Appendix A
Sediment Sampling Data
RM 2.3-2.8 East

Appendix A

A-1 Surface Sediment Sampling Results, RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

A-2 Subsurface Sediment Sampling Results, RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Appendix A-1

Surface Sediment Sampling Results, RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
LDWRI-SurfaceSedimentRound1	LDW-SS83	1,2,3,4,6,7,8-HpCDD	1.15E-03		2.07	5.56E-02					
EPA SI	DR115 (681)	1,2,3,4,6,7,8-HpCDD	2.60E-04		1.3	2.00E-02					
LDWRI-SurfaceSedimentRound1	LDW-SS83	1,2,3,4,6,7,8-HpCDF	1.38E-04		2.07	6.67E-03					
EPA SI	DR115 (681)	1,2,3,4,6,7,8-HpCDF	2.50E-05		1.3	1.92E-03					
LDWRI-SurfaceSedimentRound1	LDW-SS83	1,2,3,4,7,8,9-HpCDF	1.03E-05	J	2.07	4.98E-04					
LDWRI-SurfaceSedimentRound1	LDW-SS83	1,2,3,4,7,8-HxCDD	1.02E-05	J	2.07	4.93E-04					
LDWRI-SurfaceSedimentRound1	LDW-SS83	1,2,3,4,7,8-HxCDF	1.04E-05	J	2.07	5.02E-04					
LDWRI-SurfaceSedimentRound1	LDW-SS83	1,2,3,6,7,8-HxCDD	3.37E-05		2.07	1.63E-03					
EPA SI	DR115 (681)	1,2,3,6,7,8-HxCDD	8.60E-06		1.3	6.62E-04					
LDWRI-SurfaceSedimentRound1	LDW-SS83	1,2,3,6,7,8-HxCDF	5.39E-06	J	2.07	2.60E-04					
LDWRI-SurfaceSedimentRound1	LDW-SS83	1,2,3,7,8,9-HxCDD	3.07E-05		2.07	1.48E-03					
EPA SI	DR115 (681)	1,2,3,7,8,9-HxCDD	6.90E-06	J	1.3	5.31E-04					
LDWRI-SurfaceSedimentRound1	LDW-SS83	1,2,3,7,8,9-HxCDF	4.43E-07	J	2.07	2.14E-05					
LDWRI-SurfaceSedimentRound1	LDW-SS83	1,2,3,7,8-PeCDD	5.27E-06	J	2.07	2.55E-04					
LDWRI-SurfaceSedimentRound1	LDW-SS83	1,2,3,7,8-PeCDF	2.18E-06	J	2.07	1.05E-04					
EPA SI	DR116 (682)	1,2-Dichlorobenzene	2.60E-03	J	2.53	1.03E-01	2.3	2.3	mg/kg OC	0.045	0.045
LDWRI-SurfaceSedimentRound1	LDW-SS83	2,3,4,6,7,8-HxCDF	4.83E-06	J	2.07	2.33E-04					
LDWRI-SurfaceSedimentRound1	LDW-SS83	2,3,4,7,8-PeCDF	3.52E-06	J	2.07	1.70E-04					
LDWRI-SurfaceSedimentRound1	LDW-SS83	2,3,7,8-TCDD	1.02E-06	J	2.07	4.93E-05					
LDWRI-SurfaceSedimentRound1	LDW-SS83	2,3,7,8-TCDF	2.31E-06		2.07	1.12E-04					
EPA SI	DR115 (681)	2,3,7,8-TCDF	9.90E-07	J	1.3	7.62E-05					
EPA SI	DR175 (741)	2-Methylnaphthalene	8.00E-02		1.74	4.60E+00	38	64	mg/kg OC-dry	0.12	0.072
EPA SI	DR174 (740)	2-Methylnaphthalene	3.00E-02		1.59	1.89E+00	38	64	mg/kg OC	0.050	0.029
EPA SI	DR114 (680)	2-Methylnaphthalene	2.00E-02		2.51	7.97E-01	38	64	mg/kg OC	0.021	0.012
EPA SI	DR175 (741)	Acenaphthene	7.40E-01		1.74	4.25E+01	16	57	mg/kg OC-dry	2.7	0.75
EPA SI	DR117 (683)	Acenaphthene	1.00E-01		2.6	3.85E+00	16	57	mg/kg OC	0.24	0.067
EPA SI	DR174 (740)	Acenaphthene	1.00E-01		1.59	6.29E+00	16	57	mg/kg OC	0.39	0.11
EPA SI	DR149 (715)	Acenaphthene	9.00E-02		2.01	4.48E+00	16	57	mg/kg OC	0.28	0.079
EPA SI	DR118 (684)	Acenaphthene	6.00E-02		2.8	2.14E+00	16	57	mg/kg OC	0.13	0.038
EPA SI	DR115 (681)	Acenaphthene	3.00E-02		1.3	2.31E+00	16	57	mg/kg OC	0.14	0.040
EPA SI	DR151 (717)	Acenaphthene	3.00E-02		2.68	1.12E+00	16	57	mg/kg OC	0.070	0.020
LDWRI-SurfaceSedimentRound1	LDW-SS88	Acenaphthene	2.10E-02		1.75	1.20E+00	16	57	mg/kg OC	0.075	0.021
EPA SI	DR114 (680)	Acenaphthene	2.00E-02		2.51	7.97E-01	16	57	mg/kg OC	0.050	0.014
EPA SI	DR116 (682)	Acenaphthene	2.00E-02		2.53	7.91E-01	16	57	mg/kg OC	0.049	0.014
EPA SI	DR119 (685)	Acenaphthene	2.00E-02		2.69	7.43E-01	16	57	mg/kg OC	0.046	0.013
EPA SI	DR175 (741)	Acenaphthylene	6.00E-02		1.74	3.45E+00	66	66	mg/kg OC-dry	0.052	0.052

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR174 (740)	Acenaphthylene	4.00E-02		1.59	2.52E+00	66	66	mg/kg OC	0.038	0.038
EPA SI	DR113 (679)	Aluminum	2.48E+04		2.72	9.12E+05					
EPA SI	DR117 (683)	Aluminum	2.10E+04		2.6	8.08E+05					
EPA SI	DR118 (684)	Aluminum	2.10E+04		2.8	7.50E+05					
EPA SI	DR119 (685)	Aluminum	2.10E+04		2.69	7.81E+05					
EPA SI	DR150 (716)	Aluminum	2.10E+04		2.18	9.63E+05					
EPA SI	DR114 (680)	Aluminum	1.90E+04		2.51	7.57E+05					
EPA SI	DR116 (682)	Aluminum	1.90E+04		2.53	7.51E+05					
EPA SI	DR149 (715)	Aluminum	1.90E+04		2.01	9.45E+05					
EPA SI	DR151 (717)	Aluminum	1.90E+04		2.68	7.09E+05					
EPA SI	DR170 (736)	Aluminum	1.90E+04		2.04	9.31E+05					
EPA SI	DR115 (681)	Aluminum	1.80E+04		1.3	1.38E+06					
EPA SI	DR175 (741)	Aluminum	1.67E+04		1.74	9.60E+05					
EPA SI	DR213 (779)	Aluminum	1.40E+04		1.25	1.12E+06					
EPA SI	DR174 (740)	Aluminum	1.30E+04		1.59	8.18E+05					
EPA SI	DR212 (778)	Aluminum	1.10E+04		1.5	7.33E+05					
EPA SI	DR173 (739)	Aluminum	8.70E+03		0.87	1.00E+06					
EPA SI	DR172 (738)	Aluminum	3.80E+03		0.24	1.58E+06					
EPA SI	DR175 (741)	Anthracene	1.50E+00		1.74	8.62E+01	220	1200	mg/kg OC-dry	0.39	0.072
EPA SI	DR114 (680)	Anthracene	4.00E-01		2.51	1.59E+01	220	1200	mg/kg OC	0.072	0.013
EPA SI	DR174 (740)	Anthracene	3.30E-01		1.59	2.08E+01	220	1200	mg/kg OC	0.094	0.017
EPA SI	DR117 (683)	Anthracene	2.90E-01		2.6	1.12E+01	220	1200	mg/kg OC	0.051	0.009
LDWRI-SurfaceSedimentRound1	LDW-SS83	Anthracene	2.40E-01		2.07	1.16E+01	220	1200	mg/kg OC	0.053	0.010
EPA SI	DR149 (715)	Anthracene	2.20E-01		2.01	1.09E+01	220	1200	mg/kg OC	0.050	0.009
EPA SI	DR151 (717)	Anthracene	1.20E-01		2.68	4.48E+00	220	1200	mg/kg OC	0.020	0.004
EPA SI	DR118 (684)	Anthracene	1.10E-01		2.8	3.93E+00	220	1200	mg/kg OC	0.018	0.003
EPA SI	DR115 (681)	Anthracene	1.00E-01		1.3	7.69E+00	220	1200	mg/kg OC	0.035	0.006
EPA SI	DR116 (682)	Anthracene	1.00E-01		2.53	3.95E+00	220	1200	mg/kg OC	0.018	0.003
EPA SI	DR213 (779)	Anthracene	8.00E-02		1.25	6.40E+00	220	1200	mg/kg OC	0.029	0.005
EPA SI	DR119 (685)	Anthracene	6.00E-02		2.69	2.23E+00	220	1200	mg/kg OC	0.010	0.002
LDWRI-SurfaceSedimentRound1	LDW-SS92	Anthracene	5.50E-02	J	1.27	4.33E+00	220	1200	mg/kg OC	0.020	0.004
EPA SI	DR150 (716)	Anthracene	5.00E-02		2.18	2.29E+00	220	1200	mg/kg OC	0.010	0.002
EPA SI	DR212 (778)	Anthracene	5.00E-02		1.5	3.33E+00	220	1200	mg/kg OC	0.015	0.003
LDWRI-SurfaceSedimentRound1	LDW-SS88	Anthracene	4.70E-02		1.75	2.69E+00	220	1200	mg/kg OC	0.012	0.002
LDWRI-SurfaceSedimentRound3	LDW-SS333	Anthracene	4.50E-02	J	1.66	2.71E+00	220	1200	mg/kg OC	0.012	0.002
LDWRI-SurfaceSedimentRound2	LDW-SS81	Anthracene	4.30E-02		2.47	1.74E+00	220	1200	mg/kg OC	0.008	0.001

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR173 (739)	Anthracene	4.00E-02		0.87	4.60E+00	220	1200	mg/kg OC	0.021	0.004
EPA SI	DR113 (679)	Anthracene	3.00E-02		2.72	1.10E+00	220	1200	mg/kg OC-dry	0.005	0.001
LDWRI-SurfaceSedimentRound1	LDW-SS87	Anthracene	2.70E-02		2.18	1.24E+00	220	1200	mg/kg OC	0.006	0.001
LDWRI-SurfaceSedimentRound1	LDW-SS94	Anthracene	2.60E-02		2.05	1.27E+00	220	1200	mg/kg OC	0.006	0.001
EPA SI	DR119 (685)	Antimony	6.00E+00	J	2.69	2.23E+02					
EPA SI	DR118 (684)	Antimony	5.00E+00	J	2.8	1.79E+02					
LDWRI-SurfaceSedimentRound1	LDW-SS94	Antimony	4.00E-01	J	2.05	1.95E+01					
EPA SI	DR113 (679)	Aroclor-1242	2.83E-01	J	2.72	1.04E+01					
LDWRI-SurfaceSedimentRound2	LDW-SS81	Aroclor-1242	3.80E-02		2.47	1.54E+00					
LDWRI-SurfaceSedimentRound3	LDW-SS333	Aroclor-1248	3.70E-02		1.66	2.23E+00					
LDWRI-SurfaceSedimentRound1	LDW-SS83	Aroclor-1248	2.00E-02	J	2.07	9.66E-01					
LDWRI-SurfaceSedimentRound3	LDW-SS334	Aroclor-1248	6.30E-03		0.909	6.93E-01					
LDWRI-SurfaceSedimentRound1	LDW-SS89	Aroclor-1254	1.20E+00		1.02	1.18E+02					
EPA SI	DR113 (679)	Aroclor-1254	1.16E+00	J	2.72	4.26E+01					
LDWRI-SurfaceSedimentRound1	LDW-SS92	Aroclor-1254	4.80E-01		1.27	3.78E+01					
LDWRI-SurfaceSedimentRound1	LDW-SS88	Aroclor-1254	3.80E-01		1.75	2.17E+01					
EPA SI	DR174 (740)	Aroclor-1254	3.30E-01		1.59	2.08E+01					
EPA SI	DR119 (685)	Aroclor-1254	2.00E-01	J	2.69	7.43E+00					
EPA SI	DR151 (717)	Aroclor-1254	1.70E-01	J	2.68	6.34E+00					
EPA SI	DR114 (680)	Aroclor-1254	1.10E-01		2.51	4.38E+00					
EPA SI	DR117 (683)	Aroclor-1254	1.10E-01	J	2.6	4.23E+00					
LDWRI-SurfaceSedimentRound2	LDW-SS81	Aroclor-1254	1.00E-01		2.47	4.05E+00					
EPA SI	DR115 (681)	Aroclor-1254	8.50E-02		1.3	6.54E+00					
EPA SI	DR116 (682)	Aroclor-1254	8.20E-02	J	2.53	3.24E+00					
EPA SI	DR150 (716)	Aroclor-1254	7.70E-02		2.18	3.53E+00					
EPA SI	DR213 (779)	Aroclor-1254	7.00E-02	J	1.25	5.60E+00					
LDWRI-SurfaceSedimentRound3	LDW-SS333	Aroclor-1254	6.20E-02		1.66	3.73E+00					
EPA SI	DR175 (741)	Aroclor-1254	5.20E-02		1.74	2.99E+00					
EPA SI	DR149 (715)	Aroclor-1254	5.00E-02		2.01	2.49E+00					
LDWRI-SurfaceSedimentRound1	LDW-SS87	Aroclor-1254	4.00E-02		2.18	1.83E+00					
LDWRI-SurfaceSedimentRound1	LDW-SS83	Aroclor-1254	3.80E-02		2.07	1.84E+00					
LDWRI-SurfaceSedimentRound1	LDW-SS94	Aroclor-1254	3.70E-02		2.05	1.80E+00					
EPA SI	DR173 (739)	Aroclor-1254	3.30E-02		0.87	3.79E+00					
EPA SI	DR170 (736)	Aroclor-1254	2.80E-02		2.04	1.37E+00					
EPA SI	DR212 (778)	Aroclor-1254	2.50E-02	J	1.5	1.67E+00					
EPA SI	DR118 (684)	Aroclor-1254	2.10E-02	J	2.8	7.50E-01					

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
LDWRI-SurfaceSedimentRound3	LDW-SS334	Aroclor-1254	1.20E-02		0.909	1.32E+00					
LDWRI-SurfaceSedimentRound1	LDW-SS89	Aroclor-1260	6.20E-01		1.02	6.08E+01					
EPA SI	DR113 (679)	Aroclor-1260	5.84E-01	J	2.72	2.15E+01					
LDWRI-SurfaceSedimentRound1	LDW-SS92	Aroclor-1260	4.90E-01		1.27	3.86E+01					
LDWRI-SurfaceSedimentRound1	LDW-SS88	Aroclor-1260	2.80E-01		1.75	1.60E+01					
EPA SI	DR119 (685)	Aroclor-1260	1.90E-01	J	2.69	7.06E+00					
EPA SI	DR151 (717)	Aroclor-1260	1.60E-01	J	2.68	5.97E+00					
EPA SI	DR174 (740)	Aroclor-1260	1.60E-01		1.59	1.01E+01					
EPA SI	DR117 (683)	Aroclor-1260	9.60E-02	J	2.6	3.69E+00					
EPA SI	DR114 (680)	Aroclor-1260	7.60E-02	J	2.51	3.03E+00					
EPA SI	DR116 (682)	Aroclor-1260	7.50E-02	J	2.53	2.96E+00					
LDWRI-SurfaceSedimentRound2	LDW-SS81	Aroclor-1260	7.50E-02		2.47	3.04E+00					
EPA SI	DR175 (741)	Aroclor-1260	6.80E-02		1.74	3.91E+00					
LDWRI-SurfaceSedimentRound3	LDW-SS333	Aroclor-1260	6.80E-02		1.66	4.10E+00					
EPA SI	DR213 (779)	Aroclor-1260	6.60E-02	J	1.25	5.28E+00					
EPA SI	DR150 (716)	Aroclor-1260	6.00E-02	J	2.18	2.75E+00					
EPA SI	DR115 (681)	Aroclor-1260	5.70E-02		1.3	4.38E+00					
EPA SI	DR212 (778)	Aroclor-1260	5.20E-02	J	1.5	3.47E+00					
EPA SI	DR149 (715)	Aroclor-1260	4.50E-02	J	2.01	2.24E+00					
LDWRI-SurfaceSedimentRound1	LDW-SS83	Aroclor-1260	3.90E-02		2.07	1.88E+00					
LDWRI-SurfaceSedimentRound1	LDW-SS94	Aroclor-1260	3.50E-02		2.05	1.71E+00					
EPA SI	DR118 (684)	Aroclor-1260	3.20E-02	J	2.8	1.14E+00					
LDWRI-SurfaceSedimentRound1	LDW-SS87	Aroclor-1260	3.20E-02		2.18	1.47E+00					
EPA SI	DR173 (739)	Aroclor-1260	2.90E-02	J	0.87	3.33E+00					
EPA SI	DR170 (736)	Aroclor-1260	2.30E-02	J	2.04	1.13E+00					
LDWRI-SurfaceSedimentRound3	LDW-SS334	Aroclor-1260	1.50E-02		0.909	1.65E+00					
LDWRI-SurfaceSedimentRound1	LDW-SS94	Arsenic	2.65E+01		2.05		57	93	mg/kg dw	0.46	0.28
LDWRI-SurfaceSedimentRound2	LDW-SS81	Arsenic	1.81E+01		2.47		57	93	mg/kg dw	0.32	0.19
LDWRI-SurfaceSedimentRound1	LDW-SS83	Arsenic	1.79E+01		2.07		57	93	mg/kg dw	0.31	0.19
EPA SI	DR119 (685)	Arsenic	1.40E+01		2.69		57	93	mg/kg dw	0.25	0.15
LDWRI-SurfaceSedimentRound1	LDW-SS87	Arsenic	1.39E+01		2.18		57	93	mg/kg dw	0.24	0.15
EPA SI	DR113 (679)	Arsenic	1.34E+01		2.72		57	93	mg/kg, dry wt.	0.24	0.14
EPA SI	DR114 (680)	Arsenic	1.30E+01		2.51		57	93	mg/kg dw	0.23	0.14
EPA SI	DR118 (684)	Arsenic	1.30E+01		2.8		57	93	mg/kg dw	0.23	0.14
EPA SI	DR175 (741)	Arsenic	1.22E+01		1.74		57	93	mg/kg, dry wt.	0.21	0.13
EPA SI	DR116 (682)	Arsenic	1.20E+01		2.53		57	93	mg/kg dw	0.21	0.13

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR117 (683)	Arsenic	1.20E+01		2.6		57	93	mg/kg dw	0.21	0.13
EPA SI	DR151 (717)	Arsenic	1.20E+01		2.68		57	93	mg/kg dw	0.21	0.13
LDWRI-SurfaceSedimentRound1	LDW-SS88	Arsenic	1.16E+01		1.75		57	93	mg/kg dw	0.20	0.12
EPA SI	DR149 (715)	Arsenic	1.10E+01		2.01		57	93	mg/kg dw	0.19	0.12
LDWRI-SurfaceSedimentRound1	LDW-SS92	Arsenic	9.80E+00		1.27		57	93	mg/kg dw	0.17	0.11
EPA SI	DR174 (740)	Arsenic	9.60E+00		1.59		57	93	mg/kg dw	0.17	0.10
EPA SI	DR150 (716)	Arsenic	9.40E+00		2.18		57	93	mg/kg dw	0.16	0.10
EPA SI	DR115 (681)	Arsenic	8.20E+00		1.3		57	93	mg/kg dw	0.14	0.088
EPA SI	DR212 (778)	Arsenic	8.10E+00		1.5		57	93	mg/kg dw	0.14	0.087
EPA SI	DR170 (736)	Arsenic	8.00E+00		2.04		57	93	mg/kg dw	0.14	0.086
EPA SI	DR213 (779)	Arsenic	8.00E+00		1.25		57	93	mg/kg dw	0.14	0.086
LDWRI-SurfaceSedimentRound3	LDW-SS333	Arsenic	7.60E+00		1.66		57	93	mg/kg dw	0.13	0.082
EPA SI	DR173 (739)	Arsenic	7.40E+00		0.87		57	93	mg/kg dw	0.13	0.080
LDWRI-SurfaceSedimentRound1	LDW-SS89	Arsenic	4.20E+00		1.02		57	93	mg/kg dw	0.074	0.045
EPA SI	DR172 (738)	Arsenic	4.00E+00		0.24		57	93	mg/kg dw	0.070	0.043
LDWRI-SurfaceSedimentRound3	LDW-SS334	Arsenic	4.00E+00		0.909		57	93	mg/kg dw	0.070	0.043
EPA SI	DR113 (679)	Barium	2.79E+02		2.72	1.03E+04					
EPA SI	DR114 (680)	Barium	8.00E+01		2.51	3.19E+03					
EPA SI	DR150 (716)	Barium	8.00E+01		2.18	3.67E+03					
EPA SI	DR118 (684)	Barium	7.90E+01		2.8	2.82E+03					
EPA SI	DR170 (736)	Barium	7.80E+01		2.04	3.82E+03					
EPA SI	DR115 (681)	Barium	7.70E+01		1.3	5.92E+03					
EPA SI	DR119 (685)	Barium	7.70E+01		2.69	2.86E+03					
EPA SI	DR117 (683)	Barium	7.60E+01		2.6	2.92E+03					
EPA SI	DR116 (682)	Barium	7.20E+01		2.53	2.85E+03					
EPA SI	DR151 (717)	Barium	7.20E+01		2.68	2.69E+03					
EPA SI	DR149 (715)	Barium	6.60E+01		2.01	3.28E+03					
EPA SI	DR175 (741)	Barium	5.70E+01		1.74	3.28E+03					
EPA SI	DR174 (740)	Barium	5.40E+01		1.59	3.40E+03					
EPA SI	DR213 (779)	Barium	4.50E+01		1.25	3.60E+03					
EPA SI	DR212 (778)	Barium	3.20E+01		1.5	2.13E+03					
EPA SI	DR173 (739)	Barium	2.90E+01		0.87	3.33E+03					
EPA SI	DR172 (738)	Barium	1.20E+01		0.24	5.00E+03					
EPA SI	DR175 (741)	Benzo(a)anthracene	3.00E+00		1.74	1.72E+02	110	270	mg/kg OC-dry	1.6	0.64
EPA SI	DR174 (740)	Benzo(a)anthracene	1.50E+00		1.59	9.43E+01	110	270	mg/kg OC	0.86	0.35
LDWRI-SurfaceSedimentRound1	LDW-SS83	Benzo(a)anthracene	6.50E-01		2.07	3.14E+01	110	270	mg/kg OC	0.29	0.12

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR149 (715)	Benzo(a)anthracene	6.00E-01		2.01	2.99E+01	110	270	mg/kg OC	0.27	0.11
EPA SI	DR117 (683)	Benzo(a)anthracene	4.00E-01		2.6	1.54E+01	110	270	mg/kg OC	0.14	0.057
EPA SI	DR115 (681)	Benzo(a)anthracene	3.80E-01		1.3	2.92E+01	110	270	mg/kg OC	0.27	0.11
LDWRI-SurfaceSedimentRound1	LDW-SS92	Benzo(a)anthracene	3.60E-01		1.27	2.83E+01	110	270	mg/kg OC	0.26	0.10
EPA SI	DR114 (680)	Benzo(a)anthracene	3.50E-01		2.51	1.39E+01	110	270	mg/kg OC	0.13	0.052
EPA SI	DR118 (684)	Benzo(a)anthracene	3.50E-01		2.8	1.25E+01	110	270	mg/kg OC	0.11	0.046
EPA SI	DR213 (779)	Benzo(a)anthracene	3.50E-01		1.25	2.80E+01	110	270	mg/kg OC	0.25	0.10
EPA SI	DR116 (682)	Benzo(a)anthracene	3.30E-01		2.53	1.30E+01	110	270	mg/kg OC	0.12	0.048
EPA SI	DR151 (717)	Benzo(a)anthracene	3.20E-01		2.68	1.19E+01	110	270	mg/kg OC	0.11	0.044
EPA SI	DR119 (685)	Benzo(a)anthracene	2.20E-01		2.69	8.18E+00	110	270	mg/kg OC	0.074	0.030
EPA SI	DR150 (716)	Benzo(a)anthracene	1.80E-01		2.18	8.26E+00	110	270	mg/kg OC	0.075	0.031
EPA SI	DR173 (739)	Benzo(a)anthracene	1.60E-01		0.87	1.84E+01	110	270	mg/kg OC	0.17	0.068
LDWRI-SurfaceSedimentRound2	LDW-SS81	Benzo(a)anthracene	1.60E-01		2.47	6.48E+00	110	270	mg/kg OC	0.059	0.024
EPA SI	DR212 (778)	Benzo(a)anthracene	1.30E-01		1.5	8.67E+00	110	270	mg/kg OC	0.079	0.032
LDWRI-SurfaceSedimentRound1	LDW-SS88	Benzo(a)anthracene	1.30E-01		1.75	7.43E+00	110	270	mg/kg OC	0.068	0.028
LDWRI-SurfaceSedimentRound3	LDW-SS333	Benzo(a)anthracene	1.20E-01		1.66	7.23E+00	110	270	mg/kg OC	0.066	0.027
LDWRI-SurfaceSedimentRound1	LDW-SS94	Benzo(a)anthracene	9.50E-02		2.05	4.63E+00	110	270	mg/kg OC	0.042	0.017
EPA SI	DR170 (736)	Benzo(a)anthracene	9.00E-02		2.04	4.41E+00	110	270	mg/kg OC	0.040	0.016
LDWRI-SurfaceSedimentRound1	LDW-SS87	Benzo(a)anthracene	7.80E-02		2.18	3.58E+00	110	270	mg/kg OC	0.033	0.013
LDWRI-SurfaceSedimentRound1	LDW-SS89	Benzo(a)anthracene	5.40E-02		1.02	5.29E+00	110	270	mg/kg OC	0.048	0.020
EPA SI	DR113 (679)	Benzo(a)anthracene	5.00E-02		2.72	1.84E+00	110	270	mg/kg OC-dry	0.017	0.007
EPA SI	DR172 (738)	Benzo(a)anthracene	5.00E-02		0.24		1300	1600	ug/kg dw	0.038	0.031
EPA SI	DR175 (741)	Benzo(a)pyrene	1.20E+00		1.74	6.90E+01	99	210	mg/kg OC-dry	0.70	0.33
EPA SI	DR174 (740)	Benzo(a)pyrene	1.10E+00		1.59	6.92E+01	99	210	mg/kg OC	0.70	0.33
LDWRI-SurfaceSedimentRound1	LDW-SS83	Benzo(a)pyrene	4.90E-01		2.07	2.37E+01	99	210	mg/kg OC	0.24	0.11
EPA SI	DR149 (715)	Benzo(a)pyrene	3.90E-01		2.01	1.94E+01	99	210	mg/kg OC	0.20	0.092
EPA SI	DR115 (681)	Benzo(a)pyrene	3.60E-01		1.3	2.77E+01	99	210	mg/kg OC	0.28	0.13
EPA SI	DR213 (779)	Benzo(a)pyrene	3.20E-01		1.25	2.56E+01	99	210	mg/kg OC	0.26	0.12
LDWRI-SurfaceSedimentRound1	LDW-SS92	Benzo(a)pyrene	3.20E-01		1.27	2.52E+01	99	210	mg/kg OC	0.25	0.12
EPA SI	DR151 (717)	Benzo(a)pyrene	3.00E-01		2.68	1.12E+01	99	210	mg/kg OC	0.11	0.053
EPA SI	DR114 (680)	Benzo(a)pyrene	2.80E-01		2.51	1.12E+01	99	210	mg/kg OC	0.11	0.053
EPA SI	DR116 (682)	Benzo(a)pyrene	2.70E-01		2.53	1.07E+01	99	210	mg/kg OC	0.11	0.051
EPA SI	DR118 (684)	Benzo(a)pyrene	2.60E-01		2.8	9.29E+00	99	210	mg/kg OC	0.094	0.044
EPA SI	DR117 (683)	Benzo(a)pyrene	2.50E-01		2.6	9.62E+00	99	210	mg/kg OC	0.097	0.046
EPA SI	DR119 (685)	Benzo(a)pyrene	2.20E-01		2.69	8.18E+00	99	210	mg/kg OC	0.083	0.039
LDWRI-SurfaceSedimentRound2	LDW-SS81	Benzo(a)pyrene	1.80E-01		2.47	7.29E+00	99	210	mg/kg OC	0.074	0.035

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR173 (739)	Benzo(a)pyrene	1.70E-01		0.87	1.95E+01	99	210	mg/kg OC	0.20	0.093
EPA SI	DR150 (716)	Benzo(a)pyrene	1.60E-01		2.18	7.34E+00	99	210	mg/kg OC	0.074	0.035
LDWRI-SurfaceSedimentRound3	LDW-SS333	Benzo(a)pyrene	1.30E-01		1.66	7.83E+00	99	210	mg/kg OC	0.079	0.037
LDWRI-SurfaceSedimentRound1	LDW-SS88	Benzo(a)pyrene	1.30E-01		1.75	7.43E+00	99	210	mg/kg OC	0.075	0.035
EPA SI	DR113 (679)	Benzo(a)pyrene	1.00E-01		2.72	3.68E+00	99	210	mg/kg OC-dry	0.037	0.018
EPA SI	DR212 (778)	Benzo(a)pyrene	9.00E-02		1.5	6.00E+00	99	210	mg/kg OC	0.061	0.029
EPA SI	DR170 (736)	Benzo(a)pyrene	8.00E-02		2.04	3.92E+00	99	210	mg/kg OC	0.040	0.019
LDWRI-SurfaceSedimentRound1	LDW-SS94	Benzo(a)pyrene	6.90E-02		2.05	3.37E+00	99	210	mg/kg OC	0.034	0.016
LDWRI-SurfaceSedimentRound1	LDW-SS87	Benzo(a)pyrene	5.80E-02		2.18	2.66E+00	99	210	mg/kg OC	0.027	0.013
LDWRI-SurfaceSedimentRound1	LDW-SS89	Benzo(a)pyrene	5.10E-02		1.02	5.00E+00	99	210	mg/kg OC	0.051	0.024
EPA SI	DR172 (738)	Benzo(a)pyrene	5.00E-02		0.24		1600	3000	ug/kg dw	0.031	0.017
EPA SI	DR175 (741)	Benzo(b)fluoranthene	2.00E+00		1.74	1.15E+02	230	450	mg/kg OC	0.50	0.26
EPA SI	DR174 (740)	Benzo(b)fluoranthene	1.50E+00		1.59	9.43E+01	230	450	mg/kg OC	0.41	0.21
LDWRI-SurfaceSedimentRound1	LDW-SS83	Benzo(b)fluoranthene	8.40E-01		2.07	4.06E+01	230	450	mg/kg OC	0.18	0.090
EPA SI	DR149 (715)	Benzo(b)fluoranthene	4.80E-01		2.01	2.39E+01	230	450	mg/kg OC	0.10	0.053
EPA SI	DR115 (681)	Benzo(b)fluoranthene	4.10E-01		1.3	3.15E+01	230	450	mg/kg OC	0.14	0.070
EPA SI	DR116 (682)	Benzo(b)fluoranthene	3.50E-01		2.53	1.38E+01	230	450	mg/kg OC	0.060	0.031
EPA SI	DR151 (717)	Benzo(b)fluoranthene	3.50E-01		2.68	1.31E+01	230	450	mg/kg OC	0.057	0.029
EPA SI	DR213 (779)	Benzo(b)fluoranthene	3.40E-01		1.25	2.72E+01	230	450	mg/kg OC	0.12	0.060
EPA SI	DR114 (680)	Benzo(b)fluoranthene	3.30E-01		2.51	1.31E+01	230	450	mg/kg OC	0.057	0.029
LDWRI-SurfaceSedimentRound1	LDW-SS92	Benzo(b)fluoranthene	3.30E-01		1.27	2.60E+01	230	450	mg/kg OC	0.11	0.058
EPA SI	DR118 (684)	Benzo(b)fluoranthene	3.20E-01		2.8	1.14E+01	230	450	mg/kg OC	0.050	0.025
EPA SI	DR117 (683)	Benzo(b)fluoranthene	2.90E-01		2.6	1.12E+01	230	450	mg/kg OC	0.048	0.025
EPA SI	DR119 (685)	Benzo(b)fluoranthene	2.70E-01		2.69	1.00E+01	230	450	mg/kg OC	0.044	0.022
LDWRI-SurfaceSedimentRound2	LDW-SS81	Benzo(b)fluoranthene	2.70E-01		2.47	1.09E+01	230	450	mg/kg OC	0.048	0.024
EPA SI	DR150 (716)	Benzo(b)fluoranthene	2.00E-01		2.18	9.17E+00	230	450	mg/kg OC	0.040	0.020
EPA SI	DR173 (739)	Benzo(b)fluoranthene	1.90E-01		0.87	2.18E+01	230	450	mg/kg OC	0.095	0.049
LDWRI-SurfaceSedimentRound3	LDW-SS333	Benzo(b)fluoranthene	1.90E-01		1.66	1.14E+01	230	450	mg/kg OC	0.050	0.025
LDWRI-SurfaceSedimentRound1	LDW-SS88	Benzo(b)fluoranthene	1.40E-01		1.75	8.00E+00	230	450	mg/kg OC	0.035	0.018
EPA SI	DR113 (679)	Benzo(b)fluoranthene	1.20E-01		2.72	4.41E+00	230	450	mg/kg OC	0.019	0.010
EPA SI	DR170 (736)	Benzo(b)fluoranthene	1.10E-01		2.04	5.39E+00	230	450	mg/kg OC	0.023	0.012
EPA SI	DR212 (778)	Benzo(b)fluoranthene	1.00E-01		1.5	6.67E+00	230	450	mg/kg OC	0.029	0.015
LDWRI-SurfaceSedimentRound1	LDW-SS94	Benzo(b)fluoranthene	8.20E-02		2.05	4.00E+00	230	450	mg/kg OC	0.017	0.009
LDWRI-SurfaceSedimentRound1	LDW-SS87	Benzo(b)fluoranthene	8.10E-02		2.18	3.72E+00	230	450	mg/kg OC	0.016	0.008
EPA SI	DR172 (738)	Benzo(b)fluoranthene	7.00E-02		0.24	2.92E+01	230	450	mg/kg OC	0.13	0.065
LDWRI-SurfaceSedimentRound1	LDW-SS89	Benzo(b)fluoranthene	6.70E-02		1.02	6.57E+00	230	450	mg/kg OC	0.029	0.015

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
LDWRI-SurfaceSedimentRound3	LDW-SS334	Benzo(b)fluoranthene	3.60E-02	J	0.909	3.96E+00	230	450	mg/kg OC	0.017	0.009
EPA SI	DR175 (741)	Benzo(g,h,i)perylene	4.50E-01		1.74	2.59E+01	31	78	mg/kg OC-dry	0.83	0.33
EPA SI	DR174 (740)	Benzo(g,h,i)perylene	3.40E-01		1.59	2.14E+01	31	78	mg/kg OC	0.69	0.27
EPA SI	DR149 (715)	Benzo(g,h,i)perylene	1.80E-01		2.01	8.96E+00	31	78	mg/kg OC	0.29	0.11
EPA SI	DR151 (717)	Benzo(g,h,i)perylene	1.80E-01		2.68	6.72E+00	31	78	mg/kg OC	0.22	0.086
EPA SI	DR115 (681)	Benzo(g,h,i)perylene	1.70E-01		1.3	1.31E+01	31	78	mg/kg OC	0.42	0.17
LDWRI-SurfaceSedimentRound1	LDW-SS83	Benzo(g,h,i)perylene	1.70E-01		2.07	8.21E+00	31	78	mg/kg OC	0.26	0.11
EPA SI	DR213 (779)	Benzo(g,h,i)perylene	1.60E-01		1.25	1.28E+01	31	78	mg/kg OC	0.41	0.16
EPA SI	DR114 (680)	Benzo(g,h,i)perylene	1.40E-01		2.51	5.58E+00	31	78	mg/kg OC	0.18	0.072
EPA SI	DR116 (682)	Benzo(g,h,i)perylene	1.40E-01		2.53	5.53E+00	31	78	mg/kg OC	0.18	0.071
EPA SI	DR119 (685)	Benzo(g,h,i)perylene	1.40E-01		2.69	5.20E+00	31	78	mg/kg OC	0.17	0.067
EPA SI	DR118 (684)	Benzo(g,h,i)perylene	1.30E-01		2.8	4.64E+00	31	78	mg/kg OC	0.15	0.060
EPA SI	DR117 (683)	Benzo(g,h,i)perylene	1.20E-01		2.6	4.62E+00	31	78	mg/kg OC	0.15	0.059
EPA SI	DR150 (716)	Benzo(g,h,i)perylene	1.10E-01		2.18	5.05E+00	31	78	mg/kg OC	0.16	0.065
LDWRI-SurfaceSedimentRound2	LDW-SS81	Benzo(g,h,i)perylene	9.50E-02		2.47	3.85E+00	31	78	mg/kg OC	0.12	0.049
EPA SI	DR173 (739)	Benzo(g,h,i)perylene	9.00E-02		0.87	1.03E+01	31	78	mg/kg OC	0.33	0.13
LDWRI-SurfaceSedimentRound1	LDW-SS88	Benzo(g,h,i)perylene	8.80E-02	J	1.75	5.03E+00	31	78	mg/kg OC	0.16	0.064
LDWRI-SurfaceSedimentRound3	LDW-SS333	Benzo(g,h,i)perylene	8.20E-02		1.66	4.94E+00	31	78	mg/kg OC	0.16	0.063
LDWRI-SurfaceSedimentRound1	LDW-SS92	Benzo(g,h,i)perylene	7.80E-02		1.27	6.14E+00	31	78	mg/kg OC	0.20	0.079
EPA SI	DR170 (736)	Benzo(g,h,i)perylene	6.00E-02		2.04	2.94E+00	31	78	mg/kg OC	0.095	0.038
EPA SI	DR113 (679)	Benzo(g,h,i)perylene	5.00E-02		2.72	1.84E+00	31	78	mg/kg OC-dry	0.059	0.024
EPA SI	DR212 (778)	Benzo(g,h,i)perylene	4.00E-02		1.5	2.67E+00	31	78	mg/kg OC	0.086	0.034
EPA SI	DR172 (738)	Benzo(g,h,i)perylene	3.00E-02		0.24		670	720	ug/kg dw	0.045	0.042
EPA SI	DR175 (741)	Benzo(k)fluoranthene	1.30E+00		1.74	7.47E+01	230	450	mg/kg OC	0.32	0.17
EPA SI	DR174 (740)	Benzo(k)fluoranthene	1.00E+00		1.59	6.29E+01	230	450	mg/kg OC	0.27	0.14
LDWRI-SurfaceSedimentRound1	LDW-SS83	Benzo(k)fluoranthene	7.40E-01		2.07	3.57E+01	230	450	mg/kg OC	0.16	0.079
EPA SI	DR149 (715)	Benzo(k)fluoranthene	4.30E-01		2.01	2.14E+01	230	450	mg/kg OC	0.093	0.048
EPA SI	DR115 (681)	Benzo(k)fluoranthene	3.80E-01		1.3	2.92E+01	230	450	mg/kg OC	0.13	0.065
EPA SI	DR114 (680)	Benzo(k)fluoranthene	3.20E-01		2.51	1.27E+01	230	450	mg/kg OC	0.055	0.028
EPA SI	DR151 (717)	Benzo(k)fluoranthene	3.20E-01		2.68	1.19E+01	230	450	mg/kg OC	0.052	0.027
EPA SI	DR213 (779)	Benzo(k)fluoranthene	3.10E-01		1.25	2.48E+01	230	450	mg/kg OC	0.11	0.055
EPA SI	DR116 (682)	Benzo(k)fluoranthene	3.00E-01		2.53	1.19E+01	230	450	mg/kg OC	0.052	0.026
EPA SI	DR118 (684)	Benzo(k)fluoranthene	2.80E-01		2.8	1.00E+01	230	450	mg/kg OC	0.043	0.022
LDWRI-SurfaceSedimentRound1	LDW-SS92	Benzo(k)fluoranthene	2.80E-01		1.27	2.20E+01	230	450	mg/kg OC	0.096	0.049
EPA SI	DR117 (683)	Benzo(k)fluoranthene	2.70E-01		2.6	1.04E+01	230	450	mg/kg OC	0.045	0.023
EPA SI	DR119 (685)	Benzo(k)fluoranthene	2.40E-01		2.69	8.92E+00	230	450	mg/kg OC	0.039	0.020

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR150 (716)	Benzo(k)fluoranthene	1.70E-01		2.18	7.80E+00	230	450	mg/kg OC	0.034	0.017
EPA SI	DR173 (739)	Benzo(k)fluoranthene	1.70E-01		0.87	1.95E+01	230	450	mg/kg OC	0.085	0.043
LDWRI-SurfaceSedimentRound3	LDW-SS333	Benzo(k)fluoranthene	1.70E-01		1.66	1.02E+01	230	450	mg/kg OC	0.045	0.023
LDWRI-SurfaceSedimentRound2	LDW-SS81	Benzo(k)fluoranthene	1.70E-01		2.47	6.88E+00	230	450	mg/kg OC	0.030	0.015
EPA SI	DR113 (679)	Benzo(k)fluoranthene	1.00E-01		2.72	3.68E+00	230	450	mg/kg OC	0.016	0.008
EPA SI	DR170 (736)	Benzo(k)fluoranthene	9.00E-02		2.04	4.41E+00	230	450	mg/kg OC	0.019	0.010
EPA SI	DR212 (778)	Benzo(k)fluoranthene	9.00E-02		1.5	6.00E+00	230	450	mg/kg OC	0.026	0.013
LDWRI-SurfaceSedimentRound1	LDW-SS87	Benzo(k)fluoranthene	8.80E-02		2.18	4.04E+00	230	450	mg/kg OC	0.018	0.009
LDWRI-SurfaceSedimentRound1	LDW-SS88	Benzo(k)fluoranthene	8.40E-02	J	1.75	4.80E+00	230	450	mg/kg OC	0.021	0.011
LDWRI-SurfaceSedimentRound1	LDW-SS94	Benzo(k)fluoranthene	8.40E-02		2.05	4.10E+00	230	450	mg/kg OC	0.018	0.009
EPA SI	DR172 (738)	Benzo(k)fluoranthene	5.00E-02		0.24	2.08E+01	230	450	mg/kg OC	0.091	0.046
LDWRI-SurfaceSedimentRound1	LDW-SS89	Benzo(k)fluoranthene	4.40E-02		1.02	4.31E+00	230	450	mg/kg OC	0.019	0.010
EPA SI	DR175 (741)	Benzofluoranthenes (total-calc'd)	3.30E+00		1.74	1.90E+02	230	450	mg/kg OC-dry	0.82	0.42
EPA SI	DR174 (740)	Benzofluoranthenes (total-calc'd)	2.50E+00		1.59	1.57E+02	230	450	mg/kg OC	0.68	0.35
LDWRI-SurfaceSedimentRound1	LDW-SS83	Benzofluoranthenes (total-calc'd)	1.58E+00		2.07	7.63E+01	230	450	mg/kg OC	0.33	0.17
EPA SI	DR149 (715)	Benzofluoranthenes (total-calc'd)	9.10E-01		2.01	4.53E+01	230	450	mg/kg OC	0.20	0.10
EPA SI	DR115 (681)	Benzofluoranthenes (total-calc'd)	7.90E-01		1.3	6.08E+01	230	450	mg/kg OC	0.26	0.14
EPA SI	DR151 (717)	Benzofluoranthenes (total-calc'd)	6.70E-01		2.68	2.50E+01	230	450	mg/kg OC	0.11	0.056
EPA SI	DR114 (680)	Benzofluoranthenes (total-calc'd)	6.50E-01		2.51	2.59E+01	230	450	mg/kg OC	0.11	0.058
EPA SI	DR116 (682)	Benzofluoranthenes (total-calc'd)	6.50E-01		2.53	2.57E+01	230	450	mg/kg OC	0.11	0.057
EPA SI	DR213 (779)	Benzofluoranthenes (total-calc'd)	6.50E-01		1.25	5.20E+01	230	450	mg/kg OC	0.23	0.12
LDWRI-SurfaceSedimentRound1	LDW-SS92	Benzofluoranthenes (total-calc'd)	6.10E-01		1.27	4.80E+01	230	450	mg/kg OC	0.21	0.11
EPA SI	DR118 (684)	Benzofluoranthenes (total-calc'd)	6.00E-01		2.8	2.14E+01	230	450	mg/kg OC	0.093	0.048
EPA SI	DR117 (683)	Benzofluoranthenes (total-calc'd)	5.60E-01		2.6	2.15E+01	230	450	mg/kg OC	0.094	0.048
EPA SI	DR119 (685)	Benzofluoranthenes (total-calc'd)	5.10E-01		2.69	1.90E+01	230	450	mg/kg OC	0.082	0.042
LDWRI-SurfaceSedimentRound2	LDW-SS81	Benzofluoranthenes (total-calc'd)	4.40E-01		2.47	1.78E+01	230	450	mg/kg OC	0.077	0.040
EPA SI	DR150 (716)	Benzofluoranthenes (total-calc'd)	3.70E-01		2.18	1.70E+01	230	450	mg/kg OC	0.074	0.038
EPA SI	DR173 (739)	Benzofluoranthenes (total-calc'd)	3.60E-01		0.87	4.14E+01	230	450	mg/kg OC	0.18	0.092
LDWRI-SurfaceSedimentRound3	LDW-SS333	Benzofluoranthenes (total-calc'd)	3.60E-01		1.66	2.17E+01	230	450	mg/kg OC	0.094	0.048
EPA SI	DR113 (679)	Benzofluoranthenes (total-calc'd)	2.20E-01		2.72	8.09E+00	230	450	mg/kg OC-dry	0.035	0.018
LDWRI-SurfaceSedimentRound1	LDW-SS88	Benzofluoranthenes (total-calc'd)	2.20E-01	J	1.75	1.26E+01	230	450	mg/kg OC	0.055	0.028
EPA SI	DR170 (736)	Benzofluoranthenes (total-calc'd)	2.00E-01		2.04	9.80E+00	230	450	mg/kg OC	0.043	0.022
EPA SI	DR212 (778)	Benzofluoranthenes (total-calc'd)	1.90E-01		1.5	1.27E+01	230	450	mg/kg OC	0.055	0.028
LDWRI-SurfaceSedimentRound1	LDW-SS87	Benzofluoranthenes (total-calc'd)	1.69E-01		2.18	7.75E+00	230	450	mg/kg OC	0.034	0.017
LDWRI-SurfaceSedimentRound1	LDW-SS94	Benzofluoranthenes (total-calc'd)	1.66E-01		2.05	8.10E+00	230	450	mg/kg OC	0.035	0.018
EPA SI	DR172 (738)	Benzofluoranthenes (total-calc'd)	1.20E-01		0.24		3200	3600	ug/kg dw	0.038	0.033

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
LDWRI-SurfaceSedimentRound1	LDW-SS89	Benzofluoranthenes (total-calc'd)	1.11E-01		1.02	1.09E+01	230	450	mg/kg OC	0.047	0.024
LDWRI-SurfaceSedimentRound3	LDW-SS334	Benzofluoranthenes (total-calc'd)	3.60E-02	J	0.909	3.96E+00	230	450	mg/kg OC	0.017	0.009
EPA SI	DR113 (679)	Beryllium	5.40E-01		2.72	1.99E+01					
EPA SI	DR117 (683)	Beryllium	5.00E-01		2.6	1.92E+01					
EPA SI	DR118 (684)	Beryllium	5.00E-01		2.8	1.79E+01					
EPA SI	DR119 (685)	Beryllium	4.90E-01		2.69	1.82E+01					
EPA SI	DR150 (716)	Beryllium	4.90E-01		2.18	2.25E+01					
EPA SI	DR151 (717)	Beryllium	4.90E-01		2.68	1.83E+01					
EPA SI	DR116 (682)	Beryllium	4.80E-01		2.53	1.90E+01					
EPA SI	DR170 (736)	Beryllium	4.40E-01		2.04	2.16E+01					
EPA SI	DR114 (680)	Beryllium	4.20E-01		2.51	1.67E+01					
EPA SI	DR149 (715)	Beryllium	4.00E-01		2.01	1.99E+01					
EPA SI	DR175 (741)	Beryllium	3.40E-01		1.74	1.95E+01					
EPA SI	DR115 (681)	Beryllium	3.30E-01	J	1.3	2.54E+01					
EPA SI	DR213 (779)	Beryllium	2.90E-01		1.25	2.32E+01					
EPA SI	DR174 (740)	Beryllium	2.70E-01		1.59	1.70E+01					
EPA SI	DR212 (778)	Beryllium	2.40E-01		1.5	1.60E+01					
EPA SI	DR173 (739)	Beryllium	2.30E-01		0.87	2.64E+01					
EPA SI	DR172 (738)	Beryllium	1.00E-01		0.24	4.17E+01					
EPA SI	DR113 (679)	Bis(2-ethylhexyl)phthalate	9.10E-01		2.72	3.35E+01	47	78	mg/kg OC-dry	0.71	0.43
EPA SI	DR151 (717)	Bis(2-ethylhexyl)phthalate	5.40E-01		2.68	2.01E+01	47	78	mg/kg OC	0.43	0.26
EPA SI	DR119 (685)	Bis(2-ethylhexyl)phthalate	5.20E-01		2.69	1.93E+01	47	78	mg/kg OC	0.41	0.25
LDWRI-SurfaceSedimentRound1	LDW-SS83	Bis(2-ethylhexyl)phthalate	4.60E-01		2.07	2.22E+01	47	78	mg/kg OC	0.47	0.28
EPA SI	DR116 (682)	Bis(2-ethylhexyl)phthalate	3.90E-01		2.53	1.54E+01	47	78	mg/kg OC	0.33	0.20
EPA SI	DR150 (716)	Bis(2-ethylhexyl)phthalate	3.90E-01		2.18	1.79E+01	47	78	mg/kg OC	0.38	0.23
EPA SI	DR118 (684)	Bis(2-ethylhexyl)phthalate	3.50E-01		2.8	1.25E+01	47	78	mg/kg OC	0.27	0.16
EPA SI	DR114 (680)	Bis(2-ethylhexyl)phthalate	3.30E-01		2.51	1.31E+01	47	78	mg/kg OC	0.28	0.17
EPA SI	DR117 (683)	Bis(2-ethylhexyl)phthalate	3.10E-01		2.6	1.19E+01	47	78	mg/kg OC	0.25	0.15
EPA SI	DR174 (740)	Bis(2-ethylhexyl)phthalate	3.00E-01		1.59	1.89E+01	47	78	mg/kg OC	0.40	0.24
EPA SI	DR175 (741)	Bis(2-ethylhexyl)phthalate	2.70E-01		1.74	1.55E+01	47	78	mg/kg OC-dry	0.33	0.20
LDWRI-SurfaceSedimentRound3	LDW-SS333	Bis(2-ethylhexyl)phthalate	1.70E-01		1.66	1.02E+01	47	78	mg/kg OC	0.22	0.13
EPA SI	DR173 (739)	Bis(2-ethylhexyl)phthalate	1.00E-01		0.87	1.15E+01	47	78	mg/kg OC	0.24	0.15
LDWRI-SurfaceSedimentRound1	LDW-SS87	Bis(2-ethylhexyl)phthalate	9.70E-02		2.18	4.45E+00	47	78	mg/kg OC	0.095	0.057
LDWRI-SurfaceSedimentRound1	LDW-SS92	Bis(2-ethylhexyl)phthalate	6.30E-02		1.27	4.96E+00	47	78	mg/kg OC	0.11	0.064
LDWRI-SurfaceSedimentRound1	LDW-SS94	Bis(2-ethylhexyl)phthalate	4.60E-02		2.05	2.24E+00	47	78	mg/kg OC	0.048	0.029
LDWRI-SurfaceSedimentRound3	LDW-SS334	Bis(2-ethylhexyl)phthalate	4.40E-02	J	0.909	4.84E+00	47	78	mg/kg OC	0.10	0.062

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
LDWRI-SurfaceSedimentRound1	LDW-SS89	Bis(2-ethylhexyl)phthalate	3.10E-02		1.02	3.04E+00	47	78	mg/kg OC	0.065	0.039
LDWRI-SurfaceSedimentRound1	LDW-SS88	Bis(2-ethylhexyl)phthalate	2.70E-02		1.75	1.54E+00	47	78	mg/kg OC	0.033	0.020
EPA SI	DR172 (738)	Bis(2-ethylhexyl)phthalate	2.00E-02		0.24		1300	1900	ug/kg dw	0.015	0.011
EPA SI	DR113 (679)	Butyl benzyl phthalate	6.00E-02		2.72	2.21E+00	4.9	64	mg/kg OC-dry	0.45	0.034
LDWRI-SurfaceSedimentRound1	LDW-SS87	Butyl benzyl phthalate	4.60E-02		2.18	2.11E+00	4.9	64	mg/kg OC	0.43	0.033
LDWRI-SurfaceSedimentRound2	LDW-SS81	Butyl benzyl phthalate	4.20E-02		2.47	1.70E+00	4.9	64	mg/kg OC	0.35	0.027
EPA SI	DR119 (685)	Butyl benzyl phthalate	4.00E-02		2.69	1.49E+00	4.9	64	mg/kg OC	0.30	0.023
EPA SI	DR151 (717)	Butyl benzyl phthalate	4.00E-02		2.68	1.49E+00	4.9	64	mg/kg OC	0.30	0.023
EPA SI	DR115 (681)	Butyl benzyl phthalate	3.00E-02		1.3	2.31E+00	4.9	64	mg/kg OC	0.47	0.036
EPA SI	DR116 (682)	Butyl benzyl phthalate	3.00E-02		2.53	1.19E+00	4.9	64	mg/kg OC	0.24	0.019
EPA SI	DR118 (684)	Butyl benzyl phthalate	3.00E-02		2.8	1.07E+00	4.9	64	mg/kg OC	0.22	0.017
EPA SI	DR174 (740)	Butyl benzyl phthalate	3.00E-02		1.59	1.89E+00	4.9	64	mg/kg OC	0.39	0.029
EPA SI	DR114 (680)	Butyl benzyl phthalate	2.00E-02		2.51	7.97E-01	4.9	64	mg/kg OC	0.16	0.012
EPA SI	DR150 (716)	Butyl benzyl phthalate	2.00E-02		2.18	9.17E-01	4.9	64	mg/kg OC	0.19	0.014
LDWRI-SurfaceSedimentRound3	LDW-SS333	Butyl benzyl phthalate	1.60E-02		1.66	9.64E-01	4.9	64	mg/kg OC	0.20	0.015
LDWRI-SurfaceSedimentRound1	LDW-SS83	Butyl benzyl phthalate	7.20E-03		2.07	3.48E-01	4.9	64	mg/kg OC	0.071	0.005
EPA SI	DR113 (679)	Cadmium	1.80E+00		2.72		5.1	6.7	mg/kg, dry wt.	0.35	0.27
LDWRI-SurfaceSedimentRound1	LDW-SS88	Cadmium	1.00E+00		1.75		5.1	6.7	mg/kg dw	0.20	0.15
EPA SI	DR212 (778)	Cadmium	7.20E-01		1.5		5.1	6.7	mg/kg dw	0.14	0.11
LDWRI-SurfaceSedimentRound2	LDW-SS81	Cadmium	7.00E-01		2.47		5.1	6.7	mg/kg dw	0.14	0.10
EPA SI	DR114 (680)	Cadmium	6.00E-01		2.51		5.1	6.7	mg/kg dw	0.12	0.090
LDWRI-SurfaceSedimentRound1	LDW-SS83	Cadmium	6.00E-01		2.07		5.1	6.7	mg/kg dw	0.12	0.090
EPA SI	DR119 (685)	Cadmium	4.40E-01		2.69		5.1	6.7	mg/kg dw	0.086	0.066
EPA SI	DR150 (716)	Cadmium	4.20E-01		2.18		5.1	6.7	mg/kg dw	0.082	0.063
EPA SI	DR118 (684)	Cadmium	4.10E-01		2.8		5.1	6.7	mg/kg dw	0.080	0.061
EPA SI	DR174 (740)	Cadmium	4.10E-01		1.59		5.1	6.7	mg/kg dw	0.080	0.061
EPA SI	DR149 (715)	Cadmium	4.00E-01		2.01		5.1	6.7	mg/kg dw	0.078	0.060
EPA SI	DR151 (717)	Cadmium	4.00E-01		2.68		5.1	6.7	mg/kg dw	0.078	0.060
EPA SI	DR116 (682)	Cadmium	3.70E-01		2.53		5.1	6.7	mg/kg dw	0.073	0.055
EPA SI	DR213 (779)	Cadmium	3.70E-01		1.25		5.1	6.7	mg/kg dw	0.073	0.055
EPA SI	DR117 (683)	Cadmium	3.30E-01		2.6		5.1	6.7	mg/kg dw	0.065	0.049
EPA SI	DR175 (741)	Cadmium	3.30E-01		1.74		5.1	6.7	mg/kg, dry wt.	0.065	0.049
EPA SI	DR170 (736)	Cadmium	2.60E-01		2.04		5.1	6.7	mg/kg dw	0.051	0.039
EPA SI	DR115 (681)	Cadmium	2.00E-01		1.3		5.1	6.7	mg/kg dw	0.039	0.030
EPA SI	DR173 (739)	Cadmium	1.30E-01		0.87		5.1	6.7	mg/kg dw	0.025	0.019
EPA SI	DR172 (738)	Cadmium	7.00E-02		0.24		5.1	6.7	mg/kg dw	0.014	0.010

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR175 (741)	Carbazole	3.70E-01		1.74	2.13E+01					
EPA SI	DR174 (740)	Carbazole	1.20E-01		1.59	7.55E+00					
EPA SI	DR114 (680)	Carbazole	1.00E-01		2.51	3.98E+00					
LDWRI-SurfaceSedimentRound1	LDW-SS83	Carbazole	9.90E-02		2.07	4.78E+00					
EPA SI	DR117 (683)	Carbazole	8.00E-02		2.6	3.08E+00					
EPA SI	DR149 (715)	Carbazole	4.00E-02		2.01	1.99E+00					
EPA SI	DR151 (717)	Carbazole	4.00E-02		2.68	1.49E+00					
EPA SI	DR115 (681)	Carbazole	3.00E-02		1.3	2.31E+00					
EPA SI	DR116 (682)	Carbazole	3.00E-02		2.53	1.19E+00					
EPA SI	DR118 (684)	Carbazole	3.00E-02		2.8	1.07E+00					
EPA SI	DR119 (685)	Carbazole	3.00E-02		2.69	1.12E+00					
EPA SI	DR213 (779)	Carbazole	3.00E-02		1.25	2.40E+00					
LDWRI-SurfaceSedimentRound1	LDW-SS88	Carbazole	2.70E-02		1.75	1.54E+00					
LDWRI-SurfaceSedimentRound1	LDW-SS88	Chromium	5.71E+01		1.75		260	270	mg/kg dw	0.22	0.21
EPA SI	DR113 (679)	Chromium	4.80E+01		2.72		260	270	mg/kg, dry wt.	0.18	0.18
LDWRI-SurfaceSedimentRound1	LDW-SS83	Chromium	3.70E+01		2.07		260	270	mg/kg dw	0.14	0.14
LDWRI-SurfaceSedimentRound2	LDW-SS81	Chromium	3.50E+01		2.47		260	270	mg/kg dw	0.13	0.13
LDWRI-SurfaceSedimentRound1	LDW-SS87	Chromium	3.10E+01		2.18		260	270	mg/kg dw	0.12	0.11
EPA SI	DR115 (681)	Chromium	2.90E+01		1.3		260	270	mg/kg dw	0.11	0.11
EPA SI	DR118 (684)	Chromium	2.90E+01		2.8		260	270	mg/kg dw	0.11	0.11
EPA SI	DR150 (716)	Chromium	2.90E+01		2.18		260	270	mg/kg dw	0.11	0.11
EPA SI	DR117 (683)	Chromium	2.80E+01		2.6		260	270	mg/kg dw	0.11	0.10
EPA SI	DR119 (685)	Chromium	2.80E+01		2.69		260	270	mg/kg dw	0.11	0.10
EPA SI	DR116 (682)	Chromium	2.70E+01		2.53		260	270	mg/kg dw	0.10	0.10
EPA SI	DR151 (717)	Chromium	2.70E+01		2.68		260	270	mg/kg dw	0.10	0.10
EPA SI	DR114 (680)	Chromium	2.60E+01		2.51		260	270	mg/kg dw	0.10	0.096
EPA SI	DR149 (715)	Chromium	2.60E+01		2.01		260	270	mg/kg dw	0.10	0.096
EPA SI	DR170 (736)	Chromium	2.50E+01		2.04		260	270	mg/kg dw	0.096	0.093
EPA SI	DR212 (778)	Chromium	2.50E+01		1.5		260	270	mg/kg dw	0.096	0.093
LDWRI-SurfaceSedimentRound1	LDW-SS92	Chromium	2.34E+01		1.27		260	270	mg/kg dw	0.090	0.087
EPA SI	DR175 (741)	Chromium	2.30E+01		1.74		260	270	mg/kg, dry wt.	0.088	0.085
EPA SI	DR174 (740)	Chromium	2.20E+01		1.59		260	270	mg/kg dw	0.085	0.081
LDWRI-SurfaceSedimentRound1	LDW-SS94	Chromium	2.12E+01		2.05		260	270	mg/kg dw	0.082	0.079
EPA SI	DR213 (779)	Chromium	2.10E+01		1.25		260	270	mg/kg dw	0.081	0.078
LDWRI-SurfaceSedimentRound3	LDW-SS333	Chromium	2.06E+01		1.66		260	270	mg/kg dw	0.079	0.076
EPA SI	DR173 (739)	Chromium	1.50E+01		0.87		260	270	mg/kg dw	0.058	0.056

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
LDWRI-SurfaceSedimentRound1	LDW-SS89	Chromium	1.44E+01		1.02		260	270	mg/kg dw	0.055	0.053
LDWRI-SurfaceSedimentRound3	LDW-SS334	Chromium	1.10E+01		0.909		260	270	mg/kg dw	0.042	0.041
EPA SI	DR172 (738)	Chromium	9.00E+00		0.24		260	270	mg/kg dw	0.035	0.033
EPA SI	DR175 (741)	Chrysene	3.40E+00		1.74	1.95E+02	100	460	mg/kg OC-dry	1.95	0.42
EPA SI	DR174 (740)	Chrysene	1.80E+00		1.59	1.13E+02	110	460	mg/kg OC	1.03	0.25
LDWRI-SurfaceSedimentRound1	LDW-SS83	Chrysene	1.40E+00		2.07	6.76E+01	110	460	mg/kg OC	0.61	0.15
EPA SI	DR149 (715)	Chrysene	7.40E-01		2.01	3.68E+01	110	460	mg/kg OC	0.33	0.080
EPA SI	DR115 (681)	Chrysene	6.10E-01		1.3	4.69E+01	110	460	mg/kg OC	0.43	0.10
LDWRI-SurfaceSedimentRound1	LDW-SS92	Chrysene	5.40E-01		1.27	4.25E+01	110	460	mg/kg OC	0.39	0.092
EPA SI	DR116 (682)	Chrysene	4.70E-01		2.53	1.86E+01	110	460	mg/kg OC	0.17	0.040
EPA SI	DR118 (684)	Chrysene	4.70E-01		2.8	1.68E+01	110	460	mg/kg OC	0.15	0.036
EPA SI	DR117 (683)	Chrysene	4.60E-01		2.6	1.77E+01	110	460	mg/kg OC	0.16	0.038
EPA SI	DR151 (717)	Chrysene	4.40E-01		2.68	1.64E+01	110	460	mg/kg OC	0.15	0.036
EPA SI	DR114 (680)	Chrysene	4.30E-01		2.51	1.71E+01	110	460	mg/kg OC	0.16	0.037
EPA SI	DR213 (779)	Chrysene	4.20E-01		1.25	3.36E+01	110	460	mg/kg OC	0.31	0.073
EPA SI	DR119 (685)	Chrysene	3.20E-01		2.69	1.19E+01	110	460	mg/kg OC	0.11	0.026
LDWRI-SurfaceSedimentRound2	LDW-SS81	Chrysene	2.60E-01		2.47	1.05E+01	110	460	mg/kg OC	0.096	0.023
EPA SI	DR150 (716)	Chrysene	2.50E-01		2.18	1.15E+01	110	460	mg/kg OC	0.10	0.025
EPA SI	DR173 (739)	Chrysene	2.50E-01		0.87	2.87E+01	110	460	mg/kg OC	0.26	0.062
LDWRI-SurfaceSedimentRound1	LDW-SS88	Chrysene	2.50E-01		1.75	1.43E+01	110	460	mg/kg OC	0.13	0.031
LDWRI-SurfaceSedimentRound3	LDW-SS333	Chrysene	2.00E-01		1.66	1.20E+01	110	460	mg/kg OC	0.11	0.026
EPA SI	DR212 (778)	Chrysene	1.90E-01		1.5	1.27E+01	110	460	mg/kg OC	0.12	0.028
EPA SI	DR170 (736)	Chrysene	1.20E-01		2.04	5.88E+00	110	460	mg/kg OC	0.053	0.013
LDWRI-SurfaceSedimentRound1	LDW-SS87	Chrysene	1.20E-01		2.18	5.50E+00	110	460	mg/kg OC	0.050	0.012
LDWRI-SurfaceSedimentRound1	LDW-SS94	Chrysene	1.20E-01		2.05	5.85E+00	110	460	mg/kg OC	0.053	0.013
LDWRI-SurfaceSedimentRound1	LDW-SS89	Chrysene	9.90E-02		1.02	9.71E+00	110	460	mg/kg OC	0.088	0.021
EPA SI	DR113 (679)	Chrysene	9.00E-02		2.72	3.31E+00	100	460	mg/kg OC-dry	0.033	0.007
EPA SI	DR172 (738)	Chrysene	9.00E-02		0.24		1400	2800	ug/kg dw	0.064	0.032
LDWRI-SurfaceSedimentRound3	LDW-SS334	Chrysene	3.80E-02	J	0.909	4.18E+00	110	460	mg/kg OC	0.038	0.009
EPA SI	DR113 (679)	Cobalt	1.10E+01		2.72	4.04E+02					
LDWRI-SurfaceSedimentRound2	LDW-SS81	Cobalt	1.07E+01		2.47	4.33E+02					
EPA SI	DR116 (682)	Cobalt	1.00E+01		2.53	3.95E+02					
EPA SI	DR117 (683)	Cobalt	1.00E+01		2.6	3.85E+02					
EPA SI	DR118 (684)	Cobalt	1.00E+01		2.8	3.57E+02					
EPA SI	DR119 (685)	Cobalt	1.00E+01		2.69	3.72E+02					
EPA SI	DR149 (715)	Cobalt	1.00E+01		2.01	4.98E+02					

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR150 (716)	Cobalt	9.00E+00		2.18	4.13E+02					
EPA SI	DR151 (717)	Cobalt	9.00E+00		2.68	3.36E+02					
EPA SI	DR170 (736)	Cobalt	9.00E+00		2.04	4.41E+02					
LDWRI-SurfaceSedimentRound1	LDW-SS87	Cobalt	8.90E+00		2.18	4.08E+02					
LDWRI-SurfaceSedimentRound1	LDW-SS88	Cobalt	8.70E+00		1.75	4.97E+02					
LDWRI-SurfaceSedimentRound1	LDW-SS83	Cobalt	8.40E+00		2.07	4.06E+02					
EPA SI	DR114 (680)	Cobalt	8.00E+00		2.51	3.19E+02					
EPA SI	DR115 (681)	Cobalt	8.00E+00		1.3	6.15E+02					
EPA SI	DR175 (741)	Cobalt	8.00E+00		1.74	4.60E+02					
LDWRI-SurfaceSedimentRound1	LDW-SS94	Cobalt	7.40E+00		2.05	3.61E+02					
EPA SI	DR174 (740)	Cobalt	7.00E+00		1.59	4.40E+02					
EPA SI	DR213 (779)	Cobalt	7.00E+00		1.25	5.60E+02					
LDWRI-SurfaceSedimentRound1	LDW-SS92	Cobalt	6.20E+00		1.27	4.88E+02					
EPA SI	DR212 (778)	Cobalt	6.00E+00		1.5	4.00E+02					
LDWRI-SurfaceSedimentRound3	LDW-SS333	Cobalt	5.90E+00		1.66	3.55E+02					
EPA SI	DR173 (739)	Cobalt	5.00E+00		0.87	5.75E+02					
LDWRI-SurfaceSedimentRound1	LDW-SS89	Cobalt	4.90E+00		1.02	4.80E+02					
LDWRI-SurfaceSedimentRound3	LDW-SS334	Cobalt	4.40E+00		0.909	4.84E+02					
EPA SI	DR172 (738)	Cobalt	3.00E+00		0.24	1.25E+03					
LDWRI-SurfaceSedimentRound1	LDW-SS83	Copper	1.09E+02		2.07		390	390	mg/kg dw	0.28	0.28
LDWRI-SurfaceSedimentRound2	LDW-SS81	Copper	8.94E+01		2.47		390	390	mg/kg dw	0.23	0.23
EPA SI	DR115 (681)	Copper	8.30E+01		1.3		390	390	mg/kg dw	0.21	0.21
LDWRI-SurfaceSedimentRound1	LDW-SS87	Copper	7.26E+01		2.18		390	390	mg/kg dw	0.19	0.19
LDWRI-SurfaceSedimentRound1	LDW-SS94	Copper	7.19E+01		2.05		390	390	mg/kg dw	0.18	0.18
EPA SI	DR113 (679)	Copper	7.00E+01		2.72		390	390	mg/kg, dry wt.	0.18	0.18
EPA SI	DR119 (685)	Copper	6.10E+01		2.69		390	390	mg/kg dw	0.16	0.16
EPA SI	DR114 (680)	Copper	5.90E+01		2.51		390	390	mg/kg dw	0.15	0.15
EPA SI	DR116 (682)	Copper	5.90E+01		2.53		390	390	mg/kg dw	0.15	0.15
EPA SI	DR118 (684)	Copper	5.90E+01		2.8		390	390	mg/kg dw	0.15	0.15
EPA SI	DR151 (717)	Copper	5.70E+01		2.68		390	390	mg/kg dw	0.15	0.15
EPA SI	DR117 (683)	Copper	5.50E+01		2.6		390	390	mg/kg dw	0.14	0.14
EPA SI	DR149 (715)	Copper	5.30E+01		2.01		390	390	mg/kg dw	0.14	0.14
LDWRI-SurfaceSedimentRound1	LDW-SS88	Copper	4.87E+01		1.75		390	390	mg/kg dw	0.12	0.12
EPA SI	DR150 (716)	Copper	4.80E+01		2.18		390	390	mg/kg dw	0.12	0.12
EPA SI	DR175 (741)	Copper	4.70E+01		1.74		390	390	mg/kg, dry wt.	0.12	0.12
EPA SI	DR174 (740)	Copper	4.00E+01		1.59		390	390	mg/kg dw	0.10	0.10

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
LDWRI-SurfaceSedimentRound1	LDW-SS92	Copper	3.50E+01		1.27		390	390	mg/kg dw	0.090	0.090
EPA SI	DR170 (736)	Copper	3.40E+01		2.04		390	390	mg/kg dw	0.087	0.087
EPA SI	DR213 (779)	Copper	3.40E+01		1.25		390	390	mg/kg dw	0.087	0.087
LDWRI-SurfaceSedimentRound3	LDW-SS333	Copper	3.30E+01		1.66		390	390	mg/kg dw	0.085	0.085
EPA SI	DR212 (778)	Copper	2.60E+01		1.5		390	390	mg/kg dw	0.067	0.067
EPA SI	DR173 (739)	Copper	2.40E+01		0.87		390	390	mg/kg dw	0.062	0.062
LDWRI-SurfaceSedimentRound1	LDW-SS89	Copper	1.86E+01		1.02		390	390	mg/kg dw	0.048	0.048
EPA SI	DR172 (738)	Copper	1.60E+01		0.24		390	390	mg/kg dw	0.041	0.041
LDWRI-SurfaceSedimentRound3	LDW-SS334	Copper	1.45E+01		0.909		390	390	mg/kg dw	0.037	0.037
EPA SI	DR175 (741)	Dibenzo(a,h)anthracene	1.50E-01		1.74	8.62E+00	12	33	mg/kg OC-dry	0.72	0.26
EPA SI	DR174 (740)	Dibenzo(a,h)anthracene	1.30E-01		1.59	8.18E+00	12	33	mg/kg OC	0.68	0.25
LDWRI-SurfaceSedimentRound1	LDW-SS83	Dibenzo(a,h)anthracene	9.50E-02	J	2.07	4.59E+00	12	33	mg/kg OC	0.38	0.14
EPA SI	DR114 (680)	Dibenzo(a,h)anthracene	5.00E-02		2.51	1.99E+00	12	33	mg/kg OC	0.17	0.060
EPA SI	DR115 (681)	Dibenzo(a,h)anthracene	5.00E-02		1.3	3.85E+00	12	33	mg/kg OC	0.32	0.12
EPA SI	DR149 (715)	Dibenzo(a,h)anthracene	5.00E-02		2.01	2.49E+00	12	33	mg/kg OC	0.21	0.075
EPA SI	DR213 (779)	Dibenzo(a,h)anthracene	5.00E-02		1.25	4.00E+00	12	33	mg/kg OC	0.33	0.12
LDWRI-SurfaceSedimentRound2	LDW-SS81	Dibenzo(a,h)anthracene	4.20E-02		2.47	1.70E+00	12	33	mg/kg OC	0.14	0.052
EPA SI	DR116 (682)	Dibenzo(a,h)anthracene	4.00E-02		2.53	1.58E+00	12	33	mg/kg OC	0.13	0.048
EPA SI	DR118 (684)	Dibenzo(a,h)anthracene	4.00E-02		2.8	1.43E+00	12	33	mg/kg OC	0.12	0.043
EPA SI	DR151 (717)	Dibenzo(a,h)anthracene	4.00E-02		2.68	1.49E+00	12	33	mg/kg OC	0.12	0.045
EPA SI	DR117 (683)	Dibenzo(a,h)anthracene	3.00E-02		2.6	1.15E+00	12	33	mg/kg OC	0.096	0.035
EPA SI	DR119 (685)	Dibenzo(a,h)anthracene	3.00E-02		2.69	1.12E+00	12	33	mg/kg OC	0.093	0.034
EPA SI	DR150 (716)	Dibenzo(a,h)anthracene	3.00E-02		2.18	1.38E+00	12	33	mg/kg OC	0.11	0.042
EPA SI	DR173 (739)	Dibenzo(a,h)anthracene	3.00E-02		0.87	3.45E+00	12	33	mg/kg OC	0.29	0.10
LDWRI-SurfaceSedimentRound3	LDW-SS333	Dibenzo(a,h)anthracene	1.50E-02		1.66	9.04E-01	12	33	mg/kg OC	0.075	0.027
EPA SI	DR175 (741)	Dibenzofuran	7.50E-01		1.74	4.31E+01	15	58	mg/kg OC-dry	2.87	0.74
EPA SI	DR117 (683)	Dibenzofuran	7.00E-02		2.6	2.69E+00	15	58	mg/kg OC	0.18	0.046
EPA SI	DR149 (715)	Dibenzofuran	7.00E-02		2.01	3.48E+00	15	58	mg/kg OC	0.23	0.060
EPA SI	DR174 (740)	Dibenzofuran	6.00E-02		1.59	3.77E+00	15	58	mg/kg OC	0.25	0.065
EPA SI	DR118 (684)	Dibenzofuran	5.00E-02		2.8	1.79E+00	15	58	mg/kg OC	0.12	0.031
EPA SI	DR114 (680)	Dibenzofuran	4.00E-02		2.51	1.59E+00	15	58	mg/kg OC	0.11	0.027
EPA SI	DR116 (682)	Dibenzofuran	3.00E-02		2.53	1.19E+00	15	58	mg/kg OC	0.079	0.020
EPA SI	DR151 (717)	Dibenzofuran	3.00E-02		2.68	1.12E+00	15	58	mg/kg OC	0.075	0.019
EPA SI	DR115 (681)	Dibenzofuran	2.00E-02		1.3	1.54E+00	15	58	mg/kg OC	0.10	0.027
EPA SI	DR119 (685)	Dibenzofuran	2.00E-02		2.69	7.43E-01	15	58	mg/kg OC	0.050	0.013
EPA SI	DR116 (682)	Dibutyltin as ion	2.20E-02	J	2.53	8.70E-01					

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR174 (740)	Dibutyltin as ion	1.10E-02	J	1.59	6.92E-01					
EPA SI	DR115 (681)	Dibutyltin as ion	9.00E-03	J	1.3	6.92E-01					
EPA SI	DR151 (717)	Dibutyltin as ion	8.00E-03	J	2.68	2.99E-01					
EPA SI	DR116 (682)	Dimethyl phthalate	5.00E-02		2.53	1.98E+00	53	53	mg/kg OC	0.037	0.037
EPA SI	DR119 (685)	Dimethyl phthalate	2.00E-02		2.69	7.43E-01	53	53	mg/kg OC	0.014	0.014
EPA SI	DR151 (717)	Dimethyl phthalate	2.00E-02		2.68	7.46E-01	53	53	mg/kg OC	0.014	0.014
LDWRI-SurfaceSedimentRound2	LDW-SS81	Dimethyl phthalate	7.10E-03		2.47	2.87E-01	53	53	mg/kg OC	0.005	0.005
EPA SI	DR174 (740)	Di-n-butyl phthalate	7.00E-02		1.59	4.40E+00	220	1700	mg/kg OC	0.020	0.003
EPA SI	DR113 (679)	Di-n-butyl phthalate	3.00E-02		2.72	1.10E+00	220	1700	mg/kg OC-dry	0.005	0.001
EPA SI	DR114 (680)	Di-n-butyl phthalate	2.00E-02		2.51	7.97E-01	220	1700	mg/kg OC	0.004	0.000
LDWRI-SurfaceSedimentRound1	LDW-SS83	Dioxin/furan TEQ - Bird - Half DL	2.20E-05	J	2.07	1.06E-03					
EPA SI	DR115 (681)	Dioxin/furan TEQ - Bird - Half DL	5.00E-06	J	1.3	3.85E-04					
LDWRI-SurfaceSedimentRound1	LDW-SS83	Dioxin/furan TEQ - Mammal - Half DL	3.20E-05	J	2.07	1.55E-03					
EPA SI	DR115 (681)	Dioxin/furan TEQ - Mammal - Half DL	6.60E-06	J	1.3	5.08E-04					
EPA SI	DR175 (741)	Fluoranthene	1.80E+01		1.74	1.03E+03	160	1200	mg/kg OC-dry	6.5	0.86
EPA SI	DR174 (740)	Fluoranthene	2.80E+00		1.59	1.76E+02	160	1200	mg/kg OC	1.1	0.15
EPA SI	DR149 (715)	Fluoranthene	2.20E+00		2.01	1.09E+02	160	1200	mg/kg OC	0.68	0.091
LDWRI-SurfaceSedimentRound1	LDW-SS83	Fluoranthene	1.50E+00		2.07	7.25E+01	160	1200	mg/kg OC	0.45	0.060
EPA SI	DR117 (683)	Fluoranthene	1.40E+00		2.6	5.38E+01	160	1200	mg/kg OC	0.34	0.045
EPA SI	DR115 (681)	Fluoranthene	1.00E+00		1.3	7.69E+01	160	1200	mg/kg OC	0.48	0.064
EPA SI	DR118 (684)	Fluoranthene	9.60E-01		2.8	3.43E+01	160	1200	mg/kg OC	0.21	0.029
EPA SI	DR114 (680)	Fluoranthene	8.00E-01		2.51	3.19E+01	160	1200	mg/kg OC	0.20	0.027
LDWRI-SurfaceSedimentRound1	LDW-SS88	Fluoranthene	7.80E-01		1.75	4.46E+01	160	1200	mg/kg OC	0.28	0.037
LDWRI-SurfaceSedimentRound1	LDW-SS92	Fluoranthene	7.70E-01		1.27	6.06E+01	160	1200	mg/kg OC	0.38	0.051
EPA SI	DR116 (682)	Fluoranthene	7.40E-01		2.53	2.92E+01	160	1200	mg/kg OC	0.18	0.024
EPA SI	DR151 (717)	Fluoranthene	7.40E-01		2.68	2.76E+01	160	1200	mg/kg OC	0.17	0.023
EPA SI	DR213 (779)	Fluoranthene	7.00E-01		1.25	5.60E+01	160	1200	mg/kg OC	0.35	0.047
EPA SI	DR119 (685)	Fluoranthene	5.40E-01		2.69	2.01E+01	160	1200	mg/kg OC	0.13	0.017
EPA SI	DR150 (716)	Fluoranthene	4.90E-01		2.18	2.25E+01	160	1200	mg/kg OC	0.14	0.019
EPA SI	DR173 (739)	Fluoranthene	3.90E-01		0.87	4.48E+01	160	1200	mg/kg OC	0.28	0.037
LDWRI-SurfaceSedimentRound3	LDW-SS333	Fluoranthene	3.00E-01		1.66	1.81E+01	160	1200	mg/kg OC	0.11	0.015
LDWRI-SurfaceSedimentRound2	LDW-SS81	Fluoranthene	3.00E-01		2.47	1.21E+01	160	1200	mg/kg OC	0.076	0.010
EPA SI	DR170 (736)	Fluoranthene	2.30E-01		2.04	1.13E+01	160	1200	mg/kg OC	0.070	0.009
LDWRI-SurfaceSedimentRound1	LDW-SS94	Fluoranthene	2.00E-01		2.05	9.76E+00	160	1200	mg/kg OC	0.061	0.008
EPA SI	DR212 (778)	Fluoranthene	1.90E-01		1.5	1.27E+01	160	1200	mg/kg OC	0.079	0.011
LDWRI-SurfaceSedimentRound1	LDW-SS87	Fluoranthene	1.80E-01		2.18	8.26E+00	160	1200	mg/kg OC	0.052	0.007

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR172 (738)	Fluoranthene	1.30E-01		0.24		1700	2500	ug/kg dw	0.076	0.052
LDWRI-SurfaceSedimentRound1	LDW-SS89	Fluoranthene	1.30E-01		1.02	1.27E+01	160	1200	mg/kg OC	0.080	0.011
EPA SI	DR113 (679)	Fluoranthene	1.00E-01		2.72	3.68E+00	160	1200	mg/kg OC-dry	0.023	0.003
LDWRI-SurfaceSedimentRound3	LDW-SS334	Fluoranthene	7.90E-02		0.909	8.69E+00	160	1200	mg/kg OC	0.054	0.007
EPA SI	DR175 (741)	Fluorene	1.70E+00		1.74	9.77E+01	23	79	mg/kg OC-dry	4.2	1.2
EPA SI	DR174 (740)	Fluorene	1.20E-01		1.59	7.55E+00	23	79	mg/kg OC	0.33	0.096
EPA SI	DR117 (683)	Fluorene	1.10E-01		2.6	4.23E+00	23	79	mg/kg OC	0.18	0.054
EPA SI	DR149 (715)	Fluorene	1.10E-01		2.01	5.47E+00	23	79	mg/kg OC	0.24	0.069
EPA SI	DR114 (680)	Fluorene	9.00E-02		2.51	3.59E+00	23	79	mg/kg OC	0.16	0.045
EPA SI	DR118 (684)	Fluorene	7.00E-02		2.8	2.50E+00	23	79	mg/kg OC	0.11	0.032
LDWRI-SurfaceSedimentRound1	LDW-SS83	Fluorene	5.70E-02	J	2.07	2.75E+00	23	79	mg/kg OC	0.12	0.035
EPA SI	DR116 (682)	Fluorene	4.00E-02		2.53	1.58E+00	23	79	mg/kg OC	0.069	0.020
EPA SI	DR151 (717)	Fluorene	4.00E-02		2.68	1.49E+00	23	79	mg/kg OC	0.065	0.019
EPA SI	DR115 (681)	Fluorene	3.00E-02		1.3	2.31E+00	23	79	mg/kg OC	0.10	0.029
EPA SI	DR119 (685)	Fluorene	3.00E-02		2.69	1.12E+00	23	79	mg/kg OC	0.048	0.014
LDWRI-SurfaceSedimentRound1	LDW-SS88	Fluorene	2.40E-02		1.75	1.37E+00	23	79	mg/kg OC	0.060	0.017
EPA SI	DR173 (739)	Fluorene	2.00E-02		0.87	2.30E+00	23	79	mg/kg OC	0.10	0.029
EPA SI	DR213 (779)	Fluorene	2.00E-02		1.25	1.60E+00	23	79	mg/kg OC	0.070	0.020
EPA SI	DR175 (741)	Indeno(1,2,3-cd)pyrene	6.60E-01		1.74	3.79E+01	34	88	mg/kg OC-dry	1.1	0.43
EPA SI	DR174 (740)	Indeno(1,2,3-cd)pyrene	4.80E-01		1.59	3.02E+01	34	88	mg/kg OC	0.89	0.34
EPA SI	DR149 (715)	Indeno(1,2,3-cd)pyrene	2.40E-01		2.01	1.19E+01	34	88	mg/kg OC	0.35	0.14
EPA SI	DR115 (681)	Indeno(1,2,3-cd)pyrene	2.10E-01		1.3	1.62E+01	34	88	mg/kg OC	0.48	0.18
EPA SI	DR151 (717)	Indeno(1,2,3-cd)pyrene	2.10E-01		2.68	7.84E+00	34	88	mg/kg OC	0.23	0.089
EPA SI	DR213 (779)	Indeno(1,2,3-cd)pyrene	2.10E-01		1.25	1.68E+01	34	88	mg/kg OC	0.49	0.19
LDWRI-SurfaceSedimentRound1	LDW-SS83	Indeno(1,2,3-cd)pyrene	2.00E-01		2.07	9.66E+00	34	88	mg/kg OC	0.28	0.11
EPA SI	DR114 (680)	Indeno(1,2,3-cd)pyrene	1.90E-01		2.51	7.57E+00	34	88	mg/kg OC	0.22	0.086
EPA SI	DR116 (682)	Indeno(1,2,3-cd)pyrene	1.70E-01		2.53	6.72E+00	34	88	mg/kg OC	0.20	0.076
EPA SI	DR119 (685)	Indeno(1,2,3-cd)pyrene	1.70E-01		2.69	6.32E+00	34	88	mg/kg OC	0.19	0.072
EPA SI	DR118 (684)	Indeno(1,2,3-cd)pyrene	1.60E-01		2.8	5.71E+00	34	88	mg/kg OC	0.17	0.065
EPA SI	DR117 (683)	Indeno(1,2,3-cd)pyrene	1.40E-01		2.6	5.38E+00	34	88	mg/kg OC	0.16	0.061
EPA SI	DR150 (716)	Indeno(1,2,3-cd)pyrene	1.30E-01		2.18	5.96E+00	34	88	mg/kg OC	0.18	0.068
LDWRI-SurfaceSedimentRound2	LDW-SS81	Indeno(1,2,3-cd)pyrene	1.10E-01		2.47	4.45E+00	34	88	mg/kg OC	0.13	0.051
EPA SI	DR173 (739)	Indeno(1,2,3-cd)pyrene	1.00E-01		0.87	1.15E+01	34	88	mg/kg OC	0.34	0.13
LDWRI-SurfaceSedimentRound1	LDW-SS92	Indeno(1,2,3-cd)pyrene	9.00E-02		1.27	7.09E+00	34	88	mg/kg OC	0.21	0.081
EPA SI	DR113 (679)	Indeno(1,2,3-cd)pyrene	7.00E-02		2.72	2.57E+00	34	88	mg/kg OC-dry	0.076	0.029
LDWRI-SurfaceSedimentRound3	LDW-SS333	Indeno(1,2,3-cd)pyrene	7.00E-02		1.66	4.22E+00	34	88	mg/kg OC	0.12	0.048

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR170 (736)	Indeno(1,2,3-cd)pyrene	6.00E-02		2.04	2.94E+00	34	88	mg/kg OC	0.087	0.033
EPA SI	DR212 (778)	Indeno(1,2,3-cd)pyrene	6.00E-02		1.5	4.00E+00	34	88	mg/kg OC	0.12	0.045
EPA SI	DR172 (738)	Indeno(1,2,3-cd)pyrene	3.00E-02		0.24		600	690	ug/kg dw	0.050	0.043
LDWRI-SurfaceSedimentRound1	LDW-SS88	Indeno(1,2,3-cd)pyrene	2.10E-02		1.75	1.20E+00	34	88	mg/kg OC	0.035	0.014
LDWRI-SurfaceSedimentRound1	LDW-SS89	Indeno(1,2,3-cd)pyrene	2.10E-02		1.02	2.06E+00	34	88	mg/kg OC	0.061	0.023
LDWRI-SurfaceSedimentRound1	LDW-SS87	Indeno(1,2,3-cd)pyrene	2.00E-02		2.18	9.17E-01	34	88	mg/kg OC	0.027	0.010
LDWRI-SurfaceSedimentRound1	LDW-SS94	Indeno(1,2,3-cd)pyrene	2.00E-02		2.05	9.76E-01	34	88	mg/kg OC	0.029	0.011
EPA SI	DR113 (679)	Iron	3.19E+04	J	2.72	1.17E+06					
EPA SI	DR118 (684)	Iron	3.10E+04	J	2.8	1.11E+06					
EPA SI	DR119 (685)	Iron	3.10E+04	J	2.69	1.15E+06					
EPA SI	DR115 (681)	Iron	2.90E+04		1.3	2.23E+06					
EPA SI	DR116 (682)	Iron	2.90E+04	J	2.53	1.15E+06					
EPA SI	DR117 (683)	Iron	2.90E+04	J	2.6	1.12E+06					
EPA SI	DR150 (716)	Iron	2.90E+04	J	2.18	1.33E+06					
EPA SI	DR151 (717)	Iron	2.90E+04	J	2.68	1.08E+06					
EPA SI	DR114 (680)	Iron	2.60E+04	J	2.51	1.04E+06					
EPA SI	DR149 (715)	Iron	2.60E+04	J	2.01	1.29E+06					
EPA SI	DR170 (736)	Iron	2.40E+04	J	2.04	1.18E+06					
EPA SI	DR175 (741)	Iron	2.28E+04	J	1.74	1.31E+06					
EPA SI	DR174 (740)	Iron	1.90E+04	J	1.59	1.19E+06					
EPA SI	DR213 (779)	Iron	1.90E+04	J	1.25	1.52E+06					
EPA SI	DR173 (739)	Iron	1.50E+04	J	0.87	1.72E+06					
EPA SI	DR212 (778)	Iron	1.50E+04	J	1.5	1.00E+06					
EPA SI	DR172 (738)	Iron	9.70E+03	J	0.24	4.04E+06					
LDWRI-SurfaceSedimentRound1	LDW-SS88	Lead	7.40E+01		1.75		450	530	mg/kg dw	0.16	0.14
EPA SI	DR113 (679)	Lead	6.73E+01		2.72		450	530	mg/kg, dry wt.	0.15	0.13
LDWRI-SurfaceSedimentRound1	LDW-SS83	Lead	5.50E+01		2.07		450	530	mg/kg dw	0.12	0.10
LDWRI-SurfaceSedimentRound2	LDW-SS81	Lead	5.20E+01		2.47		450	530	mg/kg dw	0.12	0.098
LDWRI-SurfaceSedimentRound1	LDW-SS94	Lead	3.70E+01		2.05		450	530	mg/kg dw	0.082	0.070
LDWRI-SurfaceSedimentRound1	LDW-SS87	Lead	3.60E+01		2.18		450	530	mg/kg dw	0.080	0.068
EPA SI	DR212 (778)	Lead	3.20E+01		1.5		450	530	mg/kg dw	0.071	0.060
EPA SI	DR114 (680)	Lead	3.10E+01		2.51		450	530	mg/kg dw	0.069	0.058
EPA SI	DR115 (681)	Lead	3.00E+01	J	1.3		450	530	mg/kg dw	0.067	0.057
EPA SI	DR119 (685)	Lead	3.00E+01		2.69		450	530	mg/kg dw	0.067	0.057
EPA SI	DR174 (740)	Lead	2.90E+01		1.59		450	530	mg/kg dw	0.064	0.055
EPA SI	DR118 (684)	Lead	2.80E+01		2.8		450	530	mg/kg dw	0.062	0.053

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR151 (717)	Lead	2.80E+01		2.68		450	530	mg/kg dw	0.062	0.053
EPA SI	DR116 (682)	Lead	2.50E+01		2.53		450	530	mg/kg dw	0.056	0.047
EPA SI	DR117 (683)	Lead	2.50E+01		2.6		450	530	mg/kg dw	0.056	0.047
EPA SI	DR170 (736)	Lead	2.50E+01		2.04		450	530	mg/kg dw	0.056	0.047
LDWRI-SurfaceSedimentRound1	LDW-SS92	Lead	2.40E+01		1.27		450	530	mg/kg dw	0.053	0.045
EPA SI	DR149 (715)	Lead	2.30E+01		2.01		450	530	mg/kg dw	0.051	0.043
EPA SI	DR213 (779)	Lead	2.20E+01		1.25		450	530	mg/kg dw	0.049	0.042
EPA SI	DR175 (741)	Lead	2.16E+01		1.74		450	530	mg/kg, dry wt.	0.048	0.041
LDWRI-SurfaceSedimentRound3	LDW-SS333	Lead	2.00E+01		1.66		450	530	mg/kg dw	0.044	0.038
EPA SI	DR150 (716)	Lead	1.90E+01		2.18		450	530	mg/kg dw	0.042	0.036
EPA SI	DR173 (739)	Lead	1.60E+01		0.87		450	530	mg/kg dw	0.036	0.030
LDWRI-SurfaceSedimentRound1	LDW-SS89	Lead	1.00E+01		1.02		450	530	mg/kg dw	0.022	0.019
EPA SI	DR172 (738)	Lead	8.20E+00		0.24		450	530	mg/kg dw	0.018	0.015
LDWRI-SurfaceSedimentRound3	LDW-SS334	Lead	7.00E+00		0.909		450	530	mg/kg dw	0.016	0.013
EPA SI	DR118 (684)	Manganese	3.30E+02		2.8	1.18E+04					
EPA SI	DR113 (679)	Manganese	3.11E+02		2.72	1.14E+04					
EPA SI	DR119 (685)	Manganese	3.10E+02		2.69	1.15E+04					
EPA SI	DR115 (681)	Manganese	2.90E+02		1.3	2.23E+04					
EPA SI	DR117 (683)	Manganese	2.90E+02		2.6	1.12E+04					
EPA SI	DR150 (716)	Manganese	2.90E+02		2.18	1.33E+04					
EPA SI	DR151 (717)	Manganese	2.90E+02		2.68	1.08E+04					
EPA SI	DR114 (680)	Manganese	2.80E+02		2.51	1.12E+04					
EPA SI	DR116 (682)	Manganese	2.80E+02		2.53	1.11E+04					
EPA SI	DR170 (736)	Manganese	2.70E+02		2.04	1.32E+04					
EPA SI	DR149 (715)	Manganese	2.60E+02		2.01	1.29E+04					
EPA SI	DR175 (741)	Manganese	2.39E+02		1.74	1.37E+04					
EPA SI	DR173 (739)	Manganese	2.10E+02		0.87	2.41E+04					
EPA SI	DR213 (779)	Manganese	1.90E+02		1.25	1.52E+04					
EPA SI	DR172 (738)	Manganese	1.80E+02		0.24	7.50E+04					
EPA SI	DR174 (740)	Manganese	1.70E+02		1.59	1.07E+04					
EPA SI	DR212 (778)	Manganese	1.30E+02		1.5	8.67E+03					
LDWRI-SurfaceSedimentRound1	LDW-SS88	Mercury	6.20E-01		1.75		0.41	0.59	mg/kg dw	1.5	1.1
EPA SI	DR113 (679)	Mercury	3.90E-01		2.72		0.41	0.59	mg/kg, dry wt.	0.95	0.66
EPA SI	DR118 (684)	Mercury	3.10E-01		2.8		0.41	0.59	mg/kg dw	0.76	0.53
EPA SI	DR117 (683)	Mercury	2.30E-01		2.6		0.41	0.59	mg/kg dw	0.56	0.39
LDWRI-SurfaceSedimentRound2	LDW-SS81	Mercury	2.00E-01		2.47		0.41	0.59	mg/kg dw	0.49	0.34

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
LDWRI-SurfaceSedimentRound1	LDW-SS83	Mercury	2.00E-01		2.07		0.41	0.59	mg/kg dw	0.49	0.34
EPA SI	DR116 (682)	Mercury	1.90E-01		2.53		0.41	0.59	mg/kg dw	0.46	0.32
EPA SI	DR151 (717)	Mercury	1.80E-01		2.68		0.41	0.59	mg/kg dw	0.44	0.31
EPA SI	DR119 (685)	Mercury	1.70E-01		2.69		0.41	0.59	mg/kg dw	0.41	0.29
LDWRI-SurfaceSedimentRound1	LDW-SS87	Mercury	1.70E-01		2.18		0.41	0.59	mg/kg dw	0.41	0.29
EPA SI	DR114 (680)	Mercury	1.60E-01		2.51		0.41	0.59	mg/kg dw	0.39	0.27
EPA SI	DR170 (736)	Mercury	1.50E-01		2.04		0.41	0.59	mg/kg dw	0.37	0.25
EPA SI	DR174 (740)	Mercury	1.50E-01		1.59		0.41	0.59	mg/kg dw	0.37	0.25
EPA SI	DR149 (715)	Mercury	1.30E-01		2.01		0.41	0.59	mg/kg dw	0.32	0.22
EPA SI	DR175 (741)	Mercury	1.30E-01		1.74		0.41	0.59	mg/kg, dry wt.	0.32	0.22
EPA SI	DR150 (716)	Mercury	1.10E-01		2.18		0.41	0.59	mg/kg dw	0.27	0.19
EPA SI	DR213 (779)	Mercury	1.10E-01		1.25		0.41	0.59	mg/kg dw	0.27	0.19
EPA SI	DR115 (681)	Mercury	1.00E-01		1.3		0.41	0.59	mg/kg dw	0.24	0.17
EPA SI	DR212 (778)	Mercury	1.00E-01		1.5		0.41	0.59	mg/kg dw	0.24	0.17
LDWRI-SurfaceSedimentRound3	LDW-SS333	Mercury	1.00E-01		1.66		0.41	0.59	mg/kg dw	0.24	0.17
LDWRI-SurfaceSedimentRound1	LDW-SS92	Mercury	9.00E-02		1.27		0.41	0.59	mg/kg dw	0.22	0.15
LDWRI-SurfaceSedimentRound1	LDW-SS94	Mercury	9.00E-02		2.05		0.41	0.59	mg/kg dw	0.22	0.15
EPA SI	DR173 (739)	Mercury	7.00E-02		0.87		0.41	0.59	mg/kg dw	0.17	0.12
LDWRI-SurfaceSedimentRound1	LDW-SS94	Molybdenum	2.40E+00		2.05	1.17E+02					
LDWRI-SurfaceSedimentRound2	LDW-SS81	Molybdenum	2.00E+00		2.47	8.10E+01					
LDWRI-SurfaceSedimentRound1	LDW-SS83	Molybdenum	2.00E+00		2.07	9.66E+01					
LDWRI-SurfaceSedimentRound1	LDW-SS92	Molybdenum	1.50E+00		1.27	1.18E+02					
LDWRI-SurfaceSedimentRound1	LDW-SS88	Molybdenum	1.30E+00		1.75	7.43E+01					
LDWRI-SurfaceSedimentRound1	LDW-SS87	Molybdenum	1.00E+00		2.18	4.59E+01					
LDWRI-SurfaceSedimentRound1	LDW-SS89	Molybdenum	7.00E-01		1.02	6.86E+01					
LDWRI-SurfaceSedimentRound3	LDW-SS333	Molybdenum	4.00E-01		1.66	2.41E+01					
EPA SI	DR151 (717)	Monobutyltin as ion	1.80E-02	J	2.68	6.72E-01					
EPA SI	DR174 (740)	Monobutyltin as ion	1.20E-02	J	1.59	7.55E-01					
EPA SI	DR174 (740)	Naphthalene	6.00E-02		1.59	3.77E+00	99	170	mg/kg OC	0.038	0.022
EPA SI	DR175 (741)	Naphthalene	3.00E-02		1.74	1.72E+00	99	170	mg/kg OC-dry	0.017	0.010
EPA SI	DR170 (736)	Nickel	2.50E+01		2.04		140	370	mg/kg dw	0.18	0.068
LDWRI-SurfaceSedimentRound2	LDW-SS81	Nickel	2.30E+01		2.47		140	370	mg/kg dw	0.16	0.062
LDWRI-SurfaceSedimentRound1	LDW-SS83	Nickel	2.30E+01		2.07		140	370	mg/kg dw	0.16	0.062
EPA SI	DR150 (716)	Nickel	2.20E+01		2.18		140	370	mg/kg dw	0.16	0.059
EPA SI	DR113 (679)	Nickel	2.15E+01		2.72		140	370	mg/kg, dry wt.	0.15	0.058
EPA SI	DR115 (681)	Nickel	2.10E+01		1.3		140	370	mg/kg dw	0.15	0.057

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR149 (715)	Nickel	2.10E+01		2.01		140	370	mg/kg dw	0.15	0.057
EPA SI	DR174 (740)	Nickel	2.10E+01		1.59		140	370	mg/kg dw	0.15	0.057
LDWRI-SurfaceSedimentRound1	LDW-SS87	Nickel	2.10E+01		2.18		140	370	mg/kg dw	0.15	0.057
EPA SI	DR114 (680)	Nickel	2.00E+01		2.51		140	370	mg/kg dw	0.14	0.054
EPA SI	DR117 (683)	Nickel	2.00E+01		2.6		140	370	mg/kg dw	0.14	0.054
EPA SI	DR118 (684)	Nickel	2.00E+01		2.8		140	370	mg/kg dw	0.14	0.054
EPA SI	DR119 (685)	Nickel	2.00E+01		2.69		140	370	mg/kg dw	0.14	0.054
EPA SI	DR116 (682)	Nickel	1.90E+01		2.53		140	370	mg/kg dw	0.14	0.051
LDWRI-SurfaceSedimentRound1	LDW-SS88	Nickel	1.90E+01		1.75		140	370	mg/kg dw	0.14	0.051
EPA SI	DR175 (741)	Nickel	1.84E+01		1.74		140	370	mg/kg, dry wt.	0.13	0.050
EPA SI	DR213 (779)	Nickel	1.60E+01		1.25		140	370	mg/kg dw	0.11	0.043
LDWRI-SurfaceSedimentRound1	LDW-SS94	Nickel	1.60E+01		2.05		140	370	mg/kg dw	0.11	0.043
LDWRI-SurfaceSedimentRound1	LDW-SS92	Nickel	1.50E+01		1.27		140	370	mg/kg dw	0.11	0.041
LDWRI-SurfaceSedimentRound3	LDW-SS333	Nickel	1.45E+01		1.66		140	370	mg/kg dw	0.10	0.039
EPA SI	DR151 (717)	Nickel	1.40E+01		2.68		140	370	mg/kg dw	0.10	0.038
EPA SI	DR212 (778)	Nickel	1.20E+01		1.5		140	370	mg/kg dw	0.086	0.032
EPA SI	DR173 (739)	Nickel	1.00E+01		0.87		140	370	mg/kg dw	0.071	0.027
LDWRI-SurfaceSedimentRound1	LDW-SS89	Nickel	1.00E+01		1.02		140	370	mg/kg dw	0.071	0.027
LDWRI-SurfaceSedimentRound3	LDW-SS334	Nickel	9.20E+00		0.909		140	370	mg/kg dw	0.066	0.025
EPA SI	DR172 (738)	Nickel	8.90E+00		0.24		140	370	mg/kg dw	0.064	0.024
LDWRI-SurfaceSedimentRound1	LDW-SS83	OCDD	9.95E-03		2.07	4.81E-01					
EPA SI	DR115 (681)	OCDD	2.60E-03		1.3	2.00E-01					
LDWRI-SurfaceSedimentRound1	LDW-SS83	OCDF	4.51E-04		2.07	2.18E-02					
EPA SI	DR115 (681)	OCDF	9.50E-05		1.3	7.31E-03					
LDWRI-SurfaceSedimentRound1	LDW-SS89	PCBs (total calc'd)	1.80E+00		1.02	1.76E+02	12	65	mg/kg OC	15	2.7
LDWRI-SurfaceSedimentRound1	LDW-SS92	PCBs (total calc'd)	9.70E-01		1.27	7.64E+01	12	65	mg/kg OC	6.4	1.2
LDWRI-SurfaceSedimentRound1	LDW-SS88	PCBs (total calc'd)	6.60E-01		1.75	3.77E+01	12	65	mg/kg OC	3.1	0.58
EPA SI	DR174 (740)	PCBs (total calc'd)	4.90E-01		1.59	3.08E+01	12	65	mg/kg OC	2.6	0.47
EPA SI	DR119 (685)	PCBs (total calc'd)	3.90E-01	J	2.69	1.45E+01	12	65	mg/kg OC	1.2	0.22
EPA SI	DR151 (717)	PCBs (total calc'd)	3.30E-01	J	2.68	1.23E+01	12	65	mg/kg OC	1.03	0.19
NOAA SiteChar	EST182 (172)	PCBs (total calc'd)	2.50E-01		1.84	1.36E+01	12	65	mg/kg OC	1.1	0.21
NOAA SiteChar	EST179 (169)	PCBs (total calc'd)	2.40E-01		0.98	2.45E+01	12	65	mg/kg OC	2.04	0.38
EPA SI	DR117 (683)	PCBs (total calc'd)	2.10E-01	J	2.6	8.08E+00	12	65	mg/kg OC	0.67	0.12
LDWRI-SurfaceSedimentRound2	LDW-SS81	PCBs (total calc'd)	2.10E-01		2.47	8.50E+00	12	65	mg/kg OC	0.71	0.13
NOAA SiteChar	EST177 (167)	PCBs (total calc'd)	2.00E-01		2.37	8.44E+00	12	65	mg/kg OC	0.70	0.13
NOAA SiteChar	EST178 (168)	PCBs (total calc'd)	2.00E-01		2.76	7.25E+00	12	65	mg/kg OC	0.60	0.11

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR114 (680)	PCBs (total calc'd)	1.90E-01	J	2.51	7.57E+00	12	65	mg/kg OC	0.63	0.12
NOAA SiteChar	EST186 (176)	PCBs (total calc'd)	1.80E-01		2.3	7.83E+00	12	65	mg/kg OC	0.65	0.12
NOAA SiteChar	EST188 (178)	PCBs (total calc'd)	1.70E-01		2.25	7.56E+00	12	65	mg/kg OC	0.63	0.12
LDWRI-SurfaceSedimentRound3	LDW-SS333	PCBs (total calc'd)	1.67E-01		1.66	1.01E+01	12	65	mg/kg OC	0.84	0.15
EPA SI	DR116 (682)	PCBs (total calc'd)	1.57E-01	J	2.53	6.21E+00	12	65	mg/kg OC	0.52	0.095
EPA SI	DR115 (681)	PCBs (total calc'd)	1.42E-01		1.3	1.09E+01	12	65	mg/kg OC	0.91	0.17
NOAA SiteChar	EST184 (174)	PCBs (total calc'd)	1.40E-01		2	7.00E+00	12	65	mg/kg OC	0.58	0.11
NOAA SiteChar	EST189 (179)	PCBs (total calc'd)	1.40E-01		2.24	6.25E+00	12	65	mg/kg OC	0.52	0.096
EPA SI	DR150 (716)	PCBs (total calc'd)	1.37E-01	J	2.18	6.28E+00	12	65	mg/kg OC	0.52	0.097
EPA SI	DR213 (779)	PCBs (total calc'd)	1.36E-01	J	1.25	1.09E+01	12	65	mg/kg OC	0.91	0.17
NOAA SiteChar	EIT075 (82)	PCBs (total calc'd)	1.20E-01		0.54	2.22E+01	12	65	mg/kg OC	1.85	0.34
NOAA SiteChar	EST176 (166)	PCBs (total calc'd)	1.20E-01		0.93	1.29E+01	12	65	mg/kg OC	1.08	0.20
NOAA SiteChar	EST183 (173)	PCBs (total calc'd)	1.20E-01		2.02	5.94E+00	12	65	mg/kg OC	0.50	0.091
NOAA SiteChar	EST181 (171)	PCBs (total calc'd)	1.10E-01		1.79	6.15E+00	12	65	mg/kg OC	0.51	0.095
NOAA SiteChar	EST185 (175)	PCBs (total calc'd)	1.10E-01		2.22	4.95E+00	12	65	mg/kg OC	0.41	0.076
NOAA SiteChar	EIT078 (84)	PCBs (total calc'd)	1.00E-01		0.21		130	1000	ug/kg dw	0.77	0.10
LDWRI-SurfaceSedimentRound1	LDW-SS83	PCBs (total calc'd)	9.70E-02	J	2.07	4.69E+00	12	65	mg/kg OC	0.39	0.072
EPA SI	DR149 (715)	PCBs (total calc'd)	9.50E-02	J	2.01	4.73E+00	12	65	mg/kg OC	0.39	0.073
EPA SI	DR212 (778)	PCBs (total calc'd)	7.70E-02	J	1.5	5.13E+00	12	65	mg/kg OC	0.43	0.079
LDWRI-SurfaceSedimentRound1	LDW-SS87	PCBs (total calc'd)	7.20E-02		2.18	3.30E+00	12	65	mg/kg OC	0.28	0.051
LDWRI-SurfaceSedimentRound1	LDW-SS94	PCBs (total calc'd)	7.20E-02		2.05	3.51E+00	12	65	mg/kg OC	0.29	0.054
EPA SI	DR173 (739)	PCBs (total calc'd)	6.20E-02	J	0.87	7.13E+00	12	65	mg/kg OC	0.59	0.11
EPA SI	DR118 (684)	PCBs (total calc'd)	5.30E-02	J	2.8	1.89E+00	12	65	mg/kg OC	0.16	0.029
EPA SI	DR170 (736)	PCBs (total calc'd)	5.10E-02	J	2.04	2.50E+00	12	65	mg/kg OC	0.21	0.038
LDWRI-SurfaceSedimentRound3	LDW-SS334	PCBs (total calc'd)	3.30E-02		0.909	3.63E+00	12	65	mg/kg OC	0.30	0.056
EPA SI	DR113 (679)	PCBs (total-calc'd)	2.03E+00	J	2.72	7.45E+01	12	65	mg/kg OC-dry	6.2	1.1
NOAA SiteChar	EIT074 (81)	PCBs (total-calc'd)	4.50E-01		0.76	5.92E+01	12	65	mg/kg OC-dry	4.9	0.91
NOAA SiteChar	EST180 (170)	PCBs (total-calc'd)	2.30E-01		1.53	1.50E+01	12	65	mg/kg OC-dry	1.3	0.23
EPA SI	DR175 (741)	PCBs (total-calc'd)	1.20E-01		1.74	6.90E+00	12	65	mg/kg OC-dry	0.57	0.11
EPA SI	DR175 (741)	Phenanthrene	1.60E+01		1.74	9.20E+02	100	480	mg/kg OC-dry	9.2	1.9
EPA SI	DR149 (715)	Phenanthrene	8.20E-01		2.01	4.08E+01	100	480	mg/kg OC	0.41	0.085
EPA SI	DR174 (740)	Phenanthrene	7.00E-01		1.59	4.40E+01	100	480	mg/kg OC	0.44	0.092
EPA SI	DR117 (683)	Phenanthrene	6.40E-01		2.6	2.46E+01	100	480	mg/kg OC	0.25	0.051
LDWRI-SurfaceSedimentRound1	LDW-SS83	Phenanthrene	4.00E-01		2.07	1.93E+01	100	480	mg/kg OC	0.19	0.040
EPA SI	DR118 (684)	Phenanthrene	3.70E-01		2.8	1.32E+01	100	480	mg/kg OC	0.13	0.028
EPA SI	DR151 (717)	Phenanthrene	3.10E-01		2.68	1.16E+01	100	480	mg/kg OC	0.12	0.024

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR114 (680)	Phenanthrene	3.00E-01		2.51	1.20E+01	100	480	mg/kg OC	0.12	0.025
EPA SI	DR115 (681)	Phenanthrene	2.40E-01		1.3	1.85E+01	100	480	mg/kg OC	0.18	0.038
EPA SI	DR116 (682)	Phenanthrene	2.40E-01		2.53	9.49E+00	100	480	mg/kg OC	0.095	0.020
EPA SI	DR119 (685)	Phenanthrene	2.20E-01		2.69	8.18E+00	100	480	mg/kg OC	0.082	0.017
EPA SI	DR213 (779)	Phenanthrene	2.00E-01		1.25	1.60E+01	100	480	mg/kg OC	0.16	0.033
LDWRI-SurfaceSedimentRound1	LDW-SS88	Phenanthrene	2.00E-01		1.75	1.14E+01	100	480	mg/kg OC	0.11	0.024
EPA SI	DR173 (739)	Phenanthrene	1.60E-01		0.87	1.84E+01	100	480	mg/kg OC	0.18	0.038
EPA SI	DR150 (716)	Phenanthrene	1.40E-01		2.18	6.42E+00	100	480	mg/kg OC	0.064	0.013
LDWRI-SurfaceSedimentRound1	LDW-SS92	Phenanthrene	1.40E-01		1.27	1.10E+01	100	480	mg/kg OC	0.11	0.023
LDWRI-SurfaceSedimentRound3	LDW-SS333	Phenanthrene	1.20E-01		1.66	7.23E+00	100	480	mg/kg OC	0.072	0.015
LDWRI-SurfaceSedimentRound1	LDW-SS87	Phenanthrene	9.80E-02		2.18	4.50E+00	100	480	mg/kg OC	0.045	0.009
LDWRI-SurfaceSedimentRound2	LDW-SS81	Phenanthrene	9.00E-02		2.47	3.64E+00	100	480	mg/kg OC	0.036	0.008
LDWRI-SurfaceSedimentRound1	LDW-SS94	Phenanthrene	7.90E-02		2.05	3.85E+00	100	480	mg/kg OC	0.039	0.008
EPA SI	DR170 (736)	Phenanthrene	7.00E-02		2.04	3.43E+00	100	480	mg/kg OC	0.034	0.007
EPA SI	DR212 (778)	Phenanthrene	7.00E-02		1.5	4.67E+00	100	480	mg/kg OC	0.047	0.010
EPA SI	DR113 (679)	Phenanthrene	6.00E-02		2.72	2.21E+00	100	480	mg/kg OC-dry	0.022	0.005
LDWRI-SurfaceSedimentRound1	LDW-SS89	Phenanthrene	3.70E-02		1.02	3.63E+00	100	480	mg/kg OC	0.036	0.008
EPA SI	DR172 (738)	Phenanthrene	3.00E-02		0.24		1500	5400	ug/kg dw	0.020	0.006
EPA SI	DR173 (739)	Phenol	1.10E-01		0.87		420	1200	ug/kg dw	0.26	0.092
LDWRI-SurfaceSedimentRound2	LDW-SS81	Phenol	9.00E-02		2.47		420	1200	ug/kg dw	0.21	0.075
EPA SI	DR150 (716)	Phenol	5.00E-02		2.18		420	1200	ug/kg dw	0.12	0.042
EPA SI	DR113 (679)	Phenol	4.00E-02		2.72		420	1200	ug/kg, dry wt.	0.095	0.033
LDWRI-SurfaceSedimentRound3	LDW-SS333	Phenol	4.00E-02	J	1.66		420	1200	ug/kg dw	0.095	0.033
LDWRI-SurfaceSedimentRound1	LDW-SS88	Phenol	2.60E-02		1.75		420	1200	ug/kg dw	0.062	0.022
EPA SI	DR114 (680)	Phenol	2.00E-02		2.51		420	1200	ug/kg dw	0.048	0.017
EPA SI	DR175 (741)	Pyrene	1.10E+01		1.74	6.32E+02	1000	1400	mg/kg OC-dry	0.63	0.45
EPA SI	DR174 (740)	Pyrene	2.60E+00		1.59	1.64E+02	1000	1400	mg/kg OC	0.16	0.12
EPA SI	DR149 (715)	Pyrene	1.50E+00		2.01	7.46E+01	1000	1400	mg/kg OC	0.075	0.053
LDWRI-SurfaceSedimentRound1	LDW-SS83	Pyrene	1.40E+00		2.07	6.76E+01	1000	1400	mg/kg OC	0.068	0.048
EPA SI	DR117 (683)	Pyrene	1.10E+00		2.6	4.23E+01	1000	1400	mg/kg OC	0.042	0.030
EPA SI	DR118 (684)	Pyrene	8.10E-01		2.8	2.89E+01	1000	1400	mg/kg OC	0.029	0.021
EPA SI	DR115 (681)	Pyrene	7.60E-01		1.3	5.85E+01	1000	1400	mg/kg OC	0.058	0.042
EPA SI	DR151 (717)	Pyrene	7.20E-01		2.68	2.69E+01	1000	1400	mg/kg OC	0.027	0.019
EPA SI	DR116 (682)	Pyrene	7.00E-01		2.53	2.77E+01	1000	1400	mg/kg OC	0.028	0.020
EPA SI	DR114 (680)	Pyrene	6.80E-01		2.51	2.71E+01	1000	1400	mg/kg OC	0.027	0.019
LDWRI-SurfaceSedimentRound1	LDW-SS92	Pyrene	6.30E-01	J	1.27	4.96E+01	1000	1400	mg/kg OC	0.050	0.035

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR213 (779)	Pyrene	5.90E-01		1.25	4.72E+01	1000	1400	mg/kg OC	0.047	0.034
LDWRI-SurfaceSedimentRound1	LDW-SS88	Pyrene	5.20E-01		1.75	2.97E+01	1000	1400	mg/kg OC	0.030	0.021
EPA SI	DR119 (685)	Pyrene	5.00E-01		2.69	1.86E+01	1000	1400	mg/kg OC	0.019	0.013
EPA SI	DR113 (679)	Pyrene	4.20E-01		2.72	1.54E+01	1000	1400	mg/kg OC-dry	0.015	0.011
EPA SI	DR150 (716)	Pyrene	3.80E-01		2.18	1.74E+01	1000	1400	mg/kg OC	0.017	0.012
EPA SI	DR173 (739)	Pyrene	3.10E-01		0.87	3.56E+01	1000	1400	mg/kg OC	0.036	0.025
LDWRI-SurfaceSedimentRound3	LDW-SS333	Pyrene	2.70E-01		1.66	1.63E+01	1000	1400	mg/kg OC	0.016	0.012
LDWRI-SurfaceSedimentRound2	LDW-SS81	Pyrene	2.20E-01		2.47	8.91E+00	1000	1400	mg/kg OC	0.009	0.006
EPA SI	DR170 (736)	Pyrene	2.10E-01		2.04	1.03E+01	1000	1400	mg/kg OC	0.010	0.007
LDWRI-SurfaceSedimentRound1	LDW-SS94	Pyrene	1.90E-01		2.05	9.27E+00	1000	1400	mg/kg OC	0.009	0.007
LDWRI-SurfaceSedimentRound1	LDW-SS87	Pyrene	1.60E-01		2.18	7.34E+00	1000	1400	mg/kg OC	0.007	0.005
EPA SI	DR212 (778)	Pyrene	1.50E-01		1.5	1.00E+01	1000	1400	mg/kg OC	0.010	0.007
LDWRI-SurfaceSedimentRound3	LDW-SS334	Pyrene	1.30E-01		0.909	1.43E+01	1000	1400	mg/kg OC	0.014	0.010
LDWRI-SurfaceSedimentRound1	LDW-SS89	Pyrene	1.30E-01		1.02	1.27E+01	1000	1400	mg/kg OC	0.013	0.009
EPA SI	DR172 (738)	Pyrene	8.00E-02		0.24		2600	3300	ug/kg dw	0.031	0.024
EPA SI	DR113 (679)	Selenium	7.00E+00	J	2.72						
EPA SI	DR119 (685)	Selenium	7.00E+00		2.69						
EPA SI	DR170 (736)	Selenium	7.00E+00		2.04						
EPA SI	DR116 (682)	Selenium	6.00E+00		2.53						
EPA SI	DR117 (683)	Selenium	6.00E+00		2.6						
EPA SI	DR118 (684)	Selenium	6.00E+00		2.8						
EPA SI	DR150 (716)	Selenium	6.00E+00		2.18						
EPA SI	DR151 (717)	Selenium	6.00E+00		2.68						
EPA SI	DR114 (680)	Selenium	5.00E+00	J	2.51						
EPA SI	DR149 (715)	Selenium	5.00E+00	J	2.01						
EPA SI	DR173 (739)	Selenium	5.00E+00		0.87						
EPA SI	DR175 (741)	Selenium	5.00E+00		1.74						
EPA SI	DR174 (740)	Selenium	4.00E+00		1.59						
EPA SI	DR213 (779)	Selenium	4.00E+00		1.25						
EPA SI	DR172 (738)	Selenium	3.00E+00		0.24						
EPA SI	DR212 (778)	Selenium	3.00E+00		1.5						
EPA SI	DR113 (679)	Silver	1.33E+00		2.72		6.1	6.1	mg/kg, dry wt.	0.22	0.22
LDWRI-SurfaceSedimentRound1	LDW-SS88	Silver	9.00E-01		1.75		6.1	6.1	mg/kg dw	0.15	0.15
EPA SI	DR114 (680)	Silver	3.90E-01		2.51		6.1	6.1	mg/kg dw	0.064	0.064
EPA SI	DR119 (685)	Silver	3.60E-01		2.69		6.1	6.1	mg/kg dw	0.059	0.059
EPA SI	DR174 (740)	Silver	3.50E-01		1.59		6.1	6.1	mg/kg dw	0.057	0.057

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR118 (684)	Silver	3.40E-01		2.8		6.1	6.1	mg/kg dw	0.056	0.056
EPA SI	DR151 (717)	Silver	3.10E-01		2.68		6.1	6.1	mg/kg dw	0.051	0.051
EPA SI	DR116 (682)	Silver	3.00E-01		2.53		6.1	6.1	mg/kg dw	0.049	0.049
EPA SI	DR149 (715)	Silver	2.90E-01		2.01		6.1	6.1	mg/kg dw	0.048	0.048
EPA SI	DR117 (683)	Silver	2.80E-01		2.6		6.1	6.1	mg/kg dw	0.046	0.046
EPA SI	DR150 (716)	Silver	2.70E-01		2.18		6.1	6.1	mg/kg dw	0.044	0.044
EPA SI	DR212 (778)	Silver	2.40E-01		1.5		6.1	6.1	mg/kg dw	0.039	0.039
EPA SI	DR213 (779)	Silver	2.40E-01		1.25		6.1	6.1	mg/kg dw	0.039	0.039
EPA SI	DR172 (738)	Silver	2.30E-01		0.24		6.1	6.1	mg/kg dw	0.038	0.038
EPA SI	DR175 (741)	Silver	2.30E-01		1.74		6.1	6.1	mg/kg, dry wt.	0.038	0.038
EPA SI	DR115 (681)	Silver	1.90E-01		1.3		6.1	6.1	mg/kg dw	0.031	0.031
EPA SI	DR173 (739)	Silver	1.60E-01		0.87		6.1	6.1	mg/kg dw	0.026	0.026
EPA SI	DR170 (736)	Silver	1.50E-01		2.04		6.1	6.1	mg/kg dw	0.025	0.025
EPA SI	DR113 (679)	Thallium	1.30E-01	J	2.72	4.78E+00					
EPA SI	DR119 (685)	Thallium	1.20E-01		2.69	4.46E+00					
EPA SI	DR150 (716)	Thallium	1.00E-01		2.18	4.59E+00					
EPA SI	DR151 (717)	Thallium	1.00E-01		2.68	3.73E+00					
EPA SI	DR170 (736)	Thallium	1.00E-01		2.04	4.90E+00					
EPA SI	DR114 (680)	Thallium	9.00E-02	J	2.51	3.59E+00					
EPA SI	DR115 (681)	Thallium	9.00E-02	J	1.3	6.92E+00					
EPA SI	DR117 (683)	Thallium	9.00E-02		2.6	3.46E+00					
EPA SI	DR118 (684)	Thallium	9.00E-02		2.8	3.21E+00					
EPA SI	DR175 (741)	Thallium	9.00E-02		1.74	5.17E+00					
EPA SI	DR116 (682)	Thallium	8.00E-02		2.53	3.16E+00					
EPA SI	DR149 (715)	Thallium	8.00E-02	J	2.01	3.98E+00					
EPA SI	DR174 (740)	Thallium	8.00E-02		1.59	5.03E+00					
EPA SI	DR212 (778)	Thallium	8.00E-02		1.5	5.33E+00					
EPA SI	DR213 (779)	Thallium	8.00E-02		1.25	6.40E+00					
EPA SI	DR172 (738)	Thallium	4.00E-02		0.24	1.67E+01					
EPA SI	DR173 (739)	Thallium	1.00E-02	J	0.87	1.15E+00					
EPA SI	DR113 (679)	Tin	1.40E+01		2.72	5.15E+02					
EPA SI	DR114 (680)	Tin	4.00E+00		2.51	1.59E+02					
EPA SI	DR116 (682)	Tin	3.00E+00	J	2.53	1.19E+02					
EPA SI	DR117 (683)	Tin	3.00E+00	J	2.6	1.15E+02					
EPA SI	DR118 (684)	Tin	3.00E+00	J	2.8	1.07E+02					
EPA SI	DR119 (685)	Tin	3.00E+00	J	2.69	1.12E+02					

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR149 (715)	Tin	3.00E+00		2.01	1.49E+02					
EPA SI	DR151 (717)	Tin	3.00E+00	J	2.68	1.12E+02					
EPA SI	DR172 (738)	Tin	3.00E+00	J	0.24	1.25E+03					
EPA SI	DR174 (740)	Tin	3.00E+00		1.59	1.89E+02					
EPA SI	DR175 (741)	Tin	3.00E+00		1.74	1.72E+02					
EPA SI	DR150 (716)	Tin	2.00E+00	J	2.18	9.17E+01					
EPA SI	DR173 (739)	Tin	2.00E+00	J	0.87	2.30E+02					
EPA SI	DR175 (741)	Total HPAH (calc'd)	4.12E+01		1.74	2.37E+03	960	5300	mg/kg OC-dry	2.5	0.45
EPA SI	DR174 (740)	Total HPAH (calc'd)	1.33E+01		1.59	8.36E+02	960	5300	mg/kg OC	0.87	0.16
LDWRI-SurfaceSedimentRound1	LDW-SS83	Total HPAH (calc'd)	7.50E+00	J	2.07	3.62E+02	960	5300	mg/kg OC	0.38	0.068
EPA SI	DR149 (715)	Total HPAH (calc'd)	6.80E+00		2.01	3.38E+02	960	5300	mg/kg OC	0.35	0.064
EPA SI	DR117 (683)	Total HPAH (calc'd)	4.50E+00		2.6	1.73E+02	960	5300	mg/kg OC	0.18	0.033
EPA SI	DR115 (681)	Total HPAH (calc'd)	4.30E+00		1.3	3.31E+02	960	5300	mg/kg OC	0.34	0.062
EPA SI	DR118 (684)	Total HPAH (calc'd)	3.78E+00		2.8	1.35E+02	960	5300	mg/kg OC	0.14	0.025
EPA SI	DR151 (717)	Total HPAH (calc'd)	3.62E+00		2.68	1.35E+02	960	5300	mg/kg OC	0.14	0.025
EPA SI	DR114 (680)	Total HPAH (calc'd)	3.57E+00		2.51	1.42E+02	960	5300	mg/kg OC	0.15	0.027
EPA SI	DR116 (682)	Total HPAH (calc'd)	3.51E+00		2.53	1.39E+02	960	5300	mg/kg OC	0.14	0.026
EPA SI	DR213 (779)	Total HPAH (calc'd)	3.45E+00		1.25	2.76E+02	960	5300	mg/kg OC	0.29	0.052
LDWRI-SurfaceSedimentRound1	LDW-SS92	Total HPAH (calc'd)	3.40E+00	J	1.27	2.68E+02	960	5300	mg/kg OC	0.28	0.051
EPA SI	DR119 (685)	Total HPAH (calc'd)	2.65E+00		2.69	9.85E+01	960	5300	mg/kg OC	0.10	0.019
LDWRI-SurfaceSedimentRound1	LDW-SS88	Total HPAH (calc'd)	2.14E+00	J	1.75	1.22E+02	960	5300	mg/kg OC	0.13	0.023
EPA SI	DR150 (716)	Total HPAH (calc'd)	2.10E+00		2.18	9.63E+01	960	5300	mg/kg OC	0.10	0.018
EPA SI	DR173 (739)	Total HPAH (calc'd)	1.86E+00		0.87	2.14E+02	960	5300	mg/kg OC	0.22	0.040
LDWRI-SurfaceSedimentRound2	LDW-SS81	Total HPAH (calc'd)	1.81E+00		2.47	7.33E+01	960	5300	mg/kg OC	0.076	0.014
LDWRI-SurfaceSedimentRound3	LDW-SS333	Total HPAH (calc'd)	1.55E+00		1.66	9.34E+01	960	5300	mg/kg OC	0.097	0.018
EPA SI	DR113 (679)	Total HPAH (calc'd)	1.10E+00		2.72	4.04E+01	960	5300	mg/kg OC-dry	0.042	0.008
EPA SI	DR170 (736)	Total HPAH (calc'd)	1.05E+00		2.04	5.15E+01	960	5300	mg/kg OC	0.054	0.010
EPA SI	DR212 (778)	Total HPAH (calc'd)	1.04E+00		1.5	6.93E+01	960	5300	mg/kg OC	0.072	0.013
LDWRI-SurfaceSedimentRound1	LDW-SS94	Total HPAH (calc'd)	8.60E-01		2.05	4.20E+01	960	5300	mg/kg OC	0.044	0.008
LDWRI-SurfaceSedimentRound1	LDW-SS87	Total HPAH (calc'd)	7.90E-01		2.18	3.62E+01	960	5300	mg/kg OC	0.038	0.007
LDWRI-SurfaceSedimentRound1	LDW-SS89	Total HPAH (calc'd)	6.00E-01		1.02	5.88E+01	960	5300	mg/kg OC	0.061	0.011
EPA SI	DR172 (738)	Total HPAH (calc'd)	5.80E-01		0.24		12000	17000	ug/kg dw	0.048	0.034
LDWRI-SurfaceSedimentRound3	LDW-SS334	Total HPAH (calc'd)	2.80E-01	J	0.909	3.08E+01	960	5300	mg/kg OC	0.032	0.006
EPA SI	DR115 (681)	Total HpCDD	9.00E-04		1.3	6.92E-02					
EPA SI	DR115 (681)	Total HpCDF	1.10E-04		1.3	8.46E-03					
EPA SI	DR115 (681)	Total HxCDD	9.70E-05		1.3	7.46E-03					

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR115 (681)	Total HxCDF	2.80E-05		1.3	2.15E-03					
EPA SI	DR175 (741)	Total LPAH (calc'd)	2.00E+01		1.74	1.15E+03	370	780	mg/kg OC-dry	3.1	1.5
EPA SI	DR174 (740)	Total LPAH (calc'd)	1.35E+00		1.59	8.49E+01	370	780	mg/kg OC	0.23	0.11
EPA SI	DR149 (715)	Total LPAH (calc'd)	1.24E+00		2.01	6.17E+01	370	780	mg/kg OC	0.17	0.079
EPA SI	DR117 (683)	Total LPAH (calc'd)	1.14E+00		2.6	4.38E+01	370	780	mg/kg OC	0.12	0.056
EPA SI	DR114 (680)	Total LPAH (calc'd)	8.10E-01		2.51	3.23E+01	370	780	mg/kg OC	0.087	0.041
LDWRI-SurfaceSedimentRound1	LDW-SS83	Total LPAH (calc'd)	7.00E-01	J	2.07	3.38E+01	370	780	mg/kg OC	0.091	0.043
EPA SI	DR118 (684)	Total LPAH (calc'd)	6.10E-01		2.8	2.18E+01	370	780	mg/kg OC	0.059	0.028
EPA SI	DR151 (717)	Total LPAH (calc'd)	5.00E-01		2.68	1.87E+01	370	780	mg/kg OC	0.050	0.024
EPA SI	DR115 (681)	Total LPAH (calc'd)	4.00E-01		1.3	3.08E+01	370	780	mg/kg OC	0.083	0.039
EPA SI	DR116 (682)	Total LPAH (calc'd)	4.00E-01		2.53	1.58E+01	370	780	mg/kg OC	0.043	0.020
EPA SI	DR119 (685)	Total LPAH (calc'd)	3.30E-01		2.69	1.23E+01	370	780	mg/kg OC	0.033	0.016
EPA SI	DR213 (779)	Total LPAH (calc'd)	3.00E-01		1.25	2.40E+01	370	780	mg/kg OC	0.065	0.031
LDWRI-SurfaceSedimentRound1	LDW-SS88	Total LPAH (calc'd)	2.90E-01		1.75	1.66E+01	370	780	mg/kg OC	0.045	0.021
EPA SI	DR173 (739)	Total LPAH (calc'd)	2.20E-01		0.87	2.53E+01	370	780	mg/kg OC	0.068	0.032
LDWRI-SurfaceSedimentRound1	LDW-SS92	Total LPAH (calc'd)	2.00E-01	J	1.27	1.57E+01	370	780	mg/kg OC	0.043	0.020
EPA SI	DR150 (716)	Total LPAH (calc'd)	1.90E-01		2.18	8.72E+00	370	780	mg/kg OC	0.024	0.011
LDWRI-SurfaceSedimentRound3	LDW-SS333	Total LPAH (calc'd)	1.70E-01	J	1.66	1.02E+01	370	780	mg/kg OC	0.028	0.013
LDWRI-SurfaceSedimentRound2	LDW-SS81	Total LPAH (calc'd)	1.33E-01		2.47	5.38E+00	370	780	mg/kg OC	0.015	0.007
LDWRI-SurfaceSedimentRound1	LDW-SS87	Total LPAH (calc'd)	1.25E-01		2.18	5.73E+00	370	780	mg/kg OC	0.015	0.007
EPA SI	DR212 (778)	Total LPAH (calc'd)	1.20E-01		1.5	8.00E+00	370	780	mg/kg OC	0.022	0.010
LDWRI-SurfaceSedimentRound1	LDW-SS94	Total LPAH (calc'd)	1.05E-01		2.05	5.12E+00	370	780	mg/kg OC	0.014	0.007
EPA SI	DR113 (679)	Total LPAH (calc'd)	9.00E-02		2.72	3.31E+00	370	780	mg/kg OC-dry	0.009	0.004
EPA SI	DR170 (736)	Total LPAH (calc'd)	7.00E-02		2.04	3.43E+00	370	780	mg/kg OC	0.009	0.004
LDWRI-SurfaceSedimentRound1	LDW-SS89	Total LPAH (calc'd)	3.70E-02		1.02	3.63E+00	370	780	mg/kg OC	0.010	0.005
EPA SI	DR172 (738)	Total LPAH (calc'd)	3.00E-02		0.24		5200	13000	ug/kg dw	0.006	0.002
EPA SI	DR115 (681)	Total PeCDF	2.30E-05		1.3	1.77E-03					
EPA SI	DR115 (681)	Total TCDD	1.60E-06		1.3	1.23E-04					
EPA SI	DR115 (681)	Total TCDF	1.30E-05		1.3	1.00E-03					
EPA SI	DR116 (682)	Tributyltin as ion	4.80E-02		2.53	1.90E+00					
EPA SI	DR151 (717)	Tributyltin as ion	4.70E-02		2.68	1.75E+00					
EPA SI	DR174 (740)	Tributyltin as ion	4.60E-02		1.59	2.89E+00					
EPA SI	DR115 (681)	Tributyltin as ion	3.10E-02	J	1.3	2.38E+00					
LDWRI-SurfaceSedimentRound2	LDW-SS81	Vanadium	7.65E+01		2.47	3.10E+03					
LDWRI-SurfaceSedimentRound1	LDW-SS83	Vanadium	7.46E+01		2.07	3.60E+03					
EPA SI	DR113 (679)	Vanadium	7.40E+01		2.72	2.72E+03					

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
LDWRI-SurfaceSedimentRound1	LDW-SS87	Vanadium	6.81E+01		2.18	3.12E+03					
LDWRI-SurfaceSedimentRound1	LDW-SS88	Vanadium	6.21E+01		1.75	3.55E+03					
EPA SI	DR115 (681)	Vanadium	6.10E+01		1.3	4.69E+03					
EPA SI	DR118 (684)	Vanadium	6.10E+01		2.8	2.18E+03					
EPA SI	DR119 (685)	Vanadium	6.00E+01		2.69	2.23E+03					
EPA SI	DR150 (716)	Vanadium	6.00E+01		2.18	2.75E+03					
EPA SI	DR117 (683)	Vanadium	5.90E+01		2.6	2.27E+03					
EPA SI	DR114 (680)	Vanadium	5.60E+01		2.51	2.23E+03					
EPA SI	DR116 (682)	Vanadium	5.60E+01		2.53	2.21E+03					
EPA SI	DR149 (715)	Vanadium	5.60E+01		2.01	2.79E+03					
EPA SI	DR151 (717)	Vanadium	5.50E+01		2.68	2.05E+03					
LDWRI-SurfaceSedimentRound1	LDW-SS94	Vanadium	5.29E+01		2.05	2.58E+03					
EPA SI	DR170 (736)	Vanadium	5.00E+01		2.04	2.45E+03					
EPA SI	DR175 (741)	Vanadium	5.00E+01		1.74	2.87E+03					
LDWRI-SurfaceSedimentRound1	LDW-SS92	Vanadium	4.87E+01		1.27	3.83E+03					
LDWRI-SurfaceSedimentRound3	LDW-SS333	Vanadium	4.50E+01		1.66	2.71E+03					
LDWRI-SurfaceSedimentRound1	LDW-SS89	Vanadium	4.36E+01		1.02	4.27E+03					
EPA SI	DR213 (779)	Vanadium	4.30E+01		1.25	3.44E+03					
EPA SI	DR174 (740)	Vanadium	4.00E+01		1.59	2.52E+03					
EPA SI	DR212 (778)	Vanadium	3.90E+01		1.5	2.60E+03					
LDWRI-SurfaceSedimentRound3	LDW-SS334	Vanadium	3.50E+01		0.909	3.85E+03					
EPA SI	DR173 (739)	Vanadium	3.00E+01		0.87	3.45E+03					
EPA SI	DR172 (738)	Vanadium	1.50E+01		0.24	6.25E+03					
LDWRI-SurfaceSedimentRound1	LDW-SS83	Zinc	3.82E+02		2.07		410	960	mg/kg dw	0.93	0.40
LDWRI-SurfaceSedimentRound1	LDW-SS94	Zinc	2.18E+02		2.05		410	960	mg/kg dw	0.53	0.23
EPA SI	DR113 (679)	Zinc	1.59E+02		2.72		410	960	mg/kg, dry wt.	0.39	0.17
LDWRI-SurfaceSedimentRound2	LDW-SS81	Zinc	1.59E+02		2.47		410	960	mg/kg dw	0.39	0.17
LDWRI-SurfaceSedimentRound1	LDW-SS87	Zinc	1.43E+02		2.18		410	960	mg/kg dw	0.35	0.15
EPA SI	DR116 (682)	Zinc	1.30E+02		2.53		410	960	mg/kg dw	0.32	0.14
LDWRI-SurfaceSedimentRound1	LDW-SS88	Zinc	1.27E+02		1.75		410	960	mg/kg dw	0.31	0.13
EPA SI	DR114 (680)	Zinc	1.20E+02		2.51		410	960	mg/kg dw	0.29	0.13
EPA SI	DR118 (684)	Zinc	1.20E+02		2.8		410	960	mg/kg dw	0.29	0.13
EPA SI	DR119 (685)	Zinc	1.20E+02		2.69		410	960	mg/kg dw	0.29	0.13
EPA SI	DR115 (681)	Zinc	1.10E+02		1.3		410	960	mg/kg dw	0.27	0.11
EPA SI	DR117 (683)	Zinc	1.10E+02		2.6		410	960	mg/kg dw	0.27	0.11
EPA SI	DR151 (717)	Zinc	1.10E+02		2.68		410	960	mg/kg dw	0.27	0.11

Table A-1
Surface Sediment Sampling Results
RM 2.3-2.8 East (Seattle Boiler Works to Slip 4)

Sampling Event	Sample Location	Chemical	Conc'n (mg/kg DW)		TOC % dw	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor[a]	CSL Exceedance Factor[a]
EPA SI	DR175 (741)	Zinc	1.02E+02		1.74		410	960	mg/kg, dry wt.	0.25	0.11
EPA SI	DR149 (715)	Zinc	1.00E+02		2.01		410	960	mg/kg dw	0.24	0.10
EPA SI	DR150 (716)	Zinc	9.60E+01		2.18		410	960	mg/kg dw	0.23	0.10
EPA SI	DR174 (740)	Zinc	9.20E+01		1.59		410	960	mg/kg dw	0.22	0.096
LDWRI-SurfaceSedimentRound1	LDW-SS92	Zinc	9.17E+01		1.27		410	960	mg/kg dw	0.22	0.096
EPA SI	DR213 (779)	Zinc	7.90E+01		1.25		410	960	mg/kg dw	0.19	0.082
LDWRI-SurfaceSedimentRound3	LDW-SS333	Zinc	7.80E+01		1.66		410	960	mg/kg dw	0.19	0.081
EPA SI	DR170 (736)	Zinc	7.60E+01		2.04		410	960	mg/kg dw	0.19	0.079
EPA SI	DR212 (778)	Zinc	6.80E+01		1.5		410	960	mg/kg dw	0.17	0.071
EPA SI	DR173 (739)	Zinc	6.00E+01		0.87		410	960	mg/kg dw	0.15	0.063
LDWRI-SurfaceSedimentRound1	LDW-SS89	Zinc	3.91E+01		1.02		410	960	mg/kg dw	0.095	0.041
LDWRI-SurfaceSedimentRound3	LDW-SS334	Zinc	3.90E+01		0.909		410	960	mg/kg dw	0.095	0.041
EPA SI	DR172 (738)	Zinc	2.80E+01		0.24		410	960	mg/kg dw	0.068	0.029

Table presents detections only.

a - Exceedance factors are the ratio of the detected concentration to the CSL or SQS; an exceedance factor greater than 1 indicates that the measured concentration is higher than the corresponding CSL or SQS.

DW - Dry weight

OC - Organic carbon normalized

TOC - Total organic carbon