer	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W132521AA	09/09/2013 21:28	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	W132542AA	09/11/2013 23:27	Emily R Styer	10
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13247WAC026	09/06/2013 22:21	Chad A Moline	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13247WAC026	09/09/2013 16:29	Chad A Moline	10
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13247WAC026	09/04/2013 16:00	David S Schrum	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13247B20A	09/05/2013 17:41	Catherine J Schwarz	5
01146	GC VOA Water Prep	SW-846 5030B	1	13247B20A	09/05/2013 17:41	Catherine J Schwarz	5
02211	NWTPH-Dx water w/Si Gel	ECY 97-602 NWTPH-Dx modified	1	132490021A	09/11/2013 08:19	Christine E Dolman	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	132490021A	09/08/2013 12:25	Denise L Trimby	1
06035	Lead	SW-846 6020	1	132506050006A	09/10/2013 12:47	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	132506050006	09/09/2013 23:30	Annamaria Stipkovits	1

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

LL Sample # WW 7183645
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSETB

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.	1	1
10335	Bromoform	75-25-2	N.D.	1	1
10335	Bromomethane	74-83-9	N.D.	1	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.	1	1
10335	Chlorobenzene	108-90-7	N.D.	0.8	1
10335	Chloroethane	75-00-3	N.D.	1	1
10335	Chloroform	67-66-3	N.D.	0.8	1
10335	Chloromethane	74-87-3	N.D.	1	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.	1	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	Dibromomethane	74-95-3	N.D.	1	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.	2	1
10335	1,1-Dichloroethane	75-34-3	N.D.	1	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1
10335	1,2-Dichloropropane	78-87-5	N.D.	1	1
10335	1,3-Dichloropropane	142-28-9	N.D.	1	1
10335	2,2-Dichloropropane	594-20-7	N.D.	1	1
10335	1,1-Dichloropropene	563-58-6	N.D.	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	1	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.	1	1

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

LL Sample # WW 7183645
LL Group # 1415909
Account # 13534

Project Name: 301233 Tidewater Seattle

Collected: 08/29/2013

Submitted: 08/31/2013 08:50
Reported: 09/13/2013 20:10

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

TSETB

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	1
10335	Tetrachloroethene	127-18-4	N.D.	0.8	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.	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.8	1
10335	Trichloroethene	79-01-6	N.D.	1	1
10335	Trichlorofluoromethane	75-69-4	N.D.	2	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.	1	1
10335	m+p-Xylene	179601-23-1	N.D.	0.5	1
10335	o-Xylene	95-47-6	N.D.	0.5	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC Volatiles	**ECY 97-602 NWTPH-Gx**		**ug/l**	**ug/l**	
08273	NWTPH-Gx water C7-C12	n.a.	N.D.	50	1

General Sample Comments

State of Washington Lab Certification No. C259
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8-13.7C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.6-12.5 C.

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	W132521AA	09/09/2013 12:19	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W132521AA	09/09/2013 12:19	Emily R Styer	1
08273	NWTPH-Gx water C7-C12	ECY 97-602 NWTPH-Gx	1	13247B20A	09/05/2013 12:11	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13247B20A	09/05/2013 12:11	Catherine J Schwarz	1

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1415909
Reported: 09/13/13 at 08:10 PM

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

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: N132481AA	Sample number(s): 7183636							
Acetone	N.D.	6.	ug/l	84		38-157		
Benzene	N.D.	0.5	ug/l	93		78-120		
Bromobenzene	N.D.	1.	ug/l	93		80-120		
Bromochloromethane	N.D.	1.	ug/l	94		80-121		
Bromodichloromethane	N.D.	1.	ug/l	95		73-120		
Bromoform	N.D.	1.	ug/l	90		61-120		
Bromomethane	N.D.	1.	ug/l	87		51-120		
2-Butanone	N.D.	3.	ug/l	80		58-126		
n-Butylbenzene	N.D.	1.	ug/l	83		80-120		
sec-Butylbenzene	N.D.	1.	ug/l	87		80-120		
tert-Butylbenzene	N.D.	1.	ug/l	87		80-120		
Carbon Disulfide	N.D.	1.	ug/l	93		58-126		
Carbon Tetrachloride	N.D.	1.	ug/l	101		74-130		
Chlorobenzene	N.D.	0.8	ug/l	96		80-120		
Chloroethane	N.D.	1.	ug/l	86		45-120		
Chloroform	N.D.	0.8	ug/l	101		77-122		
Chloromethane	N.D.	1.	ug/l	84		55-120		
2-Chlorotoluene	N.D.	1.	ug/l	90		80-120		
4-Chlorotoluene	N.D.	1.	ug/l	91		80-120		
1,2-Dibromo-3-chloropropane	N.D.	2.	ug/l	82		56-120		
Dibromochloromethane	N.D.	1.	ug/l	97		72-120		
1,2-Dibromoethane	N.D.	0.5	ug/l	96		76-120		
Dibromomethane	N.D.	1.	ug/l	95		80-120		
1,2-Dichlorobenzene	N.D.	1.	ug/l	94		80-120		
1,3-Dichlorobenzene	N.D.	1.	ug/l	92		80-120		
1,4-Dichlorobenzene	N.D.	1.	ug/l	92		80-120		
Dichlorodifluoromethane	N.D.	2.	ug/l	80		35-122		
1,1-Dichloroethane	N.D.	1.	ug/l	94		80-120		
1,2-Dichloroethane	N.D.	0.5	ug/l	101		71-130		
1,1-Dichloroethene	N.D.	0.8	ug/l	99		76-124		
cis-1,2-Dichloroethene	N.D.	0.8	ug/l	95		80-120		
trans-1,2-Dichloroethene	N.D.	0.8	ug/l	100		80-120		
1,2-Dichloropropane	N.D.	1.	ug/l	93		80-120		
1,3-Dichloropropane	N.D.	1.	ug/l	90		80-120		
2,2-Dichloropropane	N.D.	1.	ug/l	95		67-124		
1,1-Dichloropropene	N.D.	1.	ug/l	97		80-120		
cis-1,3-Dichloropropene	N.D.	1.	ug/l	96		80-120		
trans-1,3-Dichloropropene	N.D.	1.	ug/l	96		69-120		
Ethylbenzene	N.D.	0.5	ug/l	90		79-120		
Hexachlorobutadiene	N.D.	2.	ug/l	79		50-133		
2-Hexanone	N.D.	3.	ug/l	73		59-125		
Isopropylbenzene	N.D.	1.	ug/l	89		77-120		
p-Isopropyltoluene	N.D.	1.	ug/l	84		80-120		

*- 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 Group Number: 1415909
Reported: 09/13/13 at 08:10 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	93		75-120		
4-Methyl-2-pentanone	N.D.	3.	ug/l	76		59-120		
Methylene Chloride	N.D.	2.	ug/l	97		80-120		
Naphthalene	N.D.	1.	ug/l	75		47-126		
n-Propylbenzene	N.D.	1.	ug/l	90		80-120		
Styrene	N.D.	1.	ug/l	91		80-120		
1,1,1,2-Tetrachloroethane	N.D.	1.	ug/l	95		80-120		
1,1,2,2-Tetrachloroethane	N.D.	1.	ug/l	90		70-120		
Tetrachloroethene	N.D.	0.8	ug/l	95		80-120		
Toluene	N.D.	0.5	ug/l	94		80-120		
1,2,3-Trichlorobenzene	N.D.	1.	ug/l	82		58-126		
1,2,4-Trichlorobenzene	N.D.	1.	ug/l	82		65-120		
1,1,1-Trichloroethane	N.D.	0.8	ug/l	95		66-126		
1,1,2-Trichloroethane	N.D.	0.8	ug/l	94		80-120		
Trichloroethene	N.D.	1.	ug/l	98		80-120		
Trichlorofluoromethane	N.D.	2.	ug/l	93		65-130		
1,2,3-Trichloropropane	N.D.	1.	ug/l	94		76-120		
1,2,4-Trimethylbenzene	N.D.	1.	ug/l	91		74-120		
1,3,5-Trimethylbenzene	N.D.	1.	ug/l	91		74-120		
Vinyl Chloride	N.D.	1.	ug/l	90		63-120		
m+p-Xylene	N.D.	0.5	ug/l	91		80-120		
o-Xylene	N.D.	0.5	ug/l	89		80-120		
Xylene (Total)	N.D.	0.5	ug/l	90		80-120		
Batch number: N132481AB	Sample number(s): 7183637-7183638							
Acetone	N.D.	6.	ug/l	88		38-157		
Benzene	N.D.	0.5	ug/l	95		78-120		
Bromobenzene	N.D.	1.	ug/l	93		80-120		
Bromochloromethane	N.D.	1.	ug/l	99		80-121		
Bromodichloromethane	N.D.	1.	ug/l	96		73-120		
Bromoform	N.D.	1.	ug/l	91		61-120		
Bromomethane	N.D.	1.	ug/l	90		51-120		
2-Butanone	N.D.	3.	ug/l	82		58-126		
n-Butylbenzene	N.D.	1.	ug/l	86		80-120		
sec-Butylbenzene	N.D.	1.	ug/l	88		80-120		
tert-Butylbenzene	N.D.	1.	ug/l	82		80-120		
Carbon Disulfide	N.D.	1.	ug/l	87		58-126		
Carbon Tetrachloride	N.D.	1.	ug/l	104		74-130		
Chlorobenzene	N.D.	0.8	ug/l	96		80-120		
Chloroethane	N.D.	1.	ug/l	94		45-120		
Chloroform	N.D.	0.8	ug/l	101		77-122		
Chloromethane	N.D.	1.	ug/l	92		55-120		
2-Chlorotoluene	N.D.	1.	ug/l	90		80-120		
4-Chlorotoluene	N.D.	1.	ug/l	93		80-120		
1,2-Dibromo-3-chloropropane	N.D.	2.	ug/l	80		56-120		
Dibromochloromethane	N.D.	1.	ug/l	96		72-120		
1,2-Dibromoethane	N.D.	0.5	ug/l	96		76-120		
Dibromomethane	N.D.	1.	ug/l	93		80-120		
1,2-Dichlorobenzene	N.D.	1.	ug/l	94		80-120		
1,3-Dichlorobenzene	N.D.	1.	ug/l	94		80-120		
1,4-Dichlorobenzene	N.D.	1.	ug/l	94		80-120		
Dichlorodifluoromethane	N.D.	2.	ug/l	93		35-122		
1,1-Dichloroethane	N.D.	1.	ug/l	96		80-120		
1,2-Dichloroethane	N.D.	0.5	ug/l	101		71-130		
1,1-Dichloroethene	N.D.	0.8	ug/l	99		76-124		
cis-1,2-Dichloroethene	N.D.	0.8	ug/l	97		80-120		

*- 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 Group Number: 1415909
Reported: 09/13/13 at 08:10 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
trans-1,2-Dichloroethene	N.D.	0.8	ug/l	100		80-120		
1,2-Dichloropropane	N.D.	1.	ug/l	95		80-120		
1,3-Dichloropropane	N.D.	1.	ug/l	91		80-120		
2,2-Dichloropropane	N.D.	1.	ug/l	96		67-124		
1,1-Dichloropropene	N.D.	1.	ug/l	99		80-120		
cis-1,3-Dichloropropene	N.D.	1.	ug/l	97		80-120		
trans-1,3-Dichloropropene	N.D.	1.	ug/l	97		69-120		
Ethylbenzene	N.D.	0.5	ug/l	92		79-120		
Hexachlorobutadiene	N.D.	2.	ug/l	82		50-133		
2-Hexanone	N.D.	3.	ug/l	76		59-125		
Isopropylbenzene	N.D.	1.	ug/l	91		77-120		
p-Isopropyltoluene	N.D.	1.	ug/l	86		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	92		75-120		
4-Methyl-2-pentanone	N.D.	3.	ug/l	78		59-120		
Methylene Chloride	N.D.	2.	ug/l	97		80-120		
Naphthalene	N.D.	1.	ug/l	77		47-126		
n-Propylbenzene	N.D.	1.	ug/l	91		80-120		
Styrene	N.D.	1.	ug/l	90		80-120		
1,1,1,2-Tetrachloroethane	N.D.	1.	ug/l	98		80-120		
1,1,2,2-Tetrachloroethane	N.D.	1.	ug/l	89		70-120		
Tetrachloroethene	N.D.	0.8	ug/l	97		80-120		
Toluene	N.D.	0.5	ug/l	94		80-120		
1,2,3-Trichlorobenzene	N.D.	1.	ug/l	83		58-126		
1,2,4-Trichlorobenzene	N.D.	1.	ug/l	82		65-120		
1,1,1-Trichloroethane	N.D.	0.8	ug/l	88		66-126		
1,1,2-Trichloroethane	N.D.	0.8	ug/l	97		80-120		
Trichloroethene	N.D.	1.	ug/l	99		80-120		
Trichlorofluoromethane	N.D.	2.	ug/l	104		65-130		
1,2,3-Trichloropropane	N.D.	1.	ug/l	94		76-120		
1,2,4-Trimethylbenzene	N.D.	1.	ug/l	91		74-120		
1,3,5-Trimethylbenzene	N.D.	1.	ug/l	92		74-120		
Vinyl Chloride	N.D.	1.	ug/l	99		63-120		
m+p-Xylene	N.D.	0.5	ug/l	93		80-120		
o-Xylene	N.D.	0.5	ug/l	90		80-120		
Xylene (Total)	N.D.	0.5	ug/l	92		80-120		
Batch number: W132482AA	Sample number(s): 7183632-7183635,7183640							
Acetone	N.D.	6.	ug/l	96	93	38-157	3	30
Benzene	N.D.	0.5	ug/l	99	98	78-120	1	30
Bromobenzene	N.D.	1.	ug/l	107	105	80-120	2	30
Bromochloromethane	N.D.	1.	ug/l	98	99	80-121	2	30
Bromodichloromethane	N.D.	1.	ug/l	95	95	73-120	0	30
Bromoform	N.D.	1.	ug/l	93	95	61-120	3	30
Bromomethane	N.D.	1.	ug/l	74	73	51-120	1	30
2-Butanone	N.D.	3.	ug/l	97	94	58-126	4	30
n-Butylbenzene	N.D.	1.	ug/l	99	99	80-120	0	30
sec-Butylbenzene	N.D.	1.	ug/l	102	102	80-120	0	30
tert-Butylbenzene	N.D.	1.	ug/l	103	103	80-120	1	30
Carbon Disulfide	N.D.	1.	ug/l	92	94	58-126	2	30
Carbon Tetrachloride	N.D.	1.	ug/l	98	97	74-130	0	30
Chlorobenzene	N.D.	0.8	ug/l	106	108	80-120	1	30
Chloroethane	N.D.	1.	ug/l	76	76	45-120	0	30
Chloroform	N.D.	0.8	ug/l	100	100	77-122	0	30
Chloromethane	N.D.	1.	ug/l	91	92	55-120	1	30
2-Chlorotoluene	N.D.	1.	ug/l	107	105	80-120	2	30
4-Chlorotoluene	N.D.	1.	ug/l	105	106	80-120	1	30

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

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1415909
Reported: 09/13/13 at 08:10 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dibromo-3-chloropropane	N.D.	2.	ug/l	99	100	56-120	1	30
Dibromochloromethane	N.D.	1.	ug/l	97	99	72-120	2	30
1,2-Dibromoethane	N.D.	0.5	ug/l	104	106	76-120	1	30
Dibromomethane	N.D.	1.	ug/l	95	95	80-120	0	30
1,2-Dichlorobenzene	N.D.	1.	ug/l	109	110	80-120	1	30
1,3-Dichlorobenzene	N.D.	1.	ug/l	106	106	80-120	0	30
1,4-Dichlorobenzene	N.D.	1.	ug/l	107	108	80-120	1	30
Dichlorodifluoromethane	N.D.	2.	ug/l	84	82	35-122	2	30
1,1-Dichloroethane	N.D.	1.	ug/l	98	98	80-120	1	30
1,2-Dichloroethane	N.D.	0.5	ug/l	101	101	71-130	0	30
1,1-Dichloroethene	N.D.	0.8	ug/l	96	97	76-124	2	30
cis-1,2-Dichloroethene	N.D.	0.8	ug/l	98	99	80-120	1	30
trans-1,2-Dichloroethene	N.D.	0.8	ug/l	99	101	80-120	2	30
1,2-Dichloropropane	N.D.	1.	ug/l	102	101	80-120	0	30
1,3-Dichloropropane	N.D.	1.	ug/l	102	103	80-120	1	30
2,2-Dichloropropane	N.D.	1.	ug/l	95	95	67-124	0	30
1,1-Dichloropropene	N.D.	1.	ug/l	101	100	80-120	2	30
cis-1,3-Dichloropropene	N.D.	1.	ug/l	100	98	80-120	2	30
trans-1,3-Dichloropropene	N.D.	1.	ug/l	100	99	69-120	1	30
Ethylbenzene	N.D.	0.5	ug/l	103	104	79-120	1	30
Hexachlorobutadiene	N.D.	2.	ug/l	79	85	50-133	8	30
2-Hexanone	N.D.	3.	ug/l	95	95	59-125	0	30
Isopropylbenzene	N.D.	1.	ug/l	103	106	77-120	3	30
p-Isopropyltoluene	N.D.	1.	ug/l	99	100	80-120	1	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	97	98	75-120	1	30
4-Methyl-2-pentanone	N.D.	3.	ug/l	94	93	59-120	0	30
Methylene Chloride	N.D.	2.	ug/l	99	100	80-120	1	30
Naphthalene	N.D.	1.	ug/l	105	107	47-126	3	30
n-Propylbenzene	N.D.	1.	ug/l	105	105	80-120	0	30
Styrene	N.D.	1.	ug/l	105	106	80-120	1	30
1,1,1,2-Tetrachloroethane	N.D.	1.	ug/l	99	103	80-120	3	30
1,1,2,2-Tetrachloroethane	N.D.	1.	ug/l	104	104	70-120	0	30
Tetrachloroethene	N.D.	0.8	ug/l	105	107	80-120	2	30
Toluene	N.D.	0.5	ug/l	104	106	80-120	2	30
1,2,3-Trichlorobenzene	N.D.	1.	ug/l	100	104	58-126	4	30
1,2,4-Trichlorobenzene	N.D.	1.	ug/l	100	102	65-120	2	30
1,1,1-Trichloroethane	N.D.	0.8	ug/l	98	99	66-126	1	30
1,1,2-Trichloroethane	N.D.	0.8	ug/l	101	101	80-120	0	30
Trichloroethene	N.D.	1.	ug/l	102	103	80-120	1	30
Trichlorofluoromethane	N.D.	2.	ug/l	84	83	65-130	1	30
1,2,3-Trichloropropane	N.D.	1.	ug/l	109	106	76-120	2	30
1,2,4-Trimethylbenzene	N.D.	1.	ug/l	106	106	74-120	0	30
1,3,5-Trimethylbenzene	N.D.	1.	ug/l	105	105	74-120	0	30
Vinyl Chloride	N.D.	1.	ug/l	91	91	63-120	0	30
m+p-Xylene	N.D.	0.5	ug/l	104	105	80-120	1	30
o-Xylene	N.D.	0.5	ug/l	103	107	80-120	4	30
Xylene (Total)	N.D.	0.5	ug/l	104	106	80-120	2	30
Batch number: W132521AA	Sample number(s): 7183635,7183639,7183641-7183645							
Acetone	N.D.	6.	ug/l	90	86	38-157	5	30
Benzene	N.D.	0.5	ug/l	99	98	78-120	1	30
Bromobenzene	N.D.	1.	ug/l	99	100	80-120	1	30
Bromochloromethane	N.D.	1.	ug/l	101	100	80-121	1	30
Bromodichloromethane	N.D.	1.	ug/l	92	92	73-120	0	30
Bromoform	N.D.	1.	ug/l	90	88	61-120	2	30
Bromomethane	N.D.	1.	ug/l	69	78	51-120	13	30

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

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1415909
Reported: 09/13/13 at 08:10 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2-Butanone	N.D.	3.	ug/l	90	89	58-126	2	30
n-Butylbenzene	N.D.	1.	ug/l	96	95	80-120	1	30
sec-Butylbenzene	N.D.	1.	ug/l	99	98	80-120	1	30
tert-Butylbenzene	N.D.	1.	ug/l	101	99	80-120	1	30
Carbon Disulfide	N.D.	1.	ug/l	98	95	58-126	3	30
Carbon Tetrachloride	N.D.	1.	ug/l	102	100	74-130	1	30
Chlorobenzene	N.D.	0.8	ug/l	105	102	80-120	3	30
Chloroethane	N.D.	1.	ug/l	73	82	45-120	11	30
Chloroform	N.D.	0.8	ug/l	99	98	77-122	0	30
Chloromethane	N.D.	1.	ug/l	91	88	55-120	3	30
2-Chlorotoluene	N.D.	1.	ug/l	101	101	80-120	1	30
4-Chlorotoluene	N.D.	1.	ug/l	103	101	80-120	2	30
1,2-Dibromo-3-chloropropane	N.D.	2.	ug/l	86	89	56-120	4	30
Dibromochloromethane	N.D.	1.	ug/l	97	93	72-120	4	30
1,2-Dibromoethane	N.D.	0.5	ug/l	103	100	76-120	3	30
Dibromomethane	N.D.	1.	ug/l	95	93	80-120	1	30
1,2-Dichlorobenzene	N.D.	1.	ug/l	103	104	80-120	1	30
1,3-Dichlorobenzene	N.D.	1.	ug/l	102	101	80-120	1	30
1,4-Dichlorobenzene	N.D.	1.	ug/l	102	102	80-120	0	30
Dichlorodifluoromethane	N.D.	2.	ug/l	87	85	35-122	2	30
1,1-Dichloroethane	N.D.	1.	ug/l	100	97	80-120	3	30
1,2-Dichloroethane	N.D.	0.5	ug/l	100	99	71-130	0	30
1,1-Dichloroethene	N.D.	0.8	ug/l	101	95	76-124	7	30
cis-1,2-Dichloroethene	N.D.	0.8	ug/l	99	97	80-120	2	30
trans-1,2-Dichloroethene	N.D.	0.8	ug/l	103	100	80-120	3	30
1,2-Dichloropropane	N.D.	1.	ug/l	102	100	80-120	1	30
1,3-Dichloropropane	N.D.	1.	ug/l	99	98	80-120	2	30
2,2-Dichloropropane	N.D.	1.	ug/l	96	95	67-124	1	30
1,1-Dichloropropene	N.D.	1.	ug/l	104	102	80-120	2	30
cis-1,3-Dichloropropene	N.D.	1.	ug/l	97	96	80-120	1	30
trans-1,3-Dichloropropene	N.D.	1.	ug/l	95	94	69-120	1	30
Ethylbenzene	N.D.	0.5	ug/l	102	99	79-120	3	30
Hexachlorobutadiene	N.D.	2.	ug/l	76	79	50-133	4	30
2-Hexanone	N.D.	3.	ug/l	86	85	59-125	2	30
Isopropylbenzene	N.D.	1.	ug/l	102	100	77-120	2	30
p-Isopropyltoluene	N.D.	1.	ug/l	95	95	80-120	0	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	98	94	75-120	3	30
4-Methyl-2-pentanone	N.D.	3.	ug/l	87	87	59-120	0	30
Methylene Chloride	N.D.	2.	ug/l	100	99	80-120	1	30
Naphthalene	N.D.	1.	ug/l	93	95	47-126	2	30
n-Propylbenzene	N.D.	1.	ug/l	102	102	80-120	0	30
Styrene	N.D.	1.	ug/l	100	97	80-120	4	30
1,1,1,2-Tetrachloroethane	N.D.	1.	ug/l	99	97	80-120	2	30
1,1,2,2-Tetrachloroethane	N.D.	1.	ug/l	97	98	70-120	0	30
Tetrachloroethene	N.D.	0.8	ug/l	107	105	80-120	2	30
Toluene	N.D.	0.5	ug/l	103	101	80-120	2	30
1,2,3-Trichlorobenzene	N.D.	1.	ug/l	93	95	58-126	2	30
1,2,4-Trichlorobenzene	N.D.	1.	ug/l	94	94	65-120	0	30
1,1,1-Trichloroethane	N.D.	0.8	ug/l	97	96	66-126	1	30
1,1,2-Trichloroethane	N.D.	0.8	ug/l	96	95	80-120	1	30
Trichloroethene	N.D.	1.	ug/l	103	101	80-120	2	30
Trichlorofluoromethane	N.D.	2.	ug/l	90	87	65-130	3	30
1,2,3-Trichloropropane	N.D.	1.	ug/l	101	99	76-120	1	30
1,2,4-Trimethylbenzene	N.D.	1.	ug/l	101	100	74-120	1	30
1,3,5-Trimethylbenzene	N.D.	1.	ug/l	101	100	74-120	0	30
Vinyl Chloride	N.D.	1.	ug/l	92	90	63-120	2	30

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

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1415909
Reported: 09/13/13 at 08:10 PM

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
m+p-Xylene	N.D.	0.5	ug/l	102	100	80-120	3	30
o-Xylene	N.D.	0.5	ug/l	103	100	80-120	3	30
Xylene (Total)	N.D.	0.5	ug/l	103	100	80-120	3	30
Batch number: W132542AA	Sample number(s): 7183644							
1,2,4-Trimethylbenzene	N.D.	1.	ug/l	104	103	74-120	1	30
Batch number: 13247WAC026	Sample number(s): 7183632-7183636,7183639-7183644							
Benzo(a)anthracene	N.D.	0.010	ug/l	95	93	73-127	3	30
Benzo(a)pyrene	N.D.	0.010	ug/l	100	101	72-120	1	30
Benzo(b)fluoranthene	N.D.	0.010	ug/l	103	105	79-136	2	30
Benzo(k)fluoranthene	N.D.	0.010	ug/l	124	125	73-131	1	30
Chrysene	N.D.	0.010	ug/l	109	111	76-125	2	30
Dibenz(a,h)anthracene	N.D.	0.010	ug/l	107	101	58-131	6	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	ug/l	114	110	62-130	3	30
1-Methylnaphthalene	N.D.	0.010	ug/l	115	114	80-126	1	30
2-Methylnaphthalene	N.D.	0.010	ug/l	113	113	81-124	0	30
Naphthalene	N.D.	0.030	ug/l	109	109	75-120	1	30
Batch number: 13247B20A	Sample number(s): 7183632-7183645							
NWTPH-Gx water C7-C12	N.D.	50.	ug/l	93		75-135		
Batch number: 132490021A	Sample number(s): 7183635-7183644							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	86		32-117		
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 132490022A	Sample number(s): 7183632-7183634							
DRO C12-C24 w/Si Gel	N.D.	30.	ug/l	89		32-117		
HRO C24-C40 w/Si Gel	N.D.	70.	ug/l					
Batch number: 132506050006A	Sample number(s): 7183632-7183636,7183639-7183644							
Lead	N.D.	0.085	ug/l	100		90-115		

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: N132481AA	Sample number(s): 7183636 UNSPK: 7183636								
Acetone	90	87	35-144	3	30				
Benzene	99	98	72-134	1	30				
Bromobenzene	95	94	82-115	1	30				
Bromochloromethane	95	97	76-134	3	30				
Bromodichloromethane	101	102	38-137	2	30				
Bromoform	91	90	48-118	2	30				
Bromomethane	89	91	47-129	2	30				
2-Butanone	82	82	53-124	1	30				
n-Butylbenzene	90	92	74-134	2	30				
sec-Butylbenzene	93	95	79-125	2	30				
tert-Butylbenzene	86	88	81-121	2	30				
Carbon Disulfide	95	96	53-149	1	30				

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

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1415909
Reported: 09/13/13 at 08:10 PM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Carbon Tetrachloride	114	113	72-135	1	30				
Chlorobenzene	101	100	87-124	1	30				
Chloroethane	91	94	51-145	3	30				
Chloroform	108	107	81-134	1	30				
Chloromethane	88	90	50-131	2	30				
2-Chlorotoluene	95	93	82-118	1	30				
4-Chlorotoluene	95	95	84-122	0	30				
1,2-Dibromo-3-chloropropane	83	84	54-134	2	30				
Dibromochloromethane	98	97	74-116	1	30				
1,2-Dibromoethane	96	96	77-116	0	30				
Dibromomethane	95	94	83-119	1	30				
1,2-Dichlorobenzene	96	95	84-119	1	30				
1,3-Dichlorobenzene	96	95	86-121	0	30				
1,4-Dichlorobenzene	96	96	85-121	0	30				
Dichlorodifluoromethane	101	103	52-129	2	30				
1,1-Dichloroethane	99	99	84-129	0	30				
1,2-Dichloroethane	106	103	68-131	2	30				
1,1-Dichloroethene	107	105	75-155	2	30				
cis-1,2-Dichloroethene	101	101	80-141	0	30				
trans-1,2-Dichloroethene	106	106	81-142	0	30				
1,2-Dichloropropane	97	97	83-124	1	30				
1,3-Dichloropropane	92	91	81-120	1	30				
2,2-Dichloropropane	106	105	69-135	1	30				
1,1-Dichloropropene	108	107	86-137	1	30				
cis-1,3-Dichloropropene	100	101	70-116	1	30				
trans-1,3-Dichloropropene	99	98	74-119	1	30				
Ethylbenzene	97	96	71-134	2	30				
Hexachlorobutadiene	91	93	56-134	2	30				
2-Hexanone	77	76	55-127	1	30				
Isopropylbenzene	93	101	75-128	4	30				
p-Isopropyltoluene	92	92	76-123	1	30				
Methyl Tertiary Butyl Ether	94	94	72-126	0	30				
4-Methyl-2-pentanone	78	80	63-123	1	30				
Methylene Chloride	101	100	78-133	1	30				
Naphthalene	77	82	52-125	5	30				
n-Propylbenzene	64*	92	74-134	11	30				
Styrene	94	93	78-125	1	30				
1,1,1,2-Tetrachloroethane	102	100	74-136	2	30				
1,1,2,2-Tetrachloroethane	87	87	72-128	0	30				
Tetrachloroethene	104	103	80-128	1	30				
Toluene	99	97	80-125	2	30				
1,2,3-Trichlorobenzene	87	90	50-138	4	30				
1,2,4-Trichlorobenzene	90	91	56-137	1	30				
1,1,1-Trichloroethane	97	96	69-140	1	30				
1,1,2-Trichloroethane	100	98	71-141	2	30				
Trichloroethene	107	108	88-133	1	30				
Trichlorofluoromethane	112	114	64-146	1	30				
1,2,3-Trichloropropane	95	93	76-118	2	30				
1,2,4-Trimethylbenzene	96	97	72-130	1	30				
1,3,5-Trimethylbenzene	96	96	65-132	0	30				
Vinyl Chloride	100	101	66-133	1	30				
m+p-Xylene	97	96	79-125	1	30				

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Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1415909
Reported: 09/13/13 at 08:10 PM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
o-Xylene	95	94	79-125	1	30				
Xylene (Total)	96	95	79-125	1	30				
Batch number: N132481AB	Sample number(s): 7183637-7183638 UNSPK: 7183636								
Acetone	90	87	35-144	3	30				
Benzene	99	98	72-134	1	30				
Bromobenzene	95	94	82-115	1	30				
Bromochloromethane	95	97	76-134	3	30				
Bromodichloromethane	101	102	38-137	2	30				
Bromoform	91	90	48-118	2	30				
Bromomethane	89	91	47-129	2	30				
2-Butanone	82	82	53-124	1	30				
n-Butylbenzene	90	92	74-134	2	30				
sec-Butylbenzene	93	95	79-125	2	30				
tert-Butylbenzene	86	88	81-121	2	30				
Carbon Disulfide	95	96	53-149	1	30				
Carbon Tetrachloride	114	113	72-135	1	30				
Chlorobenzene	101	100	87-124	1	30				
Chloroethane	91	94	51-145	3	30				
Chloroform	108	107	81-134	1	30				
Chloromethane	88	90	50-131	2	30				
2-Chlorotoluene	95	93	82-118	1	30				
4-Chlorotoluene	95	95	84-122	0	30				
1,2-Dibromo-3-chloropropane	83	84	54-134	2	30				
Dibromochloromethane	98	97	74-116	1	30				
1,2-Dibromoethane	96	96	77-116	0	30				
Dibromomethane	95	94	83-119	1	30				
1,2-Dichlorobenzene	96	95	84-119	1	30				
1,3-Dichlorobenzene	96	95	86-121	0	30				
1,4-Dichlorobenzene	96	96	85-121	0	30				
Dichlorodifluoromethane	101	103	52-129	2	30				
1,1-Dichloroethane	99	99	84-129	0	30				
1,2-Dichloroethane	106	103	68-131	2	30				
1,1-Dichloroethene	107	105	75-155	2	30				
cis-1,2-Dichloroethene	101	101	80-141	0	30				
trans-1,2-Dichloroethene	106	106	81-142	0	30				
1,2-Dichloropropane	97	97	83-124	1	30				
1,3-Dichloropropane	92	91	81-120	1	30				
2,2-Dichloropropane	106	105	69-135	1	30				
1,1-Dichloropropene	108	107	86-137	1	30				
cis-1,3-Dichloropropene	100	101	70-116	1	30				
trans-1,3-Dichloropropene	99	98	74-119	1	30				
Ethylbenzene	97	96	71-134	2	30				
Hexachlorobutadiene	91	93	56-134	2	30				
2-Hexanone	77	76	55-127	1	30				
Isopropylbenzene	93	101	75-128	4	30				
p-Isopropyltoluene	92	92	76-123	1	30				
Methyl Tertiary Butyl Ether	94	94	72-126	0	30				
4-Methyl-2-pentanone	78	80	63-123	1	30				
Methylene Chloride	101	100	78-133	1	30				
Naphthalene	77	82	52-125	5	30				
n-Propylbenzene	64*	92	74-134	11	30				

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

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1415909
Reported: 09/13/13 at 08:10 PM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Styrene	94	93	78-125	1	30				
1,1,1,2-Tetrachloroethane	102	100	74-136	2	30				
1,1,2,2-Tetrachloroethane	87	87	72-128	0	30				
Tetrachloroethene	104	103	80-128	1	30				
Toluene	99	97	80-125	2	30				
1,2,3-Trichlorobenzene	87	90	50-138	4	30				
1,2,4-Trichlorobenzene	90	91	56-137	1	30				
1,1,1-Trichloroethane	97	96	69-140	1	30				
1,1,2-Trichloroethane	100	98	71-141	2	30				
Trichloroethene	107	108	88-133	1	30				
Trichlorofluoromethane	112	114	64-146	1	30				
1,2,3-Trichloropropane	95	93	76-118	2	30				
1,2,4-Trimethylbenzene	96	97	72-130	1	30				
1,3,5-Trimethylbenzene	96	96	65-132	0	30				
Vinyl Chloride	100	101	66-133	1	30				
m+p-Xylene	97	96	79-125	1	30				
o-Xylene	95	94	79-125	1	30				
Xylene (Total)	96	95	79-125	1	30				
Batch number: 13247B20A	Sample number(s): 7183632-7183645 UNSPK: 7183636								
NWTPH-Gx water C7-C12	101	84	75-135	11	30				
Batch number: 132490021A	Sample number(s): 7183635-7183644 UNSPK: 7183636								
DRO C12-C24 w/Si Gel	62	107	60-120	47*	20				
Batch number: 132490022A	Sample number(s): 7183632-7183634 UNSPK: P182472								
DRO C12-C24 w/Si Gel	107	111	60-120	6	20				
Batch number: 132506050006A	Sample number(s): 7183632-7183636,7183639-7183644 UNSPK: 7183636 BKG: 7183636								
Lead	103	103	83-120	0	20	0.36	0.33	10 (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 Ext. Water Master w/GRO
Batch number: N132481AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7183636	98	99	95	96
Blank	100	96	94	91
LCS	99	99	96	98
MS	100	98	96	98
MSD	101	99	96	97
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 Ext. Water Master w/GRO

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

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1415909
Reported: 09/13/13 at 08:10 PM

Surrogate Quality Control

Batch number: N132481AB

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7183637	100	98	96	98
7183638	101	99	96	97
Blank	99	99	94	93
LCS	99	96	96	97
MS	100	98	96	98
MSD	101	99	96	97
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 Ext. Water Master w/GRO
Batch number: W132482AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7183632	100	100	103	98
7183633	100	101	102	98
7183634	99	102	103	98
7183635	99	103	102	97
7183640	97	101	102	97
Blank	97	100	103	96
LCS	99	103	102	97
LCSD	98	100	102	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 Ext. Water Master w/GRO
Batch number: W132521AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7183639	99	101	101	97
7183641	98	100	101	99
7183642	98	101	101	98
7183643	98	100	101	96
7183644	99	98	101	97
7183645	98	101	101	98
Blank	98	98	101	96
LCS	99	99	103	99
LCSD	99	100	101	98
Limits:	80-116	77-113	80-113	78-113

Analysis Name: PAHs in waters by SIM
Batch number: 13247WAC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7183632	90	90	102
7183633	94	92	106
7183634	94	94	105
7183635	92	96	103
7183636	87	77	107
7183639	92	98	106
7183640	93	94	105
7183641	91	99	109

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

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1415909
Reported: 09/13/13 at 08:10 PM

Surrogate Quality Control

7183642	87	93	102
7183643	86	102	102
7183644	88	89	98
Blank	94	94	110
LCS	89	92	109
LCSD	91	92	108
Limits:	44-137	62-141	51-136

Analysis Name: NWTPH-Gx water C7-C12
Batch number: 13247B20A

	Trifluorotoluene-F
7183632	86
7183633	87
7183634	91
7183635	91
7183636	95
7183637	123
7183638	127
7183639	86
7183640	86
7183641	89
7183642	129
7183643	95
7183644	88
7183645	86
Blank	84
LCS	116
MS	123
MSD	127
Limits:	63-135

Analysis Name: NWTPH-Dx water w/Si Gel
Batch number: 132490021A

	Orthoterphenyl
7183635	120
7183636	114
7183637	79
7183638	136
7183639	103
7183640	110
7183641	111
7183642	109
7183643	114
7183644	108
Blank	116
LCS	114
MS	79
MSD	136
Limits:	50-150

Analysis Name: NWTPH-Dx water w/Si Gel

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

Quality Control Summary

Client Name: Conestoga-Rovers & Associates Group Number: 1415909
Reported: 09/13/13 at 08:10 PM

Surrogate Quality Control

Batch number: 132490022A

	Orthoterphenyl
7183632	106
7183633	118
7183634	121
Blank	114
LCS	120
MS	122
MSD	121
Limits:	50-150

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

Chevron Northwest Region Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

Acct. # 13534 Group # 1415909 For Lancaster Laboratories use only Sample # 7183632-45

Instructions on reverse side correspond with circled numbers.

1 Client Information

Facility # 0601992-2013.1 WBS

Site Address 2800 MLK Jr. Way Seattle WA

~~Chevron PM~~ TM 8/30/13 PGB Lead Consultant CRA

Rich Solomon

Consultant/Office 20518 44th Ave W, Ste 190, Lynnwood WA 98036

Consultant Project Mgr. Ed Turner

Consultant Phone # 425-563-6500

Sampler S Rasmussen, B Pauley

4 Matrix

Soil ☐ Sediment ☐ Water ☒ Ground ☐ Potable ☐ NPDES ☐ Surface ☐ Oil ☐ Air ☐

3

Grab / Composite

2 Sample Identification

Sample Identification	Collected Date	Collected Time	Grab	Composite	Total Number of Containers	BTEX + MTBE 8021 ☐ 8260 ☒ Naphth	8260 full scan	Oxygenates ___	NWTPH GX	NWTPH DX Silica Gel Cleanup ☒	Lead Total ☐ Diss. ☐ Method	WAVPH ☐ WAEPH ☐
GW-082913-BP-MW-6	8/29/13	920	X		6	X			X	X SGC		
GW-082913-BP-MW-7	8/29/13	1015	X		6	X			X			
GW-082913-BP-MW-9	8/29/13	1120	X		6	X			X			
GW-082913-BP-MW-8	8/29/13	1200	X		6	X			X			
GW-082913-BP-MW-2	8/29/13	1330	X		18	X			X			
GW-082913-BP-MW-1	8/29/13	1415	X		6	X			X			
GW-082913-BP-MW-4	8/29/13	1540	X		6	X			X			
GW-083013-SR-MW-10	8/30/13	920	X		6	X			X			
GW-083013-SR-MW-5	8/30/13	1110	X		6	X			X			
GW-083013-SR-MW-3	8/30/13	1250	X		6	X			X			
DUP	8/30/13		X		6	X			X			
TRIP Blank	—	—			2	X			X			

5 Analyses Requested

SCR #: _____

- ☐ Results in Dry Weight
- ☐ J value reporting needed
- ☐ Must meet lowest detection limits possible for 8260 compounds
- ☐ 8021 MTBE Confirmation
- ☐ Confirm MTBE + Naphthalene
- ☐ Confirm highest hit by 8260
- ☐ Confirm all hits by 8260
- ☐ Run _____ oxy's on highest hit
- ☐ Run _____ oxy's on all hits

6 Remarks

Sent UPS
NWTPH-Dx w/ SGC includes TPHd and TPHo

Full scan VOCs (not just BTEX+MTBE) per M. Davis jmp 9/5/13

CRA chemist: Jeff Cloud jcloud@craworld.com

etturner@craworld.com
mdavis@craworld.com

7 Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | 24 hour

8 Data Package Options (please circle if required)

Type I - Full | Type VI (Raw Data)

CoA Equis/EDD per SOW

Relinquished by	Date	Time	Received by	Date	Time
	8/30/13				9
Relinquished by	Date	Time	Received by	Date	Time

Relinquished by Commerical Carrier: UPS X FedEx ____ Other ____

Received by — Date 8/31/13 Time 850

Temperature Upon Receipt 3.7-12.5C

Custody Seals Intact? Yes No

acct# 13534 Cap# 1415909 Sample# 7183632-45

CONESTOGA-ROVERS & ASSOCIATES

CHAIN OF CUSTODY RECORD

COC NO.: 38663

PAGE 1 OF 2

Address: 20818 44th Ave W, Ste 190, Lynnwood, WA

Phone: 425-563-6500 Fax: 425-563-6599/8036

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 061992-2013.1 - Sharon	Laboratory Name: Lancaster Laboratories
Project Name: Former Tidewater Site	Lab Contact:
Project Location: 2800 MLK Jr. Way, Seattle, WA	Lab Location: 2425 New Holland Pike Lancaster PA 17601
Chemistry Contact: Jeff Cloud, jcloud@cramwork.com	Lab Quote No:
Sampler(s): S Rasmussen, B Pankey	SSOW ID: PO # 40-48992
	Cooler No:
	Carrier: Fedex 8/30/13 UPS
	Airbill No:
	Date Shipped: 8/30/13

Item #	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Partial Parts (8270C SIM)	Total Lead (6020A)	TPHd w/SGT-Dx	TPHd w/o SGT-Dx	Temp	MS/MSD Request	Comments/ Special Instructions:
1																					NWTPH-Dx please report TPHd and TPHo
2	GW-082913-BP-MW-6	8/29/13	0920	AQ	G	X								3	X	X					
3	GW-082913-BP-MW-1	8/29/13	1415	AQ	G									1		X					
4	GW-083013-SR-MW-10	8/30/13	0920	AQ	G									1 2 (m 8/30/13)		X					
5	GW-083013-SR-MW-5	8/30/13	1110	AQ	G	X								3	X	X					Total lead added to MW-3 per M. Davis. jmp 9/5/13
6	GW-083013-SR-MW-3	8/30/13	1250	AQ	G		X								X	X	X	X			
7																					
8	DUP			AQ	G			X						1		X					
9	TEMP			AQ	-									1					X		
10																					CRA emi: Ed Turner etturner@cramerlda.com mdavis@cramerlda.com
11																					
12																					
13																					
14																					
15																					

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☒ Other: Standard

Total Number of Containers:

All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	CRA	8/30/13	4PM	1.			
2.				2.			
3.				3.	ELLE	8/31/13	850

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

acct# 13534 Cp# 1415909 Sample# 7183632-45

CHAIN OF CUSTODY RECORD

COC NO.: 38661

PAGE 1 OF 1

(See Reverse Side for Instructions)

CONESTOGA-ROVERS & ASSOCIATES

Address: 20818 44th Ave W, Ste 190 Lynnwood WA 98036

Phone: 425-563-6500 Fax: 425-563-6509

Project No/ Phase/Task Code: 061992-2013.1 - Rev 2	Laboratory Name: Lancaster Laboratories
Project Name: Former Tidewater Site	Lab Contact: Jill Parker
Project Location: 2800 MLK Jr. Way, Seattle, WA	Lab Location: 2425 New Holland Pike Lancaster, PA 17601
Chemistry Contact: Jeff Cloud, jcloud@craworld.com	Lab Quote No:
Sampler(s): S Rasmussen B Pawley	SSOW ID: PO# 4500048992
	Cooler No:
	Carrier: Tm 8/30/13 ~~FedEx~~ UPS
	Airbill No:
	Date Shipped: 8/30/13

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	HCl	HNO3	H2SO4	NaOH	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Analysis Requested: TPHd	NWTPH-Dx w/SGC	TEMP	MS/MSD Request	Comments/ Special Instructions:
1	GW-082913-BP-MW-6	8/29/13	0920	AQ	G									2	X				TPHd and TPHd for NWTPH-Dx w/SGC
2	GW-082913-BP-~~MW-~~ Tm 8/30/13	8/29/13	1415	AQ	G									2	X				
3																			
4	GW-082913-BP-MW-8	8/29/13	1200	AQ	G									2	X				MS/MSD request for MW-2 sample
5	GW-082913-BP-MW-2	8/29/13	1330	AQ	G									2	X			X	
6	DUP	—	—	AQ	G									2	X				
7	TEMP			AQ	—									1				X	
8																			
9																			
10																			CRA PM: Ed Turner etturner@craworld.com mdavis@craworld.com
11																			
12																			
13																			
14																			
15																			

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☒ Other: Standard

Total Number of Containers: 11

All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	CRA	8/30/13	4PM	1.			
2.				2.			
3.				3.	ELLE	8/31/13	850

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

acct# 13534 Gp# 1415909 Sample# 7183632-45

CHAIN OF CUSTODY RECORD

COC NO.: 38662

PAGE 1 OF 1

(See Reverse Side for Instructions)

CONESTOGA-ROVERS & ASSOCIATES

Address: 20818 44th Ave W, Ste 190, Lynnwood, WA 98036

Phone: 425-563-6500 Fax: 425-563-6599

Project No/ Phase/Task Code: 061992-2013.1-[illegible]	**Laboratory Name:** Lancaster Labs	**Lab Location:** 2425 New Holland Pike Lancaster, PA 17601	**SSOW ID:** KDF 4048992
Project Name: Former Tidewater Site	**Lab Contact:** Jill Parker	**Lab Quote No:**	**Cooler No:**
Project Location: 2800 MLK Jr. Way, Seattle, WA			**Carrier:** ~~FedEx~~ UPS
Chemistry Contact: Jeff Cloud, jcloud@craworld.com			**Airbill No:** TM 8/30/13
Sampler(s): S Rasmussen, B Bailey			**Date Shipped:** 8/30/13

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	HCl	HNO_3	H_2SO_4	NaOH	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Analysis Requested: TPHg (NWTPH-Gx)	TPHd (NWTPH-Dx w/ SGC)	TPHo (NWTPH-Dx w/ SGC)	BTEX (8260B)	PAHs (8270 SIM)	Total Lead (6020)		TEMP	MS/MSD Request	Comments/ Special Instructions:
1	GW-082913-SR-MW-7	8/29/13	1015	AQ	G	X	X	X						11	X	X		X	X	X				NWTPH-Dx w/SGC TPHd and TPHo
2	GW-083013-SR-MW-10	8/30/13	0920	AQ	G									2		X		X						
3	GW-083013-SR-MW-5	8/30/13	1110	AQ	G	X	X							6										
4						TM 8/30/13																X		
5	TEMP			AQ	–	X								1										
6																								
7																								
8																								
9																								
10																								
11																								
12																								CRA PM: Ed Turner
13																								etturner@craworld.com
14																								mdavis@craworld.com
15																								

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☒ Other: Standard

Total Number of Containers: 20

All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	CRA	8/30/13	4:00	1.			
2.				2.			
3.				3.	ELLE	8/31/13	8:50

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

acct#13534 Cap#1415909 sample#7183632-45

CHAIN OF CUSTODY RECORD

COC NO.: 38664

PAGE 1 OF 1

(See Reverse Side for Instructions)

CONESTOGA-ROVERS & ASSOCIATES

Address: 20818 44th Ave W, Lynnwood WA 98036 Ste 190

Phone: 425-563-6500 Fax: 425-563-6599

Project No/ Phase/Task Code: 061992-2013.1 - Admin	**Laboratory Name:** Lancaster Laboratories	**Lab Location:** 2425 New Holland Pike Lancaster, PA 17601	**SSOW ID:** PO #4045992
Project Name: Former Tidewater Site	**Lab Contact:** Jill Parker	**Lab Quote No:**	**Cooler No:**
Project Location: 2800 MLK Jr. Way Seattle, WA			**Carrier:** UPS ~~FedEx~~
Chemistry Contact: Jeff Cloud			**Airbill No:** ~~Tracking #~~ 8/30/13
Sampler(s): J Rasmussen, B Pauley			**Date Shipped:** 8/30/13

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Analysis Requested: PAHs/cPAHs 8270C-SIM	Total Lead (6020)	TEMP	MS/MSD Request	Comments/ Special Instructions:
1																			
2	GW-082913-BP-MW-9	8/29/13	1120	AQ	G	X		X						3	X	X			~~IH DX Includes~~ PP TM 8/30/13
3	GW-082913-BP-MW-8	8/29/13	1200	AQ	G	X		X						3	X	X			
4	GW-082913-BP-MW-1	8/29/13	1415	AQ	G	X								2	X	X			
5	GW-082913-BP-MW-2	8/29/13	1330	AQ	G	X		X						3	X	X		X	MW-2 is MS/MSD sample
6	DUP			AQ	G	X								2	X	X			
7	GW-082913-BP-MW-4	8/29/13	1540	AQ	G	X		X						3	X	X			
8	GW-082913-SR-MW-10	8/30/13	0920	AQ	G	X								2	X	X			
9	TEMP													1			X		
10																			
11																			
12																			CRA PM: Ed Turner etturner@craworld.com mdavis@craworld.com
13																			
14																			
15																			

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☒ Other: Standard

Total Number of Containers: 19

All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	CRA	8/30/13	4:00PM	1.			
2.				2.			
3.				3.	ELLE	8/31/13	0650

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

acct# 13534 Cup# 1415909 Sample# 7183632-45

CONESTOGA-ROVERS & ASSOCIATES

CHAIN OF CUSTODY RECORD

Address: 20518 44th Ave W, Ste A0

Phone: 425-563-6500 Fax: 425-563-6599

COC NO.: 38660

PAGE 1 OF 1

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 061992-2013.1-Activity	Laboratory Name: Lancaster Lab
Project Name: Former Tidewater Site	Lab Contact: J.11 Parker
Project Location: 2800 MLK Jr. Way, Seattle, WA	Lab Location: 2425 New Holland Pike
Chemistry Contact: Jeff Cloud	Lab Quote No: Lancaster, PA 17601
Sampler(s): S Rasmussen, B Pauley	SSOW ID: PO# 4048992
	Cooler No:
	Carrier: UPS TM FedEx 8/30/13
	Airbill No:
	Date Shipped: 8/30/13

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Analysis Requested (See Back of COC for Definitions): (NW TPH-Dx w/sgc)	TEMP	MS/MSD Request	Comments/ Special Instructions:
1	TM 8/30/13	—	—															NW TPH-Dx w/sgc is TPHd and TPHo to report
2	TM 8/30/13	—	—															
3	GW-082913-BP-MW-9	8/29/13	1120	AQ	G		X							2	X			
4	GW-082913-BP-MW-2	8/29/13	1330	AQ	G		X							4	X		X	
5	GW-082913-BP-MW-4	8/29/13	1540	AQ	G		X							2	X			MW-2 is MS/MSD sample
6	GW-082913-BP-MW-5	8/30/13	1110	AQ	G		X							2	X			
7	TEMP													1		X		
8																		
9																		
10																		CRA PM: Ed Turner etturner@craworld.com, mdavis@craworld.com
11																		
12																		
13																		
14																		
15														11				

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☒ Other: Standard

Total Number of Containers: 11

All Samples in Cooler must be on COC

Notes/ Special Requirements: TM 8/30/13

	Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	[signature]	CRA	8/30/13	4PM	1.			
2.					2.			
3.					3. [signature]	ELLE	8/31/13	850

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

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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 ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

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

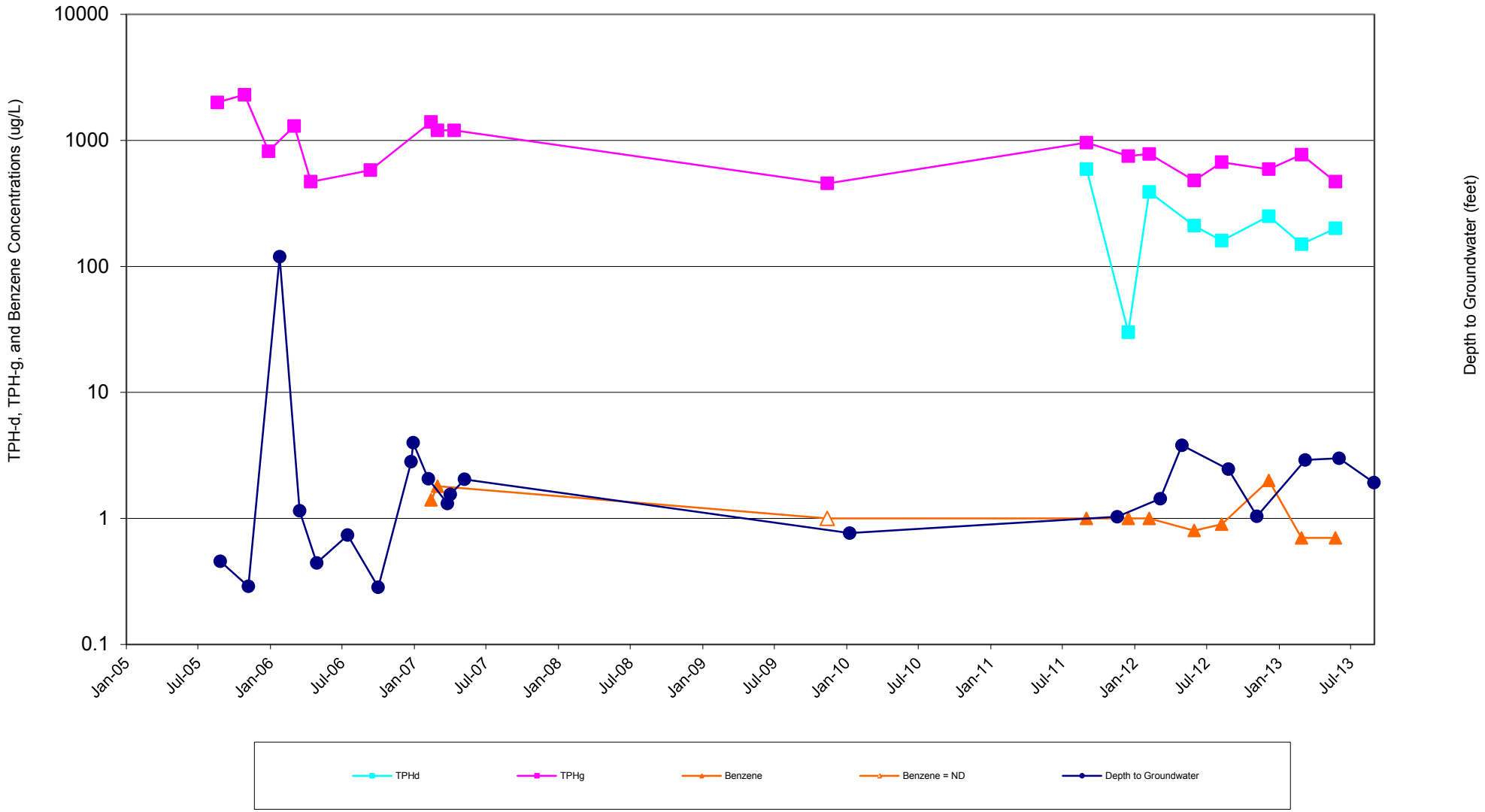
Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

ATTACHMENT C

CONCENTRATION TREND GRAPHS

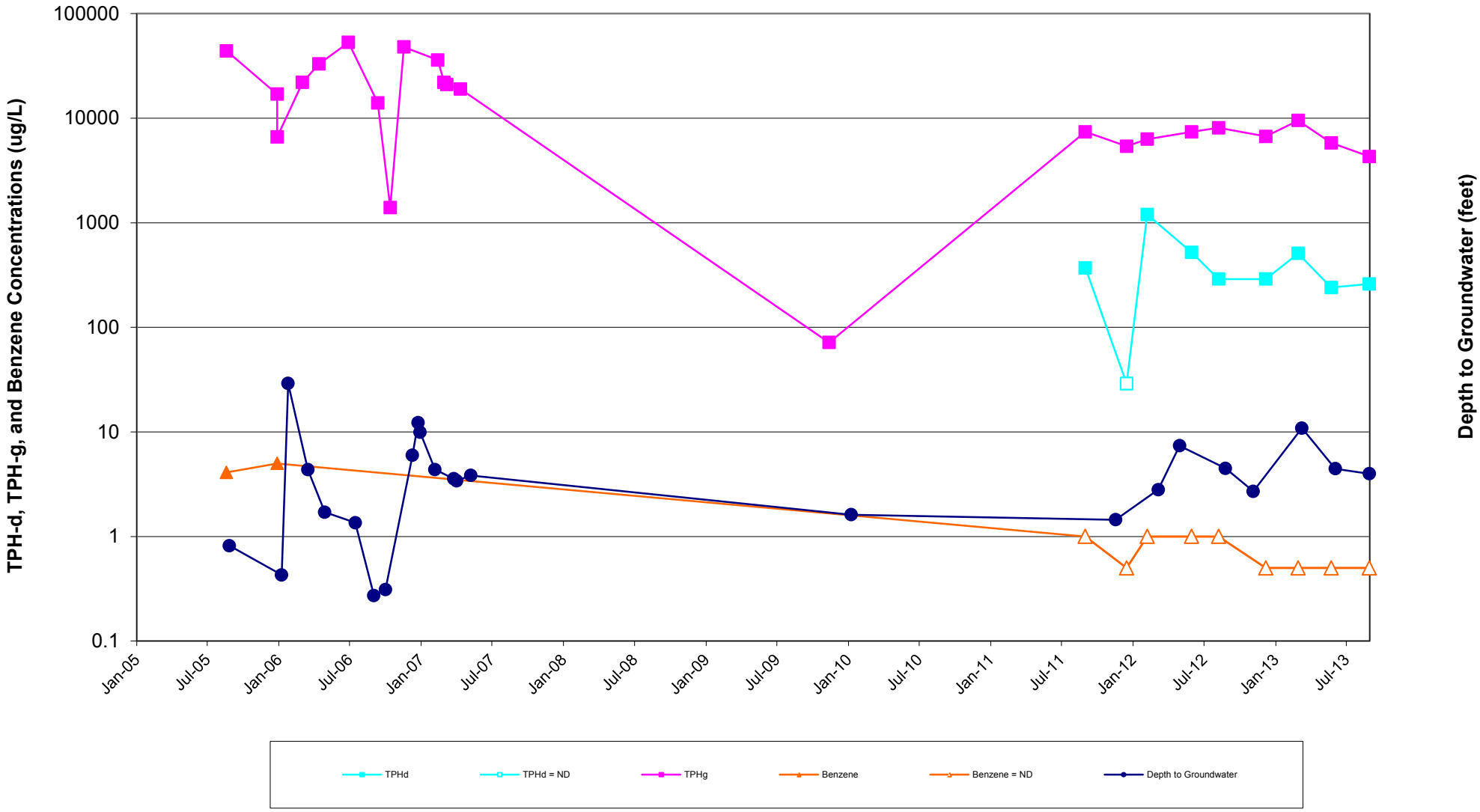
GRAPH 1

CHEMICAL CONCENTRATION VERSUS TIME
MW-2
FORMER TIDEWATER SITE
2800 MARTIN LUTHER KING JUNIOR WAY SOUTH
SEATTLE, WASHINGTON



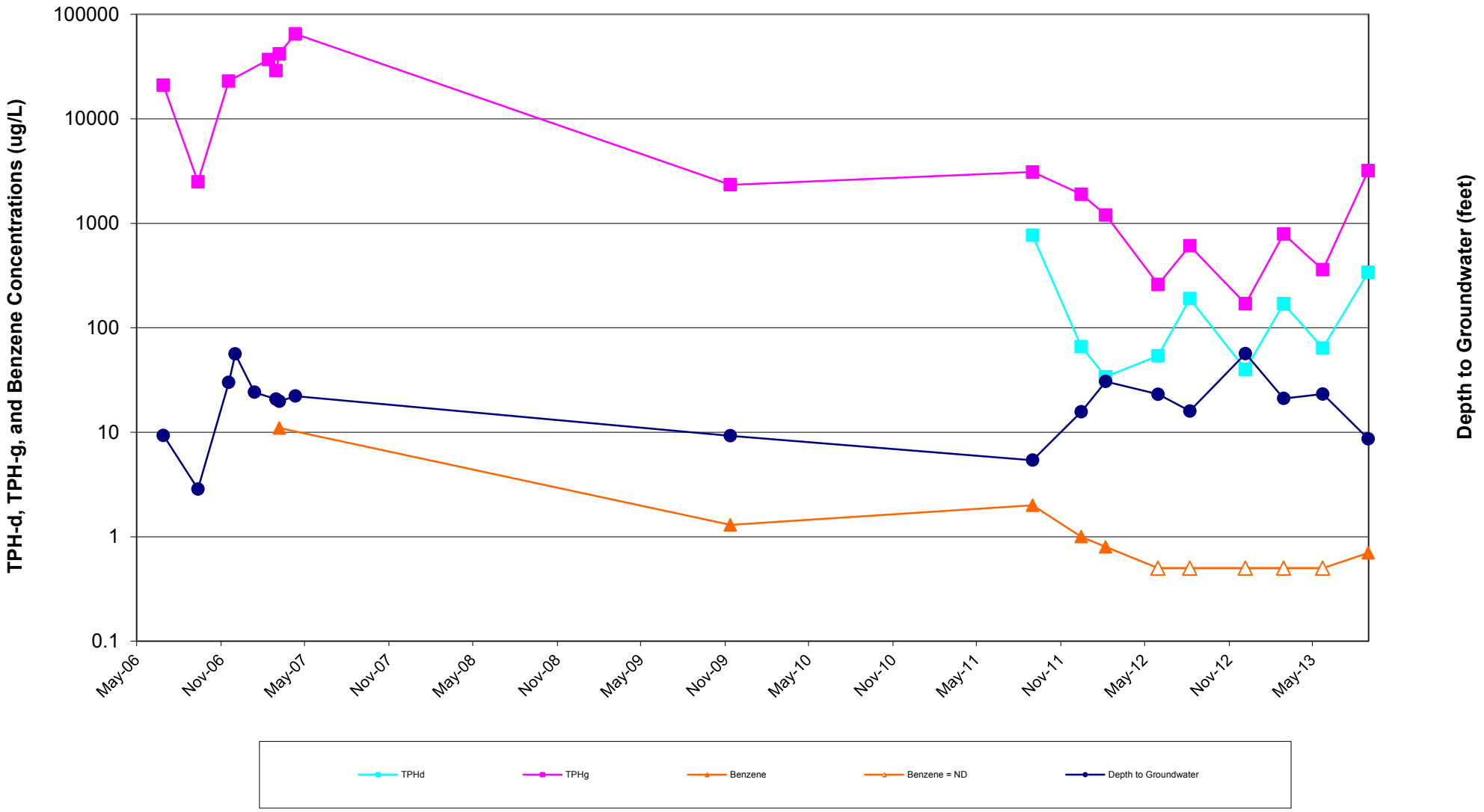
GRAPH 2

CHEMICAL CONCENTRATION VERSUS TIME
MW-3
FORMER TIDEWATER SITE
2800 MARTIN LUTHER KING JUNIOR WAY SOUTH
SEATTLE, WASHINGTON



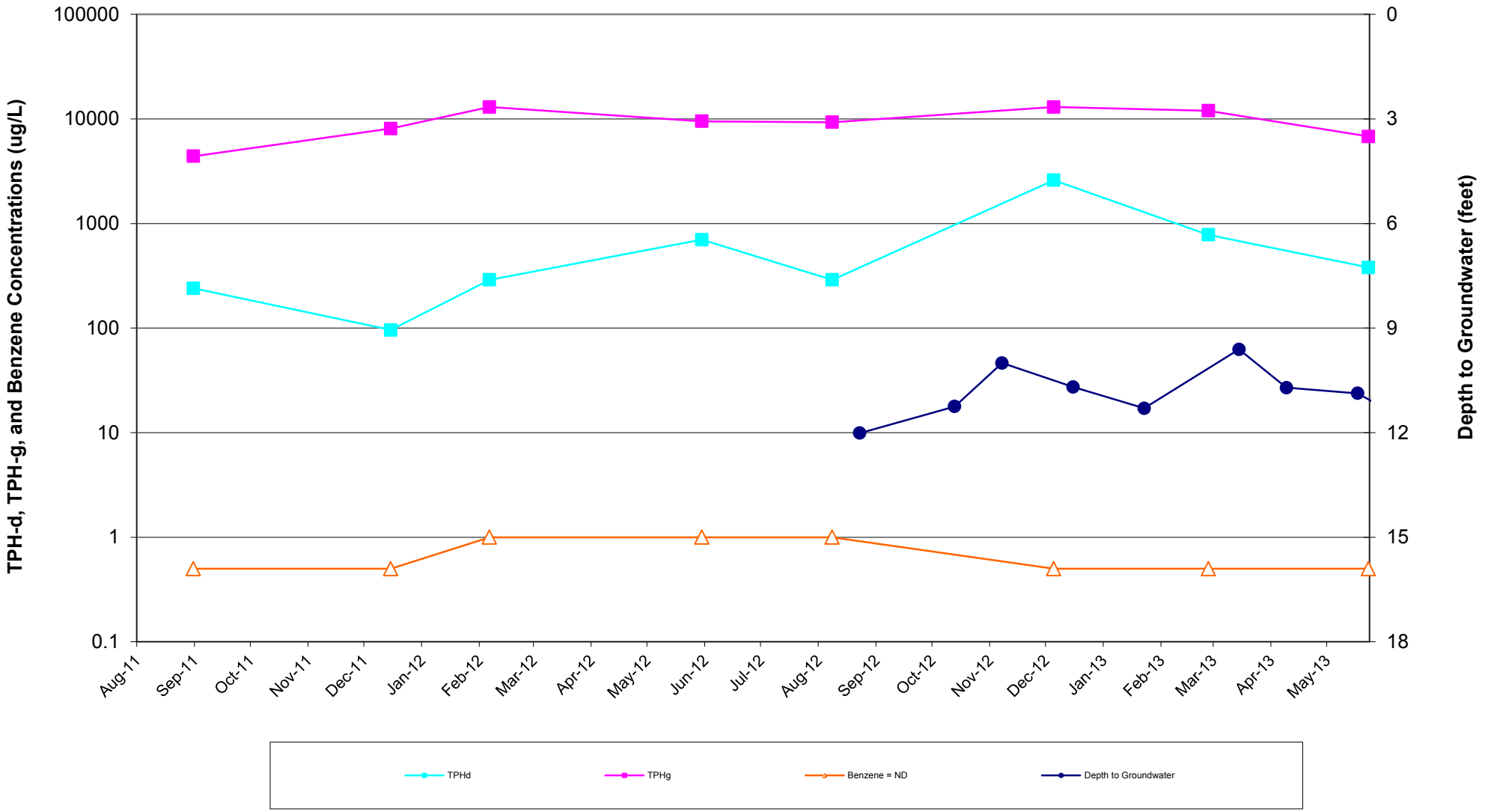
GRAPH 3

CHEMICAL CONCENTRATION VERSUS TIME
MW-5
FORMER TIDEWATER SITE
2800 MARTIN LUTHER KING JUNIOR WAY SOUTH
SEATTLE, WASHINGTON



GRAPH 4

CHEMICAL CONCENTRATION VERSUS TIME
MW-8
FORMER TIDEWATER SITE
2800 MARTIN LUTHER KING JUNIOR WAY SOUTH
SEATTLE, WASHINGTON



ATTACHMENT D

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 (µg/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.