PORTLAND HARBOR RI/FS

REMEDIAL INVESTIGATION REPORT

APPENDIX D1.3
SUMMARY STATISTICS FOR ALL COIS AND PHYSICAL PARAMETERS IN BEDDED SEDIMENT—TABLES

DRAFT FINAL

June 12, 2015

LIST OF TABLES

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach

Table D1.3-2. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8)

TableD1.3-3. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8)

Table D1.3-4. Summary Statistics for All Chemicals in Surface Sediment, Upriver Reach (RM 15.3-28.4)

Table D1.3-5. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Upriver Reach (RM 15.3-28.4)

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3)

Table D1.3-7. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3)

Table D1.3-8. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downstream Reach (RM 0-1.9)

Table D1.3-9. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downstream Reach (RM 0-1.9)

Table D1.3-10. Summary Statistics for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8)

Table D1.3-11. Summary Statistics for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8)

Table D1.3-12. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Eastern Nearshore

TableD1.3-13. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Eastern Nearshore

Table D1.3-14. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Navigation Channel

Table D1.3-15. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Navigation Channel

Table D1.3-16. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Western Nearshore

Table D1.3-17. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Western Nearshore

Table D1.3-18. Summary Statistics for Other Contaminants and Physical Parameters in Surface Sediment, Upriver Reach (RM 15.3-28.4)

Table D1.3-19. Summary Statistics for Other Contaminants and Physical Parameters in Subsurface Sediment, Upriver Reach (RM 15.3-28.4)
Table D1.3-20. Summary Statistics for Other Contaminants and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3)
Table D1.3-21. Summary Statistics for Other Contaminants and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3)
Table D1.3-22. Summary Statistics for Other Contaminants and Physical Parameters in Surface Sediment, Downstream Reach (RM 0-1.9)
Table D1.3-23. Summary Statistics for Other Contaminants and Physical Parameters in Subsurface Sediment, Downstream Reach (RM 0-1.9)
Table D1.3-24. Number of Surface and Subsurface Samples (Detected only) for Other Contaminants by Concentration Range, Study Area (RM 1.9-11.8)
Table D1.3-25. Number of Surface and Subsurface Samples (Detected and Not Detected) for Other Contaminants by Concentration Range, Study Area (RM 1.9-11.8)
Table D1.3-26. Number of Surface and Subsurface Samples (Detected Only) for Other Contaminants by Concentration Range, Upriver Reach (RM 15.3-28.4)
Table D1.3-27. Number of Surface and Subsurface Samples (Detected and Not Detected) for Other Contaminants by Concentration Range, Upriver Reach (RM 15.3-28.4)
Table D1.3-28. Number of Surface and Subsurface Samples (Detected Only) for Other Contaminants by Concentration Range, Downtown Reach (RM 11.8-15.3)
Table D1.3-29. Number of Surface and Subsurface Samples (Detected and Not Detected) for Other Contaminants by Concentration Range, Downtown Reach (RM 11.8-15.3)
Table D1.3-30. Number of Surface and Subsurface Samples (Detected Only) for Other Contaminants by Concentration Range, Downstream Reach (RM 0-1.9)
Table D1.3-31. Number of Surface and Subsurface Samples (Detected and Not Detected) for Other Contaminants by Concentration Range, Downstream Reach (RM 0-1.9)
Table D1.3-32. Surface and Subsurface Sediment Samples Excluded from Summary Statistics Tables per Exclusion Criteria

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Downstream (RM <1)	0	surface sediment	WLR0797WRBC01WRA
Downstream (RM <1)	0	surface sediment	WLR0797WRBC01WRBC01
Downstream (RM <1)	0.1	subsurface sediment	WLR0797WRGC02RGC02A
Downstream (RM <1)	0.1	subsurface sediment	WLR0797WRGC02RGC02B
Downstream (RM <1)	0.4	subsurface sediment	WLR0797WRBC03WRBC03
Downstream (RM <1)	0.7	subsurface sediment	LW3-DC07-B
Downstream (RM <1)	0.7	subsurface sediment	LW3-DC07-C
Downstream (RM <1)	0.7	subsurface sediment	LW3-DC07-D
Downstream (RM <1)	0.7	subsurface sediment	LW3-DC07-E
Downstream (RM <1)	0.7	surface sediment	LW3-DG19
Downstream (RM <1)	0.7	subsurface sediment	WLR0797WRGC04RGC04A
Downstream (RM <1)	0.7	subsurface sediment	WLR0797WRGC04RGC04B
Downstream (RM <1)	0.7	subsurface sediment	WLR0797WRGC05RGC05A
Downstream (RM <1)	0.7	subsurface sediment	WLR0797WRGC05RGC05B
Downstream (RM <1)	0.9	surface sediment	LW3-DG12
Downstream (RM <1)	0.9	subsurface sediment	WLCT5K99B50101B50101
Downstream (RM <1)	0.9	subsurface sediment	WLCT5K99B501C1B501C1
Downstream (RM <1)	0.9	subsurface sediment	WLR0797WRGC06RGC06A
Downstream (RM <1)	0.9	subsurface sediment	WLR0797WRGC06RGC06B
Downstream (RM 1 - 2)	1	surface sediment	LW3-DG11
Downstream (RM 1 - 2)	1	surface sediment	LW3-DG11-2
Downstream (RM 1 - 2)	1	surface sediment	LW3-GCR01E-ALT
Downstream (RM 1 - 2)	1	subsurface sediment	WLCT0F01T50101T5011A
Downstream (RM 1 - 2)	1	subsurface sediment	WLCT0F01T50102T5012A
Downstream (RM 1 - 2)	1	subsurface sediment	WLCT0I98B501C1B501C1
Downstream (RM 1 - 2)	1	subsurface sediment	WLCT5K99B50102B50102
Downstream (RM 1 - 2)	1	subsurface sediment	WLCT5K99B50103argeC1
Downstream (RM 1 - 2)	1.1	subsurface sediment	LW3-DC06-B
Downstream (RM 1 - 2)	1.1	subsurface sediment	LW3-DC06-C
Downstream (RM 1 - 2)	1.1	subsurface sediment	LW3-DC06-D
Downstream (RM 1 - 2)	1.1	surface sediment	LW3-DG18
Downstream (RM 1 - 2)	1.1	subsurface sediment	WLCT0I98B501C2B501C2
Downstream (RM 1 - 2)	1.2	subsurface sediment	LW3-DC04-B
Downstream (RM 1 - 2)	1.2	subsurface sediment	LW3-DC04-C
Downstream (RM 1 - 2)	1.2	subsurface sediment	LW3-DC04-D
Downstream (RM 1 - 2)	1.2	subsurface sediment	LW3-DC05-B
Downstream (RM 1 - 2)	1.2	subsurface sediment	LW3-DC05-C
Downstream (RM 1 - 2)	1.2	surface sediment	LW3-DG10
Downstream (RM 1 - 2)	1.2	surface sediment	LW3-DG16
Downstream (RM 1 - 2)	1.2	surface sediment	LW3-DG17
Downstream (RM 1 - 2)	1.3	surface sediment	LW3-GSP01E
Downstream (RM 1 - 2)	1.4	subsurface sediment	LW3-DC03-B
Downstream (RM 1 - 2)	1.4	subsurface sediment	LW3-DC03-C
Downstream (RM 1 - 2)	1.4	subsurface sediment	LW3-DC03-D
Downstream (RM 1 - 2)	1.4	surface sediment	LW3-DG09
Downstream (RM 1 - 2)	1.4	surface sediment	LW3-DG15
Downstream (RM 1 - 2)	1.4	surface sediment	LW3-GCRSP01W-1
Downstream (RM 1 - 2)	1.4	subsurface sediment	WLCT5K99B503C1B503C1
Downstream (RM 1 - 2)	1.5	subsurface sediment	LW3-DC02-B
Downstream (RM 1 - 2)	1.5	subsurface sediment	LW3-DC02-C
Downstream (RM 1 - 2)	1.5	subsurface sediment	LW3-DC02-D
Downstream (RM 1 - 2)	1.5	surface sediment	LW3-DG07
Downstream (RM 1 - 2)	1.5	surface sediment	LW3-DG08
Downstream (RM 1 - 2)	1.5	surface sediment	LW3-DG14
Downstream (RM 1 - 2)	1.5	surface sediment	LW3-GCA01E-C00
Downstream (RM 1 - 2)	1.6	surface sediment	LW3-DG05
Downstream (RM 1 - 2)	1.6	surface sediment	LW3-DG06
Downstream (RM 1 - 2)	1.6	surface sediment	WLR0797WRBC07WRBC07

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Downstream (RM 1 - 2)	1.7	surface sediment	LW3-DG03
Downstream (RM 1 - 2)	1.7	surface sediment	LW3-DG04
Downstream (RM 1 - 2)	1.8	surface sediment	WLR0797WRBC08WRBC08
Study Area	1.9	surface sediment	LW2-B002
Study Area	1.9	surface sediment	LW2-G001
Study Area	1.9	surface sediment	LW2-G002
Study Area	1.9	surface sediment	LW2-G004
Study Area	1.9	surface sediment	LW2-GBT001
Study Area	1.9	subsurface sediment	LW3-DC01-B1
Study Area	1.9	subsurface sediment	LW3-DC01-B2
Study Area	1.9	subsurface sediment	LW3-DC01-C1
Study Area	1.9	subsurface sediment	LW3-DC01-C2
Study Area	1.9	subsurface sediment	LW3-DC01-D1
Study Area	1.9	subsurface sediment	LW3-DC01-D2
Study Area	1.9	subsurface sediment	LW3-DC01-E1
Study Area	1.9	subsurface sediment	LW3-DC01-E2
Study Area	1.9	surface sediment	LW3-DG01
Study Area	1.9	surface sediment	LW3-DG02
Study Area	1.9	surface sediment	LW3-DG13
Study Area	2	surface sediment	LW2-D1-1
Study Area	2	surface sediment	LW2-D1-2
Study Area	2	surface sediment	LW2-G006
Study Area	2	subsurface sediment	LW3-C600-B
Study Area	2	subsurface sediment	LW3-C600-C
Study Area	2	subsurface sediment	LW3-C600-D
Study Area	2	surface sediment	LW3-G600
Study Area	2	surface sediment	WLCOSJ00RB01SD0001
Study Area	2	surface sediment	WLCOSJ00RB02SD0002
Study Area	2	surface sediment	WLR0797WRBC09WRBC09
Study Area	2.1	subsurface sediment	LW2-C009-B
Study Area	2.1	subsurface sediment	LW2-C009-C
Study Area	2.1	subsurface sediment	LW2-C011-B1
Study Area	2.1	subsurface sediment	LW2-C011-B2
Study Area	2.1	subsurface sediment	LW2-C011-C1
Study Area	2.1	subsurface sediment	LW2-C011-C2
Study Area	2.1	subsurface sediment	LW2-C011-D1
Study Area	2.1	subsurface sediment	LW2-C011-D2
Study Area	2.1	subsurface sediment	LW2-C011-E1
Study Area	2.1	subsurface sediment	LW2-C011-E2
Study Area	2.1	subsurface sediment	LW2-C011-F1
Study Area	2.1	subsurface sediment	LW2-C011-G2
Study Area	2.1	surface sediment	LW2-G003
Study Area	2.1	surface sediment	LW2-G005
Study Area	2.1	surface sediment	LW2-G007-1
Study Area	2.1	surface sediment	LW2-G007-2
Study Area	2.1	surface sediment	LW2-G008
Study Area	2.1	surface sediment	LW2-G009
Study Area	2.1	surface sediment	LW2-G010
Study Area	2.1	surface sediment	LW2-G011
Study Area	2.1	subsurface sediment	LW3-C601-B1
Study Area	2.1	subsurface sediment	LW3-C601-B2
Study Area	2.1	subsurface sediment	LW3-C602-B
Study Area	2.1	subsurface sediment	LW3-C602-C
Study Area	2.1	subsurface sediment	LW3-C602-D
Study Area	2.1	surface sediment	LW3-G601
Study Area	2.1	surface sediment	LW3-G602
Study Area	2.1	surface sediment	WLCOSJ00RB03SD0003
Study Area	2.1	surface sediment	WLCOSJ00RB04SD0004

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	2.1	surface sediment	WLCOSJ00RB04SD0014
Study Area	2.1	surface sediment	WLCOSJ00RB05SD0005
Study Area	2.1	surface sediment	WLCOSJ00RB06SD0006
Study Area	2.1	surface sediment	WLCOSJ00RB06SD0007
Study Area	2.1	surface sediment	WLCOSJ00RB13SD0015
Study Area	2.1	subsurface sediment	WLCOSJ00RB13SD0016
Study Area	2.2	subsurface sediment	021108WRPB-VC-01A
Study Area	2.2	subsurface sediment	021108WRPB-VC-01Z
Study Area	2.2	surface sediment	021108WRPB-VC-02A
Study Area	2.2	subsurface sediment	021108WRPB-VC-02B
Study Area	2.2	surface sediment	LW2-B001
Study Area	2.2	subsurface sediment	LW2-C015-B
Study Area	2.2	subsurface sediment	LW2-C015-C
Study Area	2.2	subsurface sediment	LW2-C015-D
Study Area	2.2	subsurface sediment	LW2-C015-E
Study Area	2.2	surface sediment	LW2-G012
Study Area	2.2	surface sediment	LW2-G013
Study Area	2.2	surface sediment	LW2-G014
Study Area	2.2	surface sediment	LW2-G015
Study Area	2.2	surface sediment	LW2-G016
Study Area	2.2	surface sediment	LW2-G017
Study Area	2.2	surface sediment	LW3-G603
Study Area	2.2	subsurface sediment	LWM-METCS1
Study Area	2.2	subsurface sediment	LWM-TCLPC1
Study Area	2.2	surface sediment	WLCDRD05PG00101
Study Area	2.2	surface sediment	WLCDRD05PG141141Dup
Study Area	2.2	subsurface sediment	WLCDRI03C01-03CSS01
Study Area	2.2	surface sediment	WLCOSJ00RB07SD0008
Study Area	2.2	subsurface sediment	WLR0499WRVC01WRVC01
Study Area	2.3	subsurface sediment	021108WRPB-VC-03A
Study Area	2.3	subsurface sediment	021108WRPB-VC-03Z
Study Area	2.3	surface sediment	021108WRPB-VC-04A
Study Area	2.3	subsurface sediment	021108WRPB-VC-04B
Study Area	2.3	subsurface sediment	021108WRPB-VC-05A
Study Area	2.3	subsurface sediment	021108WRPB-VC-05Z
Study Area	2.3	surface sediment	LW2-B004
Study Area	2.3	subsurface sediment	LW2-C019-B1
Study Area	2.3	subsurface sediment	LW2-C019-B2
Study Area	2.3	subsurface sediment	LW2-C019-C1
Study Area	2.3	subsurface sediment	LW2-C019-D1
Study Area	2.3	subsurface sediment	LW2-C019-E2
Study Area	2.3	subsurface sediment	LW2-C020-B
Study Area	2.3	subsurface sediment	LW2-C020-C
Study Area	2.3	subsurface sediment	LW2-C020-D
Study Area	2.3	subsurface sediment	LW2-C022-B
Study Area	2.3	subsurface sediment	LW2-C022-C
Study Area	2.3	subsurface sediment	LW2-C022-D
Study Area	2.3	surface sediment	LW2-G018
Study Area	2.3	surface sediment	LW2-G019
Study Area	2.3	surface sediment	LW2-G020
Study Area	2.3	surface sediment	LW2-G021
Study Area	2.3	surface sediment	LW2-G022
Study Area	2.3	surface sediment	LW2-GBT002
Study Area	2.3	subsurface sediment	LW3-C604-B
Study Area	2.3	subsurface sediment	LW3-C604-C
Study Area	2.3	subsurface sediment	LW3-C604-D
Study Area	2.3	surface sediment	LW3-G604
Study Area	2.3	surface sediment	LW3-GCA02W-C10

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	2.3	surface sediment	LWG0102R015SDS015C00
Study Area	2.3	surface sediment	WLCDRD05PG00202
Study Area	2.3	surface sediment	WLCOSJ00RB08SD0009
Study Area	2.3	surface sediment	WLCOSJ00RB09SD0010
Study Area	2.3	surface sediment	WLCOSJ00RB10SD0011
Study Area	2.3	subsurface sediment	WLR0499WRVC02WRVC02
Study Area	2.3	subsurface sediment	WLR1199WRVC02WRVC02
Study Area	2.4	surface sediment	021108WRPB-VC-06A
Study Area	2.4	subsurface sediment	021108WRPB-VC-06B
Study Area	2.4	subsurface sediment	LW2-C025-B1
Study Area	2.4	subsurface sediment	LW2-C025-B2
Study Area	2.4	subsurface sediment	LW2-C025-C1
Study Area	2.4	subsurface sediment	LW2-C025-D1
Study Area	2.4	subsurface sediment	LW2-C025-D2
Study Area	2.4	subsurface sediment	LW2-C025-E2
Study Area	2.4	surface sediment	LW2-G023-1
Study Area	2.4	surface sediment	LW2-G023-2
Study Area	2.4	surface sediment	LW2-G024
Study Area	2.4	surface sediment	LW2-G025
Study Area	2.4	surface sediment	LW2-G026
Study Area	2.4	subsurface sediment	LW3-C605-B
Study Area	2.4	subsurface sediment	LW3-C605-C
Study Area	2.4	subsurface sediment	LW3-C605-D
Study Area	2.4	surface sediment	LW3-G605
Study Area	2.4	surface sediment	LWG0102R001SDS015C00
Study Area	2.4	surface sediment	WLR0797WRBC10WRB
Study Area	2.4	surface sediment	WLR0797WRBC10WRBC10
Study Area	2.5	surface sediment	LW2-B003
Study Area	2.5	subsurface sediment	LW2-C027-B
Study Area	2.5	subsurface sediment	LW2-C027-C
Study Area	2.5	subsurface sediment	LW2-C027-D
Study Area	2.5	surface sediment	LW2-D2
Study Area	2.5	surface sediment	LW2-G027
Study Area	2.5	surface sediment	LW2-G028
Study Area	2.5	surface sediment	LW2-G029
Study Area	2.5	subsurface sediment	LW3-C606-B
Study Area	2.5	subsurface sediment	LW3-C606-C
Study Area	2.5	surface sediment	LW3-G606
Study Area	2.5	surface sediment	WLCOSJ00RB11SD0012
Study Area	2.5	surface sediment	WLCOSJ00RB12SD0013
Study Area	2.6	surface sediment	LW2-B006
Study Area	2.6	surface sediment	LW2-G030
Study Area	2.6	surface sediment	LW2-G031
Study Area	2.6	subsurface sediment	LW3-C608-B
Study Area	2.6	surface sediment	LW3-G607
Study Area	2.6	surface sediment	LW3-G608
Study Area	2.7	subsurface sediment	LW2-C034-B
Study Area	2.7	subsurface sediment	LW2-C034-C
Study Area	2.7	subsurface sediment	LW2-C034-E
Study Area	2.7	subsurface sediment	LW2-C034-F
Study Area	2.7	subsurface sediment	LW2-C038-B
Study Area	2.7	subsurface sediment	LW2-C038-C
Study Area	2.7	subsurface sediment	LW2-C038-D
Study Area	2.7	subsurface sediment	LW2-C038-E
Study Area	2.7	surface sediment	LW2-G032
Study Area	2.7	surface sediment	LW2-G033
Study Area	2.7	surface sediment	LW2-G034
Study Area	2.7	surface sediment	LW2-G035

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	2.7	surface sediment	LW2-G036
Study Area	2.7	surface sediment	LW2-G037
Study Area	2.7	surface sediment	LW2-G038
Study Area	2.8	surface sediment	LW2-B005
Study Area	2.8	surface sediment	LW2-G039
Study Area	2.8	surface sediment	LW2-G040
Study Area	2.8	surface sediment	LW2-G041
Study Area	2.8	subsurface sediment	LW3-C609-B
Study Area	2.8	subsurface sediment	LW3-C609-C
Study Area	2.8	subsurface sediment	LW3-C609-D
Study Area	2.8	surface sediment	LW3-G609
Study Area	2.8	subsurface sediment	WLCACF05C123Z
Study Area	2.8	surface sediment	WLCDRD05PG00303
Study Area	2.8	subsurface sediment	WLCDRD05VC00303
Study Area	2.9	surface sediment	LW2-G042
Study Area	2.9	surface sediment	LW2-G043
Study Area	2.9	surface sediment	WLCDRD05PG00404
Study Area	2.9	subsurface sediment	WLCDRD05VC00404
Study Area	2.9	subsurface sediment	WLR0797WRGC11RGC11A
Study Area	3	surface sediment	LW2-G044-1
Study Area	3	surface sediment	LW2-G044-2
Study Area	3	surface sediment	LW2-G046
Study Area	3	subsurface sediment	LW3-C610-B
Study Area	3.1	surface sediment	LW2-G050
Study Area	3.1	surface sediment	LW2-G051
Study Area	3.1	surface sediment	LW2-G052
Study Area	3.1	surface sediment	LWG0103R001SDS015C00
Study Area	3.1	surface sediment	LWG0103R041SDS015C00
Study Area	3.2	surface sediment	LW2-G053
Study Area	3.2	surface sediment	LW2-G055
Study Area	3.2	surface sediment	LW2-G056
Study Area	3.2	surface sediment	LW2-GBT004
Study Area	3.2	surface sediment	LWG0103R040SDS015C00
Study Area	3.3	surface sediment	LW2-B008
Study Area	3.3	surface sediment	LW2-C060-A
Study Area	3.3	subsurface sediment	LW2-C060-B
Study Area	3.3	subsurface sediment	LW2-C060-C
Study Area	3.3	surface sediment	LW2-G057
Study Area	3.3	surface sediment	LW2-G058
Study Area	3.3	surface sediment	LW2-G060
Study Area	3.3	surface sediment	LW3-G611
Study Area	3.3	surface sediment	LW3-G612-1
Study Area	3.3	surface sediment	LW3-G612-2
Study Area	3.3	surface sediment	LWG0103B031SDS015C00
Study Area	3.3	surface sediment	WLR0797121314WRBC12
Study Area	3.3	surface sediment	WR-WSI98SD0010
Study Area	3.3	subsurface sediment	WR-WSI98SD0010000A
Study Area	3.3	surface sediment	WR-WSI98SD0020
Study Area	3.3	surface sediment	WR-WSI98SD0030
Study Area	3.4	subsurface sediment	LW2-C061-B
Study Area	3.4	subsurface sediment	LW2-C061-C
Study Area	3.4	subsurface sediment	LW2-C061-D
Study Area	3.4	subsurface sediment	LW2-C061-E
Study Area	3.4	subsurface sediment	LW2-C062-B
Study Area	3.4	subsurface sediment	LW2-C062-C
Study Area	3.4	subsurface sediment	LW2-C062-D
Study Area	3.4	subsurface sediment	LW2-C064-B
Study Area	3.4	subsurface sediment	LW2-C064-C

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	3.4	subsurface sediment	LW2-C064-G
Study Area	3.4	surface sediment	LW2-C066-A
Study Area	3.4	subsurface sediment	LW2-C066-B
Study Area	3.4	subsurface sediment	LW2-C066-C
Study Area	3.4	subsurface sediment	LW2-C066-F
Study Area	3.4	surface sediment	LW2-G059
Study Area	3.4	surface sediment	LW2-G061
Study Area	3.4	surface sediment	LW2-G062
Study Area	3.4	surface sediment	LW2-G063
Study Area	3.4	surface sediment	LW2-G064
Study Area	3.4	surface sediment	LW2-G066
Study Area	3.4	subsurface sediment	LW3-C613-B
Study Area	3.4	subsurface sediment	LW3-C613-C
Study Area	3.4	subsurface sediment	LW3-C613-E
Study Area	3.4	surface sediment	LW3-G613
Study Area	3.4	surface sediment	LW3-GCA03W-C00
Study Area	3.4	surface sediment	LWG0103R002SDS015C00
Study Area	3.4	surface sediment	LWG0103R003SDS015C10
Study Area	3.4	surface sediment	LWG0103R003SDS015C20
Study Area	3.4	surface sediment	LWG0103R003SDS015C31
Study Area	3.4	surface sediment	WR-WSI98SD0040
Study Area	3.4	surface sediment	WR-WSI98SD0050
Study Area	3.4	surface sediment	WR-WSI98SD0060
Study Area	3.4	surface sediment	WR-WSI98SD0070
Study Area	3.4	subsurface sediment	WR-WSI98SD0070000A
Study Area	3.5	surface sediment	LW2-C067-A
Study Area	3.5	subsurface sediment	LW2-C067-B
Study Area	3.5	subsurface sediment	LW2-C067-D
Study Area	3.5	subsurface sediment	LW2-C067-E
Study Area	3.5	surface sediment	LW2-G065
Study Area	3.5	surface sediment	LW2-G067
Study Area	3.5	surface sediment	LW2-G068
Study Area	3.5	surface sediment	LW2-G069
Study Area	3.5	surface sediment	LW2-G070
Study Area	3.5	surface sediment	LW2-G072
Study Area	3.5	subsurface sediment	LW3-C614-B
Study Area	3.5	subsurface sediment	LW3-C614-C
Study Area	3.5	subsurface sediment	LW3-C614-D
Study Area	3.5	surface sediment	LW3-G614
Study Area	3.5	surface sediment	LW3-GSP03E
Study Area	3.5	surface sediment	WR-WSI98SD0080
Study Area	3.6	subsurface sediment	LW2-C073-B
Study Area	3.6	subsurface sediment	LW2-C073-C
Study Area	3.6	subsurface sediment	LW2-C073-D
Study Area	3.6	subsurface sediment	LW2-C074-B
Study Area	3.6	subsurface sediment	LW2-C074-C
Study Area	3.6	subsurface sediment	LW2-C074-D
Study Area	3.6	subsurface sediment	LW2-C074-F
Study Area	3.6	subsurface sediment	LW2-C077-C
Study Area	3.6	subsurface sediment	LW2-C077-D
Study Area	3.6	surface sediment	LW2-G071
Study Area	3.6	surface sediment	LW2-G073
Study Area	3.6	surface sediment	LW2-G074
Study Area	3.6	surface sediment	LW2-G075-1
Study Area	3.6	surface sediment	LW2-G075-2
Study Area	3.6	surface sediment	LW2-G076
Study Area	3.6	surface sediment	LW2-G077
Study Area	3.6	surface sediment	LW2-G081

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	3.6	surface sediment	LW2-G095
Study Area	3.6	surface sediment	LW3-G784
Study Area	3.6	surface sediment	WLCITH98SD02SD02
Study Area	3.6	surface sediment	WLR0797WRBC15WRBC15
Study Area	3.6	surface sediment	WR-WSI98SD0090
Study Area	3.6	surface sediment	WR-WSI98SD0100
Study Area	3.7	surface sediment	LW2-C078-A
Study Area	3.7	subsurface sediment	LW2-C078-B
Study Area	3.7	subsurface sediment	LW2-C078-C
Study Area	3.7	subsurface sediment	LW2-C078-D
Study Area	3.7	surface sediment	LW2-C079-A
Study Area	3.7	subsurface sediment	LW2-C079-B
Study Area	3.7	subsurface sediment	LW2-C079-C
Study Area	3.7	subsurface sediment	LW2-C079-D
Study Area	3.7	surface sediment	LW2-C080-A
Study Area	3.7	subsurface sediment	LW2-C080-B
Study Area	3.7	subsurface sediment	LW2-C080-C
Study Area	3.7	subsurface sediment	LW2-C080-D
Study Area	3.7	surface sediment	LW2-C082-A1
Study Area	3.7	surface sediment	LW2-C082-A2
Study Area	3.7	subsurface sediment	LW2-C082-B1
Study Area	3.7	subsurface sediment	LW2-C082-B2
Study Area	3.7	subsurface sediment	LW2-C082-C1
Study Area	3.7	subsurface sediment	LW2-C082-C2
Study Area	3.7	subsurface sediment	LW2-C082-D1
Study Area	3.7	subsurface sediment	LW2-C082-D2
Study Area	3.7	surface sediment	LW2-C083-A
Study Area	3.7	subsurface sediment	LW2-C083-B
Study Area	3.7	subsurface sediment	LW2-C083-C
Study Area	3.7	subsurface sediment	LW2-C083-D
Study Area	3.7	surface sediment	LW2-C084-A
Study Area	3.7	subsurface sediment	LW2-C084-B
Study Area	3.7	subsurface sediment	LW2-C084-C
Study Area	3.7	subsurface sediment	LW2-C084-D
Study Area	3.7	subsurface sediment	LW2-C084-E
Study Area	3.7	surface sediment	LW2-C087-A
Study Area	3.7	subsurface sediment	LW2-C087-B
Study Area	3.7	subsurface sediment	LW2-C087-C
Study Area	3.7	subsurface sediment	LW2-C087-D
Study Area	3.7	surface sediment	LW2-C088-A
Study Area	3.7	subsurface sediment	LW2-C088-B
Study Area	3.7	subsurface sediment	LW2-C088-C
Study Area	3.7	surface sediment	LW2-C089-A
Study Area	3.7	subsurface sediment	LW2-C089-B
Study Area	3.7	subsurface sediment	LW2-C089-C
Study Area	3.7	subsurface sediment	LW2-C089-D
Study Area	3.7	subsurface sediment	LW2-C089-F
Study Area	3.7	surface sediment	LW2-C090-A
Study Area	3.7	subsurface sediment	LW2-C090-B
Study Area	3.7	subsurface sediment	LW2-C090-C
Study Area	3.7	subsurface sediment	LW2-C090-D
Study Area	3.7	surface sediment	LW2-C091-A
Study Area	3.7	subsurface sediment	LW2-C091-B
Study Area	3.7	subsurface sediment	LW2-C091-C
Study Area	3.7	subsurface sediment	LW2-C091-D
Study Area	3.7	surface sediment	LW2-C092-A
Study Area	3.7	subsurface sediment	LW2-C092-B
Study Area	3.7	subsurface sediment	LW2-C092-C

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	3.7	subsurface sediment	LW2-C092-D
Study Area	3.7	subsurface sediment	LW2-C092-E
Study Area	3.7	subsurface sediment	LW2-C092-F
Study Area	3.7	surface sediment	LW2-C094-A
Study Area	3.7	subsurface sediment	LW2-C094-B
Study Area	3.7	subsurface sediment	LW2-C094-C
Study Area	3.7	subsurface sediment	LW2-C094-E
Study Area	3.7	surface sediment	LW2-C096-A
Study Area	3.7	subsurface sediment	LW2-C096-B
Study Area	3.7	subsurface sediment	LW2-C096-C
Study Area	3.7	subsurface sediment	LW2-C096-D
Study Area	3.7	subsurface sediment	LW2-C105-B
Study Area	3.7	subsurface sediment	LW2-C105-C
Study Area	3.7	subsurface sediment	LW2-C105-F
Study Area	3.7	surface sediment	LW2-G078
Study Area	3.7	surface sediment	LW2-G079
Study Area	3.7	surface sediment	LW2-G080
Study Area	3.7	surface sediment	LW2-G082
Study Area	3.7	surface sediment	LW2-G083
Study Area	3.7	surface sediment	LW2-G084
Study Area	3.7	surface sediment	LW2-G085
Study Area	3.7	surface sediment	LW2-G089
Study Area	3.7	surface sediment	LW2-G092
Study Area	3.7	surface sediment	LW2-G093
Study Area	3.7	surface sediment	LW2-G094
Study Area	3.7	surface sediment	LW2-G096
Study Area	3.7	surface sediment	LW2-G097
Study Area	3.7	surface sediment	LW2-G098
Study Area	3.7	surface sediment	LW2-G100
Study Area	3.7	surface sediment	LW2-G101
Study Area	3.7	surface sediment	LW2-G105
Study Area	3.7	surface sediment	LW2-GBT005
Study Area	3.7	surface sediment	LW2-GBT006-1
Study Area	3.7	surface sediment	LW2-GBT006-2
Study Area	3.7	subsurface sediment	LW3-C615-B
Study Area	3.7	subsurface sediment	LW3-C617-B
Study Area	3.7	subsurface sediment	LW3-C617-C
Study Area	3.7	surface sediment	LW3-G616
Study Area	3.7	surface sediment	LW3-G617
Study Area	3.7	surface sediment	LWG0103R005SDS015C00
Study Area	3.7	surface sediment	LWG0103R032SDS015C00
Study Area	3.7	surface sediment	LWG0103R034SDS015C00
Study Area	3.7	subsurface sediment	LWM-METCS3
Study Area	3.7	surface sediment	WLCDRD05PG00606
Study Area	3.7	surface sediment	WLCDRD05PG140140Dup
Study Area	3.7	subsurface sediment	WLCDRD05VC00505
Study Area	3.7	subsurface sediment	WLCDRD05VC00606
Study Area	3.7	subsurface sediment	WLCITG08SED01-0.5-2.5A
Study Area	3.7	surface sediment	WLCITG08SED01-0-A
Study Area	3.7	subsurface sediment	WLCITG08SED01-2.5-5-A
Study Area	3.7	subsurface sediment	WLCITG08SED01-5-6.5-A
Study Area	3.7	subsurface sediment	WLCITG08SED02-0.5-2.5A
Study Area	3.7	surface sediment	WLCITG08SED02-0-A
Study Area	3.7	subsurface sediment	WLCITG08SED02-2.5-5-A
Study Area	3.7	subsurface sediment	WLCITG08SED02-5-8.5-A
Study Area	3.7	surface sediment	WLCITG08SED03-0-A
Study Area	3.7	surface sediment	WLCITG08SED04-0-A
Study Area	3.7	surface sediment	WLCITG08SED05-0-A

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	3.7	surface sediment	WLCITG08SED06-0-A
Study Area	3.7	surface sediment	WLCITG08SED07-0-A
Study Area	3.7	surface sediment	WLCITG08SED08-0-A
Study Area	3.7	surface sediment	WLCITG08SED09-0-A
Study Area	3.7	subsurface sediment	WLCITG08SED10-0.5-2.5-B
Study Area	3.7	surface sediment	WLCITG08SED10-0-A
Study Area	3.7	subsurface sediment	WLCITG08SED11-0.5-2.5-A
Study Area	3.7	surface sediment	WLCITG08SED11-0-A
Study Area	3.7	surface sediment	WLCITG08SED12-0-A
Study Area	3.7	surface sediment	WLCITG08SED13-0-A
Study Area	3.7	subsurface sediment	WLCITG08SED14-0.5-2-A
Study Area	3.7	surface sediment	WLCITG08SED14-0-A
Study Area	3.7	subsurface sediment	WLCITG08SED14-2-3.5-A
Study Area	3.7	surface sediment	WLCITH98SD03SD03
Study Area	3.7	surface sediment	WLCITH98SD11SD11
Study Area	3.7	surface sediment	WLCITH98SD12SD12
Study Area	3.7	surface sediment	WR-WSI98SD0110
Study Area	3.7	surface sediment	WR-WSI98SD0120
Study Area	3.7	surface sediment	WR-WSI98SD0130
Study Area	3.7	subsurface sediment	WR-WSI98SD0130000A
Study Area	3.8	surface sediment	LW2-C099-A
Study Area	3.8	subsurface sediment	LW2-C099-B
Study Area	3.8	subsurface sediment	LW2-C099-C
Study Area	3.8	subsurface sediment	LW2-C099-D
Study Area	3.8	surface sediment	LW2-C103-A
Study Area	3.8	subsurface sediment	LW2-C103-B
Study Area	3.8	subsurface sediment	LW2-C103-C
Study Area	3.8	subsurface sediment	LW2-C103-D
Study Area	3.8	subsurface sediment	LW2-C103-E
Study Area	3.8	surface sediment	LW2-G099
Study Area	3.8	surface sediment	LW2-G102
Study Area	3.8	surface sediment	LW2-G103
Study Area	3.8	surface sediment	LW2-G107
Study Area	3.8	surface sediment	LW2-G110
Study Area	3.8	surface sediment	LW3-G618
Study Area	3.8	subsurface sediment	WLCDRD05VC00808
Study Area	3.9	surface sediment	LW2-C106-A
Study Area	3.9	subsurface sediment	LW2-C106-B
Study Area	3.9	subsurface sediment	LW2-C106-C
Study Area	3.9	subsurface sediment	LW2-C106-E
Study Area	3.9	subsurface sediment	LW2-C106-F
Study Area	3.9	surface sediment	LW2-C109-A
Study Area	3.9	subsurface sediment	LW2-C109-B
Study Area	3.9	subsurface sediment	LW2-C109-C
Study Area	3.9	subsurface sediment	LW2-C109-D
Study Area	3.9	subsurface sediment	LW2-C109-E
Study Area	3.9	surface sediment	LW2-G106
Study Area	3.9	surface sediment	LW2-G109
Study Area	3.9	surface sediment	LW2-G113
Study Area	3.9	surface sediment	LW3-G619
Study Area	3.9	surface sediment	LWG0103B033SDS015C00
Study Area	3.9	subsurface sediment	WLCDRD05VC00707
Study Area	3.9	subsurface sediment	WLCDRD05VC01010
Study Area	3.9	surface sediment	WR-WSI98SD0150
Study Area	4	surface sediment	LW2-C111-A2
Study Area	4	subsurface sediment	LW2-C111-B
Study Area	4	subsurface sediment	LW2-C111-B2
Study Area	4	subsurface sediment	LW2-C111-C

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	4	subsurface sediment	LW2-C111-C2
Study Area	4	subsurface sediment	LW2-C111-D2
Study Area	4	subsurface sediment	LW2-C111-E2
Study Area	4	subsurface sediment	LW2-C111-F
Study Area	4	surface sediment	LW2-C112-A
Study Area	4	subsurface sediment	LW2-C112-B
Study Area	4	subsurface sediment	LW2-C112-C
Study Area	4	subsurface sediment	LW2-C112-D
Study Area	4	subsurface sediment	LW2-C121-B
Study Area	4	subsurface sediment	LW2-C121-C
Study Area	4	subsurface sediment	LW2-C121-D
Study Area	4	surface sediment	LW2-C522-A
Study Area	4	subsurface sediment	LW2-C522-B
Study Area	4	subsurface sediment	LW2-C522-C
Study Area	4	subsurface sediment	LW2-C522-E
Study Area	4	surface sediment	LW2-G111
Study Area	4	surface sediment	LW2-G112
Study Area	4	surface sediment	LW2-G114
Study Area	4	surface sediment	LW2-G115-1
Study Area	4	surface sediment	LW2-G115-2
Study Area	4	surface sediment	LW2-G116
Study Area	4	surface sediment	LW2-G117
Study Area	4	surface sediment	LW2-G121
Study Area	4	subsurface sediment	LW3-C621-B
Study Area	4	subsurface sediment	LW3-C621-C
Study Area	4	surface sediment	LW3-G620
Study Area	4	surface sediment	LW3-G621
Study Area	4	surface sediment	LW3-G622
Study Area	4	surface sediment	LW3-GCA04W-C00
Study Area	4	surface sediment	WLCDRD05PG01212
Study Area	4	subsurface sediment	WLCDRD05VC01212
Study Area	4	surface sediment	WLCGXV99S1S1_10
Study Area	4	subsurface sediment	WLCGXV99S1S1_30
Study Area	4	surface sediment	WLCGXV99S4S4_10
Study Area	4	subsurface sediment	WLCGXV99S4S4_30
Study Area	4	surface sediment	WLR0797C1617WRBC16
Study Area	4	surface sediment	WR-WSI98SD0170
Study Area	4	subsurface sediment	WR-WSI98SD0170000A
Study Area	4	surface sediment	WR-WSI98SD0180
Study Area	4.1	subsurface sediment	LW2-C122-B
Study Area	4.1	subsurface sediment	LW2-C122-C
Study Area	4.1	surface sediment	LW2-G118
Study Area	4.1	surface sediment	LW2-G119
Study Area	4.1	surface sediment	LW2-G120
Study Area	4.1	surface sediment	LW2-G122
Study Area	4.1	surface sediment	LW2-G123
Study Area	4.1	surface sediment	LW2-G124
Study Area	4.1	surface sediment	LW2-G126
Study Area	4.1	surface sediment	LWG0103R004SDS015C11
Study Area	4.1	surface sediment	LWG0103R004SDS015C20
Study Area	4.1	surface sediment	LWG0103R004SDS015C30
Study Area	4.1	surface sediment	LWG2-PG-KM8A
Study Area	4.1	surface sediment	LWG2-PG-R2KM2
Study Area	4.1	subsurface sediment	LWM-METCS6
Study Area	4.1	surface sediment	WLCDRD05PG01414
Study Area	4.1	subsurface sediment	WLCDRD05VC01414
Study Area	4.1	surface sediment	WLCGXV99S2S2_10
Study Area	4.1	subsurface sediment	WLCGXV99S2S2_30

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	4.1	subsurface sediment	WLCT0I98B401C1B401C1
Study Area	4.1	surface sediment	WLCT0I98GRAB01GRAB01
Study Area	4.1	surface sediment	WLCT4C04UP01UP0101
Study Area	4.1	surface sediment	WLCT4C04VC01VC0101
Study Area	4.1	subsurface sediment	WLCT4C04VC01VC0113
Study Area	4.1	subsurface sediment	WLCT4C04VC01VC0135
Study Area	4.1	surface sediment	WR-WSI98SD0160
Study Area	4.1	surface sediment	WR-WSI98SD0190
Study Area	4.1	surface sediment	WR-WSI98SD0200
Study Area	4.2	subsurface sediment	LW2-C127-B
Study Area	4.2	subsurface sediment	LW2-C127-C
Study Area	4.2	subsurface sediment	LW2-C127-D
Study Area	4.2	subsurface sediment	LW2-C127-F
Study Area	4.2	surface sediment	LW2-G125
Study Area	4.2	surface sediment	LW2-G127
Study Area	4.2	surface sediment	LW2-GBT007
Study Area	4.2	surface sediment	LW3-G623
Study Area	4.2	surface sediment	WLCDRD05PG01616
Study Area	4.2	subsurface sediment	WLCDRD05VC01616
Study Area	4.2	surface sediment	WLCGXB02SED03SED03
Study Area	4.2	surface sediment	WLCGXV99S3S3_10
Study Area	4.2	subsurface sediment	WLCGXV99S3S3_30
Study Area	4.2	subsurface sediment	WLCGXV99S3S3_30R
Study Area	4.2	subsurface sediment	WLCT0I98B401C2B401C2
Study Area	4.2	subsurface sediment	WLCT4C04PS03031113
Study Area	4.2	subsurface sediment	WLCT4C04PS03031517
Study Area	4.2	subsurface sediment	WLCT4C04PS04041012
Study Area	4.2	subsurface sediment	WLCT4C04PS04041517
Study Area	4.2	surface sediment	WLCT4C04UP02UP0201
Study Area	4.2	surface sediment	WLCT4C04VC02VC0201
Study Area	4.2	subsurface sediment	WLCT4C04VC02VC0213
Study Area	4.2	subsurface sediment	WLCT4C04VC02VC0235
Study Area	4.2	subsurface sediment	WLCT4C04VC02VC0257
Study Area	4.2	subsurface sediment	WLCT4C04VC02VC0279
Study Area	4.2	surface sediment	WLCT4C04VC03VC0301
Study Area	4.2	subsurface sediment	WLCT4C04VC03VC0313
Study Area	4.2	subsurface sediment	WLCT4C04VC03VC0335
Study Area	4.2	subsurface sediment	WLCT4C04VC03VC0357
Study Area	4.2	surface sediment	WLCT4C04VC04VC0401
Study Area	4.2	subsurface sediment	WLCT4C04VC04VC0413
Study Area	4.2	subsurface sediment	WLCT4C04VC04VC0435
Study Area	4.2	subsurface sediment	WLCT4C04VC04VC0457
Study Area	4.2	subsurface sediment	WLCT4C04VC04VC0479
Study Area	4.2	surface sediment	WR-WSI98SD0240
Study Area	4.3	surface sediment	LW2-B009
Study Area	4.3	subsurface sediment	LW2-C130-B
Study Area	4.3	subsurface sediment	LW2-C130-C
Study Area	4.3	subsurface sediment	LW2-C130-D
Study Area	4.3	subsurface sediment	LW2-C130-E
Study Area	4.3	subsurface sediment	LW2-C130-F
Study Area	4.3	surface sediment	LW2-G128
Study Area	4.3	surface sediment	LW2-G129
Study Area	4.3	surface sediment	LW2-G130
Study Area	4.3	surface sediment	LW3-G624
Study Area	4.3	surface sediment	LW3-G625
Study Area	4.3	surface sediment	LWG0104B024SDS015C00
Study Area	4.3	surface sediment	WLCASF97S030W4137
Study Area	4.3	surface sediment	WLCDRD05PG00909

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	4.3	surface sediment	WLCDRD05PG01818
Study Area	4.3	subsurface sediment	WLCDRD05VC00909
Study Area	4.3	subsurface sediment	WLCDRD05VC01818
Study Area	4.3	surface sediment	WLCOFJ02240224020
Study Area	4.3	surface sediment	WLCOFJ02240324030
Study Area	4.3	surface sediment	WLCOFJ02240424040
Study Area	4.3	surface sediment	WLCOFJ02240524050
Study Area	4.3	surface sediment	WLCOFJ0252C0452C040
Study Area	4.3	subsurface sediment	WLCT4C04PS12121012
Study Area	4.3	subsurface sediment	WLCT4C04PS12121517
Study Area	4.3	subsurface sediment	WLCT4C04PS17171012
Study Area	4.3	subsurface sediment	WLCT4C04PS17171517
Study Area	4.3	surface sediment	WLCT4C04UP03UP03
Study Area	4.3	surface sediment	WLCT4C04UP04UP04
Study Area	4.3	surface sediment	WLCT4C04UP05UP05
Study Area	4.3	surface sediment	WLCT4C04UP06UP0601
Study Area	4.3	surface sediment	WLCT4C04VC05VC0501
Study Area	4.3	subsurface sediment	WLCT4C04VC05VC0513
Study Area	4.3	subsurface sediment	WLCT4C04VC05VC0535
Study Area	4.3	subsurface sediment	WLCT4C04VC05VC0557
Study Area	4.3	subsurface sediment	WLCT4C04VC05VC0579
Study Area	4.3	surface sediment	WLCT4C04VC06VC0601
Study Area	4.3	subsurface sediment	WLCT4C04VC06VC0613
Study Area	4.3	subsurface sediment	WLCT4C04VC06VC0635
Study Area	4.3	subsurface sediment	WLCT4C04VC06VC0657
Study Area	4.3	subsurface sediment	WLCT4C04VC06VC0679
Study Area	4.3	surface sediment	WLCT4C04VC07VC0701
Study Area	4.3	subsurface sediment	WLCT4C04VC07VC0713
Study Area	4.3	subsurface sediment	WLCT4C04VC07VC0735
Study Area	4.3	subsurface sediment	WLCT4C04VC07VC0757
Study Area	4.3	subsurface sediment	WLCT4C04VC07VC0779
Study Area	4.3	subsurface sediment	WLCT4C04VC08C08911
Study Area	4.3	surface sediment	WLCT4C04VC08VC0801
Study Area	4.3	subsurface sediment	WLCT4C04VC08VC0813
Study Area	4.3	subsurface sediment	WLCT4C04VC08VC0835
Study Area	4.3	subsurface sediment	WLCT4C04VC08VC0857
Study Area	4.3	subsurface sediment	WLCT4C04VC08VC0879
Study Area	4.3	subsurface sediment	WLCT4C04VC09C09911
Study Area	4.3	surface sediment	WLCT4C04VC09VC0901
Study Area	4.3	subsurface sediment	WLCT4C04VC09VC0913
Study Area	4.3	subsurface sediment	WLCT4C04VC09VC0935
Study Area	4.3	subsurface sediment	WLCT4C04VC09VC0957
Study Area	4.3	subsurface sediment	WLCT4C04VC09VC0979
Study Area	4.3	subsurface sediment	WLCT4C04VC10101113
Study Area	4.3	subsurface sediment	WLCT4C04VC10C10911
Study Area	4.3	surface sediment	WLCT4C04VC10VC1001
Study Area	4.3	subsurface sediment	WLCT4C04VC10VC1013
Study Area	4.3	subsurface sediment	WLCT4C04VC10VC1035
Study Area	4.3	subsurface sediment	WLCT4C04VC10VC1057
Study Area	4.3	subsurface sediment	WLCT4C04VC10VC1079
Study Area	4.3	subsurface sediment	WLCT4C04VC11C11911
Study Area	4.3	surface sediment	WLCT4C04VC11VC1101
Study Area	4.3	subsurface sediment	WLCT4C04VC11VC1113
Study Area	4.3	subsurface sediment	WLCT4C04VC11VC1135
Study Area	4.3	subsurface sediment	WLCT4C04VC11VC1157
Study Area	4.3	subsurface sediment	WLCT4C04VC11VC1179
Study Area	4.3	surface sediment	WLCT4C04VC12VC1201
Study Area	4.3	subsurface sediment	WLCT4C04VC12VC1213

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	4.3	subsurface sediment	WLCT4C04VC12VC1235
Study Area	4.3	subsurface sediment	WLCT4C04VC12VC1257
Study Area	4.3	surface sediment	WLCT4C04VC13VC1301
Study Area	4.3	subsurface sediment	WLCT4C04VC13VC1313
Study Area	4.3	subsurface sediment	WLCT4C04VC13VC1335
Study Area	4.3	subsurface sediment	WLCT4C04VC13VC1357
Study Area	4.3	subsurface sediment	WLCT4C04VC13VC1379
Study Area	4.3	surface sediment	WLCT4C04VC14VC1401
Study Area	4.3	subsurface sediment	WLCT4C04VC14VC1413
Study Area	4.3	subsurface sediment	WLCT4C04VC14VC1435
Study Area	4.3	subsurface sediment	WLCT4C04VC14VC1457
Study Area	4.3	subsurface sediment	WLCT4C04VC14VC1479
Study Area	4.3	surface sediment	WLCT4C04VC17VC1701
Study Area	4.3	subsurface sediment	WLCT4C04VC17VC1713
Study Area	4.3	subsurface sediment	WLCT4C04VC17VC1735
Study Area	4.3	subsurface sediment	WLCT4C04VC17VC1757
Study Area	4.3	subsurface sediment	WLR0797WRGC18RGC18A
Study Area	4.3	surface sediment	WR-WSI98SD0210000CC
Study Area	4.3	surface sediment	WR-WSI98SD0220
Study Area	4.4	surface sediment	LW2-B010
Study Area	4.4	surface sediment	LW2-B011
Study Area	4.4	subsurface sediment	LW2-C133-B
Study Area	4.4	subsurface sediment	LW2-C133-C
Study Area	4.4	subsurface sediment	LW2-C133-D
Study Area	4.4	surface sediment	LW2-G131
Study Area	4.4	surface sediment	LW2-G132
Study Area	4.4	surface sediment	LW2-G133
Study Area	4.4	surface sediment	LW2-GBT008
Study Area	4.4	surface sediment	LW2-GBT009
Study Area	4.4	subsurface sediment	LW3-C626-B
Study Area	4.4	subsurface sediment	LW3-C626-C
Study Area	4.4	subsurface sediment	LW3-C626-D
Study Area	4.4	subsurface sediment	LW3-C626-E
Study Area	4.4	surface sediment	LW3-G626
Study Area	4.4	surface sediment	LW3-G627-1
Study Area	4.4	surface sediment	LW3-G627-2
Study Area	4.4	surface sediment	LW3-G628
Study Area	4.4	surface sediment	LWG0104R003SDS015C00
Study Area	4.4	surface sediment	WLCASF97S029W4138
Study Area	4.4	surface sediment	WLCDRD05PG01111
Study Area	4.4	subsurface sediment	WLCDRD05VC01111
Study Area	4.4	subsurface sediment	WLCDRD05VC02020
Study Area	4.4	surface sediment	WLCOFJ0252C0152C010
Study Area	4.4	surface sediment	WLCOFJ0252C0252C020
Study Area	4.4	surface sediment	WLCOFJ0252C0352C030
Study Area	4.4	surface sediment	WLCOFJ0252C0552C050
Study Area	4.4	subsurface sediment	WLCT4C04PS20201517
Study Area	4.4	subsurface sediment	WLCT4C04PS20202022
Study Area	4.4	subsurface sediment	WLCT4C04PS21211517
Study Area	4.4	subsurface sediment	WLCT4C04PS21212022
Study Area	4.4	surface sediment	WLCT4C04UP07UP0701
Study Area	4.4	surface sediment	WLCT4C04UP08UP0801
Study Area	4.4	subsurface sediment	WLCT4C04VC15C15911
Study Area	4.4	surface sediment	WLCT4C04VC15VC1501
Study Area	4.4	subsurface sediment	WLCT4C04VC15VC1513
Study Area	4.4	subsurface sediment	WLCT4C04VC15VC1535
Study Area	4.4	subsurface sediment	WLCT4C04VC15VC1557

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	4.4	subsurface sediment	WLCT4C04VC15VC1579
Study Area	4.4	subsurface sediment	WLCT4C04VC16C16911
Study Area	4.4	surface sediment	WLCT4C04VC16VC1601
Study Area	4.4	subsurface sediment	WLCT4C04VC16VC1613
Study Area	4.4	subsurface sediment	WLCT4C04VC16VC1635
Study Area	4.4	subsurface sediment	WLCT4C04VC16VC1657
Study Area	4.4	subsurface sediment	WLCT4C04VC16VC1679
Study Area	4.4	surface sediment	WLCT4C04VC18VC1801
Study Area	4.4	subsurface sediment	WLCT4C04VC18VC1813
Study Area	4.4	subsurface sediment	WLCT4C04VC18VC1835
Study Area	4.4	subsurface sediment	WLCT4C04VC18VC1857
Study Area	4.4	subsurface sediment	WLCT4C04VC18VC1879
Study Area	4.4	subsurface sediment	WLCT4C04VC20201113
Study Area	4.4	subsurface sediment	WLCT4C04VC20C20911
Study Area	4.4	surface sediment	WLCT4C04VC20VC2001
Study Area	4.4	subsurface sediment	WLCT4C04VC20VC2013
Study Area	4.4	subsurface sediment	WLCT4C04VC20VC2035
Study Area	4.4	subsurface sediment	WLCT4C04VC20VC2057
Study Area	4.4	subsurface sediment	WLCT4C04VC20VC2079
Study Area	4.4	surface sediment	WLCT4G06T4WB02
Study Area	4.4	surface sediment	WLCT4G06T4WB03
Study Area	4.4	surface sediment	WLCT4J98HCS43HCS43
Study Area	4.4	surface sediment	WR-WSI98SD0230
Study Area	4.4	subsurface sediment	WR-WSI98SD0230000A
Study Area	4.4	surface sediment	WR-WSI98SD0250
Study Area	4.4	surface sediment	WR-WSI98SD0260
Study Area	4.4	surface sediment	WR-WSI98SD0280
Study Area	4.5	subsurface sediment	LW2-C135-B
Study Area	4.5	subsurface sediment	LW2-C135-C
Study Area	4.5	subsurface sediment	LW2-C135-D
Study Area	4.5	subsurface sediment	LW2-C136-B
Study Area	4.5	subsurface sediment	LW2-C136-C
Study Area	4.5	subsurface sediment	LW2-C136-D
Study Area	4.5	surface sediment	LW2-G134
Study Area	4.5	surface sediment	LW2-G135
Study Area	4.5	surface sediment	LW2-G136
Study Area	4.5	subsurface sediment	LW3-C630-B
Study Area	4.5	subsurface sediment	LW3-C630-C
Study Area	4.5	surface sediment	LW3-G629
Study Area	4.5	surface sediment	LW3-G630
Study Area	4.5	surface sediment	LW3-GSP04W
Study Area	4.5	surface sediment	WLCDRD05PG02222
Study Area	4.5	subsurface sediment	WLCDRD05VC02222
Study Area	4.5	subsurface sediment	WLCT4C04PS22221517
Study Area	4.5	subsurface sediment	WLCT4C04PS22222022
Study Area	4.5	subsurface sediment	WLCT4C04UP09UP0902
Study Area	4.5	surface sediment	WLCT4C04UP10UP1001
Study Area	4.5	subsurface sediment	WLCT4C04UP10UP1002
Study Area	4.5	subsurface sediment	WLCT4C04VC19C19911
Study Area	4.5	surface sediment	WLCT4C04VC19VC1901
Study Area	4.5	subsurface sediment	WLCT4C04VC19VC1913
Study Area	4.5	subsurface sediment	WLCT4C04VC19VC1935
Study Area	4.5	subsurface sediment	WLCT4C04VC19VC1957
Study Area	4.5	subsurface sediment	WLCT4C04VC19VC1979
Study Area	4.5	subsurface sediment	WLCT4C04VC21211113
Study Area	4.5	subsurface sediment	WLCT4C04VC21C21911
Study Area	4.5	surface sediment	WLCT4C04VC21VC2101
Study Area	4.5	subsurface sediment	WLCT4C04VC21VC2113

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	4.5	subsurface sediment	WLCT4C04VC21VC2135
Study Area	4.5	subsurface sediment	WLCT4C04VC21VC2157
Study Area	4.5	subsurface sediment	WLCT4C04VC21VC2179
Study Area	4.5	subsurface sediment	WLCT4C04VC22C22911
Study Area	4.5	surface sediment	WLCT4C04VC22VC2201
Study Area	4.5	subsurface sediment	WLCT4C04VC22VC2213
Study Area	4.5	subsurface sediment	WLCT4C04VC22VC2235
Study Area	4.5	subsurface sediment	WLCT4C04VC22VC2257
Study Area	4.5	subsurface sediment	WLCT4C04VC22VC2279
Study Area	4.5	subsurface sediment	WLCT4C04VC25C25911
Study Area	4.5	surface sediment	WLCT4C04VC25VC2501
Study Area	4.5	subsurface sediment	WLCT4C04VC25VC2513
Study Area	4.5	subsurface sediment	WLCT4C04VC25VC2535
Study Area	4.5	subsurface sediment	WLCT4C04VC25VC2557
Study Area	4.5	subsurface sediment	WLCT4C04VC25VC2579
Study Area	4.5	surface sediment	WLCT4G06T4WB01
Study Area	4.5	surface sediment	WLCT4G06T4WB04
Study Area	4.5	surface sediment	WLCT4J98HCS32HCS32
Study Area	4.5	subsurface sediment	WLCT4J98HCS32VC32S1
Study Area	4.5	subsurface sediment	WLCT4J98HCS32VC32S2
Study Area	4.5	surface sediment	WLCT4J98HCS36HCS36
Study Area	4.5	surface sediment	WLCT4J98HCS41HCS41
Study Area	4.5	surface sediment	WLCT4J98HCS42HCS42
Study Area	4.5	subsurface sediment	WLCT4J98HCS42VC42S1
Study Area	4.5	subsurface sediment	WLCT4J98HCS42VC42S2
Study Area	4.5	surface sediment	WLCT4J98HCS44HCS44
Study Area	4.5	surface sediment	WR-WSI98SD0270
Study Area	4.5	surface sediment	WR-WSI98SD0300
Study Area	4.6	surface sediment	LW2-B012
Study Area	4.6	surface sediment	LW2-C138-A
Study Area	4.6	subsurface sediment	LW2-C138-B
Study Area	4.6	subsurface sediment	LW2-C138-C
Study Area	4.6	subsurface sediment	LW2-C138-D
Study Area	4.6	subsurface sediment	LW2-C139-B
Study Area	4.6	subsurface sediment	LW2-C139-C
Study Area	4.6	subsurface sediment	LW2-C139-D
Study Area	4.6	subsurface sediment	LW2-C142-B
Study Area	4.6	subsurface sediment	LW2-C142-C
Study Area	4.6	surface sediment	LW2-G137
Study Area	4.6	surface sediment	LW2-G138
Study Area	4.6	surface sediment	LW2-G139
Study Area	4.6	surface sediment	LW2-G140-1
Study Area	4.6	surface sediment	LW2-G140-2
Study Area	4.6	surface sediment	LW2-GBT011
Study Area	4.6	surface sediment	LW3-G631
Study Area	4.6	surface sediment	LW3-G632
Study Area	4.6	surface sediment	LWG0104R004SDS015C00
Study Area	4.6	surface sediment	NA-1A-0005
Study Area	4.6	subsurface sediment	NA-1A-0508
Study Area	4.6	subsurface sediment	NA-1A-0812
Study Area	4.6	subsurface sediment	NA-1A-1216
Study Area	4.6	subsurface sediment	NA-1A-1620
Study Area	4.6	subsurface sediment	NA-1A-2024
Study Area	4.6	subsurface sediment	NA-1A-2428
Study Area	4.6	subsurface sediment	NA-1A-2832
Study Area	4.6	subsurface sediment	NA-1A-3238
Study Area	4.6	subsurface sediment	NA-1A-3844
Study Area	4.6	subsurface sediment	NA-1A-4854

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	4.6	subsurface sediment	NA-1A-5864
Study Area	4.6	subsurface sediment	NA-1A-6874
Study Area	4.6	subsurface sediment	NA-1A-7884
Study Area	4.6	subsurface sediment	NA-1A-8894
Study Area	4.6	subsurface sediment	NA-1B-0046
Study Area	4.6	subsurface sediment	NA-1B-4668
Study Area	4.6	subsurface sediment	NA-1B-6894
Study Area	4.6	surface sediment	WLCDRD05PG02424
Study Area	4.6	subsurface sediment	WLCDRD05VC02424
Study Area	4.6	surface sediment	WLCT0I98GRAB02GRAB02
Study Area	4.6	subsurface sediment	WLCT4C04PS28281012
Study Area	4.6	subsurface sediment	WLCT4C04PS28281517
Study Area	4.6	subsurface sediment	WLCT4C04PS32321012
Study Area	4.6	subsurface sediment	WLCT4C04PS32321517
Study Area	4.6	surface sediment	WLCT4C04UP12UP1201
Study Area	4.6	surface sediment	WLCT4C04UP13UP1301
Study Area	4.6	subsurface sediment	WLCT4C04VC23C23911
Study Area	4.6	surface sediment	WLCT4C04VC23VC2301
Study Area	4.6	subsurface sediment	WLCT4C04VC23VC2313
Study Area	4.6	subsurface sediment	WLCT4C04VC23VC2335
Study Area	4.6	subsurface sediment	WLCT4C04VC23VC2357
Study Area	4.6	subsurface sediment	WLCT4C04VC23VC2379
Study Area	4.6	surface sediment	WLCT4C04VC26V2601
Study Area	4.6	subsurface sediment	WLCT4C04VC26V2613
Study Area	4.6	subsurface sediment	WLCT4C04VC26VC2635
Study Area	4.6	subsurface sediment	WLCT4C04VC26VC2657
Study Area	4.6	subsurface sediment	WLCT4C04VC26VC2679
Study Area	4.6	surface sediment	WLCT4C04VC27VC2701
Study Area	4.6	subsurface sediment	WLCT4C04VC27VC2713
Study Area	4.6	subsurface sediment	WLCT4C04VC27VC2735
Study Area	4.6	subsurface sediment	WLCT4C04VC27VC2757
Study Area	4.6	subsurface sediment	WLCT4C04VC27VC2779
Study Area	4.6	surface sediment	WLCT4C04VC28VC2801
Study Area	4.6	subsurface sediment	WLCT4C04VC28VC2813
Study Area	4.6	subsurface sediment	WLCT4C04VC28VC2835
Study Area	4.6	subsurface sediment	WLCT4C04VC28VC2857
Study Area	4.6	subsurface sediment	WLCT4C04VC28VC2879
Study Area	4.6	subsurface sediment	WLCT4C04VC29C29911
Study Area	4.6	surface sediment	WLCT4C04VC29VC2901
Study Area	4.6	subsurface sediment	WLCT4C04VC29VC2913
Study Area	4.6	subsurface sediment	WLCT4C04VC29VC2935
Study Area	4.6	subsurface sediment	WLCT4C04VC29VC2957
Study Area	4.6	subsurface sediment	WLCT4C04VC29VC2979
Study Area	4.6	subsurface sediment	WLCT4C04VC30C30911
Study Area	4.6	surface sediment	WLCT4C04VC30VC3001
Study Area	4.6	subsurface sediment	WLCT4C04VC30VC3013
Study Area	4.6	subsurface sediment	WLCT4C04VC30VC3035
Study Area	4.6	subsurface sediment	WLCT4C04VC30VC3057
Study Area	4.6	subsurface sediment	WLCT4C04VC30VC3079
Study Area	4.6	surface sediment	WLCT4C04VC32VC3201
Study Area	4.6	subsurface sediment	WLCT4C04VC32VC3213
Study Area	4.6	subsurface sediment	WLCT4C04VC32VC3235
Study Area	4.6	subsurface sediment	WLCT4C04VC32VC3257
Study Area	4.6	subsurface sediment	WLCT4C04VC32VC3279
Study Area	4.6	subsurface sediment	WLCT4G06T4B41106A
Study Area	4.6	subsurface sediment	WLCT4G06T4B41106B
Study Area	4.6	subsurface sediment	WLCT4G06T4B41106C
Study Area	4.6	surface sediment	WLCT4G06T4B41403A

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	4.6	subsurface sediment	WLCT4G06T4B41403B
Study Area	4.6	subsurface sediment	WLCT4G06T4B41403C
Study Area	4.6	surface sediment	WLCT4G06T4PI09A
Study Area	4.6	subsurface sediment	WLCT4G06T4PI09B
Study Area	4.6	subsurface sediment	WLCT4G06T4S301D
Study Area	4.6	subsurface sediment	WLCT4G06T4S301E
Study Area	4.6	subsurface sediment	WLCT4G06T4S301F
Study Area	4.6	subsurface sediment	WLCT4G06T4S301G
Study Area	4.6	subsurface sediment	WLCT4G06T4S301H
Study Area	4.6	subsurface sediment	WLCT4G06T4S301J
Study Area	4.6	subsurface sediment	WLCT4G06T4S301K
Study Area	4.6	subsurface sediment	WLCT4G06T4S302C
Study Area	4.6	subsurface sediment	WLCT4G06T4S302D
Study Area	4.6	subsurface sediment	WLCT4G06T4S302E
Study Area	4.6	subsurface sediment	WLCT4G06T4S302F
Study Area	4.6	subsurface sediment	WLCT4G06T4S302G
Study Area	4.6	subsurface sediment	WLCT4G06T4S302H
Study Area	4.6	subsurface sediment	WLCT4G06T4S302J
Study Area	4.6	subsurface sediment	WLCT4G06T4S302K
Study Area	4.6	subsurface sediment	WLCT4G06T4S303B
Study Area	4.6	subsurface sediment	WLCT4G06T4S303C
Study Area	4.6	subsurface sediment	WLCT4G06T4S303D
Study Area	4.6	subsurface sediment	WLCT4G06T4S303E
Study Area	4.6	subsurface sediment	WLCT4G06T4S303F
Study Area	4.6	subsurface sediment	WLCT4G06T4S303G
Study Area	4.6	subsurface sediment	WLCT4G06T4S305E
Study Area	4.6	subsurface sediment	WLCT4G06T4S305F
Study Area	4.6	subsurface sediment	WLCT4G06T4S305G
Study Area	4.6	subsurface sediment	WLCT4G06T4S305H
Study Area	4.6	subsurface sediment	WLCT4G06T4S305J
Study Area	4.6	subsurface sediment	WLCT4G06T4S305K
Study Area	4.6	surface sediment	WLCT4G06T4S306A
Study Area	4.6	subsurface sediment	WLCT4G06T4S306B
Study Area	4.6	subsurface sediment	WLCT4G06T4S307B
Study Area	4.6	subsurface sediment	WLCT4G06T4S307C
Study Area	4.6	subsurface sediment	WLCT4G06T4S307D
Study Area	4.6	subsurface sediment	WLCT4G06T4S307E
Study Area	4.6	subsurface sediment	WLCT4G06T4S307F
Study Area	4.6	subsurface sediment	WLCT4G06T4S308B
Study Area	4.6	subsurface sediment	WLCT4G06T4S308C
Study Area	4.6	subsurface sediment	WLCT4G06T4S308D
Study Area	4.6	surface sediment	WLCT4J98HCS06HCS06
Study Area	4.6	surface sediment	WLCT4J98HCS07HCS07
Study Area	4.6	subsurface sediment	WLCT4J98HCS07VC07S1
Study Area	4.6	subsurface sediment	WLCT4J98HCS07VC07S2
Study Area	4.6	surface sediment	WLCT4J98HCS08HCS08
Study Area	4.6	surface sediment	WLCT4J98HCS11HCS11
Study Area	4.6	subsurface sediment	WLCT4J98HCS11VC11S1
Study Area	4.6	subsurface sediment	WLCT4J98HCS11VC11S2
Study Area	4.6	surface sediment	WLCT4J98HCS12HCS12
Study Area	4.6	surface sediment	WLCT4J98HCS13HCS13
Study Area	4.6	subsurface sediment	WLCT4J98HCS13VC13S1
Study Area	4.6	subsurface sediment	WLCT4J98HCS13VC13S2
Study Area	4.6	surface sediment	WLCT4J98HCS14HCS14
Study Area	4.6	surface sediment	WLCT4J98HCS15HCS15
Study Area	4.6	surface sediment	WLCT4J98HCS16HCS16
Study Area	4.6	surface sediment	WLCT4J98HCS17HCS17
Study Area	4.6	surface sediment	WLCT4J98HCS20HCS20

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	4.6	surface sediment	WLCT4J98HCS21HCS21
Study Area	4.6	surface sediment	WLCT4J98HCS22HCS22
Study Area	4.6	subsurface sediment	WLCT4J98HCS22VC22S1
Study Area	4.6	subsurface sediment	WLCT4J98HCS22VC22S2
Study Area	4.6	surface sediment	WLCT4J98HCS23HCS23
Study Area	4.6	surface sediment	WLCT4J98HCS25HCS25
Study Area	4.6	surface sediment	WLCT4J98HCS26HCS26
Study Area	4.6	surface sediment	WLCT4J98HCS27HCS27
Study Area	4.6	subsurface sediment	WLCT4J98HCS27VC27S1
Study Area	4.6	subsurface sediment	WLCT4J98HCS27VC27S2
Study Area	4.6	surface sediment	WLCT4J98HCS28HCS28
Study Area	4.6	surface sediment	WLCT4J98HCS29HCS29
Study Area	4.6	surface sediment	WLCT4J98HCS33HCS33
Study Area	4.6	surface sediment	WLCT4J98HCS34HCS34
Study Area	4.6	surface sediment	WLCT4L08T4IM01SS081230
Study Area	4.6	surface sediment	WLCT4L08T4IM02SS081230
Study Area	4.6	surface sediment	WLCT4L08T4IM03SS081230
Study Area	4.6	surface sediment	WLCT4L08T4IM04SS081230
Study Area	4.6	surface sediment	WLCT4L08T4IM05SS081230
Study Area	4.6	surface sediment	WLCT4L08T4IM06SS081230
Study Area	4.6	surface sediment	WLCT4L08T4IM07SS081230
Study Area	4.6	surface sediment	WLCT4L08T4IM08SS081230
Study Area	4.6	surface sediment	WLCT4L08T4IM09SS081230
Study Area	4.6	surface sediment	WLCT4L08T4IM10SS081230
Study Area	4.6	surface sediment	WLCT4L08T4IM11SS081229
Study Area	4.6	surface sediment	WLCT4L08T4IM12SS081229
Study Area	4.6	surface sediment	WLCT4L08T4IM13SS081229
Study Area	4.6	surface sediment	WLCT4L08T4IM14SS081229
Study Area	4.6	surface sediment	WLCT4L08T4IM414SS081229
Study Area	4.6	surface sediment	WLCT4L08T4IMS3ACSS081230
Study Area	4.6	surface sediment	WLCT4L08T4IMS3ADSS081230
Study Area	4.6	surface sediment	WLCT4L08T4IMS3CSS081229
Study Area	4.6	surface sediment	WR-WSI98SD0310
Study Area	4.6	subsurface sediment	WR-WSI98SD0310000A
Study Area	4.7	surface sediment	LW2-C144-A
Study Area	4.7	subsurface sediment	LW2-C144-B
Study Area	4.7	subsurface sediment	LW2-C144-C
Study Area	4.7	subsurface sediment	LW2-C144-D
Study Area	4.7	subsurface sediment	LW2-C144-E
Study Area	4.7	subsurface sediment	LW2-C147-B
Study Area	4.7	subsurface sediment	LW2-C147-C
Study Area	4.7	subsurface sediment	LW2-C147-D
Study Area	4.7	subsurface sediment	LW2-C147-E
Study Area	4.7	surface sediment	LW2-G141
Study Area	4.7	surface sediment	LW2-G142
Study Area	4.7	surface sediment	LW2-G143
Study Area	4.7	surface sediment	LW2-G144
Study Area	4.7	surface sediment	LW2-G145
Study Area	4.7	surface sediment	LW2-G147
Study Area	4.7	surface sediment	LW2-GBT010
Study Area	4.7	surface sediment	LW3-G633
Study Area	4.7	surface sediment	LWG0104B023SDS015C00
Study Area	4.7	surface sediment	LWG2-PG-AR2A
Study Area	4.7	surface sediment	WLCDRD05PG01313
Study Area	4.7	surface sediment	WLCDRD05PG02626
Study Area	4.7	subsurface sediment	WLCDRD05VC01313
Study Area	4.7	subsurface sediment	WLCDRD05VC02626
Study Area	4.7	subsurface sediment	WLCT4C04PS31.522.5

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	4.7	subsurface sediment	WLCT4C04PS31311517
Study Area	4.7	surface sediment	WLCT4C04UP14UP14
Study Area	4.7	subsurface sediment	WLCT4C04VC31C31911
Study Area	4.7	surface sediment	WLCT4C04VC31VC3101
Study Area	4.7	subsurface sediment	WLCT4C04VC31VC3113
Study Area	4.7	subsurface sediment	WLCT4C04VC31VC3135
Study Area	4.7	subsurface sediment	WLCT4C04VC31VC3157
Study Area	4.7	subsurface sediment	WLCT4C04VC31VC3179
Study Area	4.7	surface sediment	WLCT4G06T4B41402A
Study Area	4.7	subsurface sediment	WLCT4G06T4B41402B
Study Area	4.7	subsurface sediment	WLCT4G06T4B41402C
Study Area	4.7	subsurface sediment	WLCT4G06T4B41402D
Study Area	4.7	subsurface sediment	WLCT4G06T4B41402E
Study Area	4.7	subsurface sediment	WLCT4G06T4B41402F
Study Area	4.7	surface sediment	WLCT4G06T4B41404A
Study Area	4.7	subsurface sediment	WLCT4G06T4B41404B
Study Area	4.7	subsurface sediment	WLCT4G06T4B41404C
Study Area	4.7	subsurface sediment	WLCT4G06T4B41404D
Study Area	4.7	subsurface sediment	WLCT4G06T4B41404E
Study Area	4.7	subsurface sediment	WLCT4G06T4B41404F
Study Area	4.7	surface sediment	WLCT4J98HCS04HCS04
Study Area	4.7	surface sediment	WLCT4J98HCS05HCS05
Study Area	4.7	surface sediment	WLCT4J98HCS39HCS39
Study Area	4.7	subsurface sediment	WLCT4J98HCS39VC39S1
Study Area	4.7	subsurface sediment	WLCT4J98HCS39VC39S2
Study Area	4.7	surface sediment	WLCT4J98HCS40HCS40
Study Area	4.7	surface sediment	WR-WSI98SD0330
Study Area	4.7	surface sediment	WR-WSI98SD0340
Study Area	4.7	surface sediment	WR-WSI98SD0350
Study Area	4.7	subsurface sediment	WR-WSI98SD0350000A
Study Area	4.8	subsurface sediment	LW2-C148-B
Study Area	4.8	subsurface sediment	LW2-C148-C
Study Area	4.8	subsurface sediment	LW2-C148-D
Study Area	4.8	subsurface sediment	LW2-C148-E
Study Area	4.8	subsurface sediment	LW2-C152-B
Study Area	4.8	subsurface sediment	LW2-C152-C
Study Area	4.8	subsurface sediment	LW2-C152-E
Study Area	4.8	subsurface sediment	LW2-C156-B
Study Area	4.8	subsurface sediment	LW2-C156-C
Study Area	4.8	subsurface sediment	LW2-C156-F
Study Area	4.8	subsurface sediment	LW2-C157-B
Study Area	4.8	subsurface sediment	LW2-C157-C
Study Area	4.8	subsurface sediment	LW2-C160-B
Study Area	4.8	subsurface sediment	LW2-C160-C
Study Area	4.8	surface sediment	LW2-G146
Study Area	4.8	surface sediment	LW2-G148
Study Area	4.8	surface sediment	LW2-G150
Study Area	4.8	surface sediment	LW2-G152
Study Area	4.8	surface sediment	LW2-G153
Study Area	4.8	surface sediment	LW2-G155
Study Area	4.8	surface sediment	LW2-G156
Study Area	4.8	surface sediment	LW2-GBT012
Study Area	4.8	subsurface sediment	LW3-C634-B
Study Area	4.8	subsurface sediment	LW3-C634-C
Study Area	4.8	surface sediment	LW3-G634
Study Area	4.8	surface sediment	LWG2-PG-R2AR1
Study Area	4.8	surface sediment	LWG2-PG-R2AR1-2
Study Area	4.8	surface sediment	LWG2-PG-R2AR2

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	4.8	surface sediment	WLCASF97S028W4139
Study Area	4.8	subsurface sediment	WLCBPE06SGP061012
Study Area	4.8	subsurface sediment	WLCBPE06SGP061415
Study Area	4.8	subsurface sediment	WLCBPE06SGP0624
Study Area	4.8	subsurface sediment	WLCBPE06SGP1357
Study Area	4.8	subsurface sediment	WLCBPE06SGP13810
Study Area	4.8	surface sediment	WLCBPE06SGP1601
Study Area	4.8	subsurface sediment	WLCBPE06SGP1624
Study Area	4.8	surface sediment	WLCBPE06SS01
Study Area	4.8	surface sediment	WLCBPE06SS02
Study Area	4.8	surface sediment	WLCBPE06SS03
Study Area	4.8	surface sediment	WLCBPE06SS04
Study Area	4.8	surface sediment	WLCBPE06SS29
Study Area	4.8	surface sediment	WLCBPE06SS30
Study Area	4.8	surface sediment	WLCBPE06SS31
Study Area	4.8	surface sediment	WLCBPE06SS32
Study Area	4.8	surface sediment	WLCBPE06SS33
Study Area	4.8	surface sediment	WLCBPE06SS34
Study Area	4.8	surface sediment	WLCBPE06SS35
Study Area	4.8	surface sediment	WLCBPE06SS36
Study Area	4.8	surface sediment	WLCBPE06SS37
Study Area	4.8	surface sediment	WLCBPE06SS38
Study Area	4.8	surface sediment	WLCBPE06SS46
Study Area	4.8	surface sediment	WLCBPE06SS47
Study Area	4.8	surface sediment	WLCBPE06SS48
Study Area	4.8	surface sediment	WLCBPE06SS49
Study Area	4.8	surface sediment	WLCBPE06SS50
Study Area	4.8	subsurface sediment	WLCDRD05VC02828
Study Area	4.8	surface sediment	WR-WSI98SD0360
Study Area	4.8	surface sediment	WR-WSI98SD0370
Study Area	4.8	surface sediment	WR-WSI98SD0380
Study Area	4.8	surface sediment	WR-WSI98SD0390
Study Area	4.9	surface sediment	LW2-C158-A
Study Area	4.9	subsurface sediment	LW2-C158-B
Study Area	4.9	subsurface sediment	LW2-C158-C
Study Area	4.9	subsurface sediment	LW2-C158-D
Study Area	4.9	subsurface sediment	LW2-C158-E
Study Area	4.9	surface sediment	LW2-C162-A
Study Area	4.9	subsurface sediment	LW2-C162-B
Study Area	4.9	subsurface sediment	LW2-C162-C
Study Area	4.9	subsurface sediment	LW2-C162-D
Study Area	4.9	subsurface sediment	LW2-C163-B1
Study Area	4.9	subsurface sediment	LW2-C163-B2
Study Area	4.9	subsurface sediment	LW2-C163-C1
Study Area	4.9	subsurface sediment	LW2-C163-C2
Study Area	4.9	subsurface sediment	LW2-C163-D1
Study Area	4.9	subsurface sediment	LW2-C163-D2
Study Area	4.9	subsurface sediment	LW2-C166-B
Study Area	4.9	subsurface sediment	LW2-C166-C
Study Area	4.9	subsurface sediment	LW2-C166-D
Study Area	4.9	surface sediment	LW2-C167-A
Study Area	4.9	subsurface sediment	LW2-C167-B
Study Area	4.9	subsurface sediment	LW2-C167-C
Study Area	4.9	subsurface sediment	LW2-C167-D
Study Area	4.9	subsurface sediment	LW2-C167-F
Study Area	4.9	surface sediment	LW2-G149
Study Area	4.9	surface sediment	LW2-G158
Study Area	4.9	surface sediment	LW2-G162

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	4.9	surface sediment	LW2-G163
Study Area	4.9	surface sediment	LW2-G166
Study Area	4.9	subsurface sediment	LW3-C635-B
Study Area	4.9	surface sediment	LW3-G635
Study Area	4.9	surface sediment	LWG2-PG-EM2A
Study Area	4.9	surface sediment	LWPTZSARCO2B2
Study Area	4.9	surface sediment	LWPTZSARCO3B
Study Area	4.9	surface sediment	LWPTZSARCO6B-1
Study Area	4.9	surface sediment	WLCBPE06SGP0501
Study Area	4.9	subsurface sediment	WLCBPE06SGP0524
Study Area	4.9	subsurface sediment	WLCBPE06SGP0568
Study Area	4.9	subsurface sediment	WLCBPE06SGP05910
Study Area	4.9	subsurface sediment	WLCBPE06SGP1013
Study Area	4.9	subsurface sediment	WLCBPE06SGP1057
Study Area	4.9	subsurface sediment	WLCBPE06SGP1424
Study Area	4.9	subsurface sediment	WLCBPE06SGP1445
Study Area	4.9	subsurface sediment	WLCBPE06SGP1479
Study Area	4.9	surface sediment	WLCBPE06SGP1501
Study Area	4.9	subsurface sediment	WLCBPE06SGP1524
Study Area	4.9	surface sediment	WLCBPE06SGP2201
Study Area	4.9	subsurface sediment	WLCBPE06SGP2224
Study Area	4.9	surface sediment	WLCBPE06SGP2301
Study Area	4.9	subsurface sediment	WLCBPE06SGP2324
Study Area	4.9	surface sediment	WLCBPE06SGP2401
Study Area	4.9	subsurface sediment	WLCBPE06SGP2424
Study Area	4.9	surface sediment	WLCBPE06SS17
Study Area	4.9	surface sediment	WLCBPE06SS18
Study Area	4.9	surface sediment	WLCBPE06SS19
Study Area	4.9	surface sediment	WLCBPE06SS39
Study Area	4.9	surface sediment	WLCBPE06SS40
Study Area	4.9	surface sediment	WLCBPE06SS41
Study Area	4.9	surface sediment	WLCBPE06SS42
Study Area	4.9	surface sediment	WLCBPE06SS43
Study Area	4.9	surface sediment	WLCBPE06SS44
Study Area	4.9	surface sediment	WLCBPE06SS45
Study Area	4.9	surface sediment	WLCDRD05PG03030
Study Area	4.9	subsurface sediment	WLCDRD05VC03030
Study Area	4.9	surface sediment	WR-WSI98SD0400
Study Area	4.9	surface sediment	WR-WSI98SD0410
Study Area	5	subsurface sediment	LW2-C164-B
Study Area	5	subsurface sediment	LW2-C164-C
Study Area	5	subsurface sediment	LW2-C164-E
Study Area	5	surface sediment	LW2-C169-A
Study Area	5	subsurface sediment	LW2-C169-B
Study Area	5	subsurface sediment	LW2-C169-C
Study Area	5	subsurface sediment	LW2-C169-D
Study Area	5	subsurface sediment	LW2-C170-B
Study Area	5	subsurface sediment	LW2-C170-C
Study Area	5	subsurface sediment	LW2-C170-D
Study Area	5	surface sediment	LW2-C171-A
Study Area	5	subsurface sediment	LW2-C171-B
Study Area	5	subsurface sediment	LW2-C171-C
Study Area	5	subsurface sediment	LW2-C171-D
Study Area	5	subsurface sediment	LW2-C172-B
Study Area	5	subsurface sediment	LW2-C172-C
Study Area	5	subsurface sediment	LW2-C172-E
Study Area	5	subsurface sediment	LW2-C173-B
Study Area	5	subsurface sediment	LW2-C173-C

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	5	subsurface sediment	LW2-C173-D
Study Area	5	subsurface sediment	LW2-C173-E
Study Area	5	subsurface sediment	LW2-C176-B
Study Area	5	subsurface sediment	LW2-C176-C
Study Area	5	subsurface sediment	LW2-C176-G
Study Area	5	surface sediment	LW2-G154
Study Area	5	surface sediment	LW2-G159
Study Area	5	surface sediment	LW2-G169
Study Area	5	surface sediment	LW2-G170
Study Area	5	surface sediment	LW2-G171
Study Area	5	surface sediment	LW2-G172
Study Area	5	surface sediment	LW2-G173
Study Area	5	surface sediment	LW2-G174
Study Area	5	surface sediment	LW2-G176
Study Area	5	surface sediment	LWG0105R041SDS015C00
Study Area	5	surface sediment	LWG2-PG-EM3A
Study Area	5	surface sediment	WLCASF97S025W4142
Study Area	5	surface sediment	WLCASF97S026W4141
Study Area	5	surface sediment	WLCASF97S027W4140
Study Area	5	surface sediment	WLCDRD05PG01515
Study Area	5	subsurface sediment	WLCDRD05VC01515
Study Area	5	subsurface sediment	WLCDRD05VC03232
Study Area	5	surface sediment	WLCT0I98GRAB03GRAB03
Study Area	5	surface sediment	WR-WSI98SD0420
Study Area	5	surface sediment	WR-WSI98SD0430
Study Area	5	surface sediment	WR-WSI98SD0440
Study Area	5.1	subsurface sediment	LW2-C179-B
Study Area	5.1	subsurface sediment	LW2-C179-C
Study Area	5.1	subsurface sediment	LW2-C179-D
Study Area	5.1	subsurface sediment	LW2-C182-B
Study Area	5.1	subsurface sediment	LW2-C182-C
Study Area	5.1	subsurface sediment	LW2-C182-D
Study Area	5.1	subsurface sediment	LW2-C184-B
Study Area	5.1	subsurface sediment	LW2-C184-C
Study Area	5.1	subsurface sediment	LW2-C184-D
Study Area	5.1	subsurface sediment	LW2-C184-E
Study Area	5.1	surface sediment	LW2-G164
Study Area	5.1	surface sediment	LW2-G165
Study Area	5.1	surface sediment	LW2-G168
Study Area	5.1	surface sediment	LW2-G177
Study Area	5.1	surface sediment	LW2-G178
Study Area	5.1	surface sediment	LW2-G179
Study Area	5.1	surface sediment	LW2-G182
Study Area	5.1	surface sediment	LW2-G184
Study Area	5.1	surface sediment	WLCASF97S045W4161
Study Area	5.1	surface sediment	WLCASF97S045W4162
Study Area	5.1	surface sediment	WLCASF97S046W4163
Study Area	5.1	surface sediment	WLCASF97S047W4164
Study Area	5.1	surface sediment	WLCDRD05PG03434
Study Area	5.1	surface sediment	WLCDRD05PG03636
Study Area	5.1	surface sediment	WLCDRD05PG139139Dup
Study Area	5.1	subsurface sediment	WLCDRD05VC03434
Study Area	5.1	subsurface sediment	WLCDRD05VC03636
Study Area	5.1	surface sediment	WLCOFJ02530253020
Study Area	5.1	surface sediment	WLCOFJ02530353030
Study Area	5.1	surface sediment	WLCOFJ02530453040
Study Area	5.1	surface sediment	WLCOFJ02530553050
Study Area	5.1	subsurface sediment	WLR0797WRGC19RGC19A

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	5.1	surface sediment	WR-WSI98SD0450
Study Area	5.1	surface sediment	WR-WSI98SD0460
Study Area	5.1	surface sediment	WR-WSI98SD0470
Study Area	5.1	surface sediment	WR-WSI98SD0480000CC
Study Area	5.1	subsurface sediment	WR-WSI98SD048000ACC
Study Area	5.2	subsurface sediment	LW2-C185-B
Study Area	5.2	subsurface sediment	LW2-C185-C
Study Area	5.2	subsurface sediment	LW2-C185-D
Study Area	5.2	surface sediment	LW2-C187-A
Study Area	5.2	subsurface sediment	LW2-C187-B
Study Area	5.2	subsurface sediment	LW2-C187-C
Study Area	5.2	subsurface sediment	LW2-C187-D
Study Area	5.2	subsurface sediment	LW2-C187-E
Study Area	5.2	surface sediment	LW2-G175
Study Area	5.2	surface sediment	LW2-G180
Study Area	5.2	surface sediment	LW2-G183
Study Area	5.2	surface sediment	LW2-G185
Study Area	5.2	surface sediment	LW2-G187
Study Area	5.2	subsurface sediment	LW3-C636-B
Study Area	5.2	subsurface sediment	LW3-C636-C
Study Area	5.2	subsurface sediment	LW3-C636-D
Study Area	5.2	surface sediment	LW3-G636
Study Area	5.2	surface sediment	LW3-G637-1
Study Area	5.2	surface sediment	LW3-G637-2
Study Area	5.2	surface sediment	LWG0105R001SDS015C00
Study Area	5.2	surface sediment	WLCDRD05PG01717
Study Area	5.2	subsurface sediment	WLCDRD05VC01717
Study Area	5.2	surface sediment	WLR0797WRBC20WRBC20
Study Area	5.2	surface sediment	WR-WSI98SD0490
Study Area	5.2	subsurface sediment	WR-WSI98SD0490000A
Study Area	5.3	surface sediment	LW2-G181
Study Area	5.3	surface sediment	LW2-G186
Study Area	5.3	surface sediment	LW2-G189
Study Area	5.3	surface sediment	LW2-G191
Study Area	5.3	surface sediment	LW3-G638
Study Area	5.3	surface sediment	WLCASF97S023W4144
Study Area	5.3	surface sediment	WLCASF97S024W4143
Study Area	5.3	surface sediment	WLCDRD05PG01919
Study Area	5.3	subsurface sediment	WLCDRD05VC01919
Study Area	5.3	surface sediment	WR-WSI98SD0500
Study Area	5.4	surface sediment	LW2-G188
Study Area	5.4	surface sediment	LW2-G190
Study Area	5.4	surface sediment	LW2-G194
Study Area	5.4	surface sediment	LW2-G195
Study Area	5.4	surface sediment	LW2-G200
Study Area	5.4	surface sediment	LW2-G205
Study Area	5.4	subsurface sediment	LW3-C640-B
Study Area	5.4	subsurface sediment	LW3-C640-C
Study Area	5.4	surface sediment	LW3-G639
Study Area	5.4	surface sediment	LWG0105B019SDS015C00
Study Area	5.4	surface sediment	WLCASF97S020W4147
Study Area	5.4	surface sediment	WLCASF97S021W4146
Study Area	5.4	surface sediment	WLCASF97S022W4145
Study Area	5.4	surface sediment	WLCDRD05PG02121
Study Area	5.4	subsurface sediment	WLCDRD05VC04242
Study Area	5.4	surface sediment	WR-WSI98SD0510
Study Area	5.4	surface sediment	WR-WSI98SD0520
Study Area	5.5	subsurface sediment	LW2-C192-B

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	5.5	subsurface sediment	LW2-C192-C
Study Area	5.5	subsurface sediment	LW2-C192-D
Study Area	5.5	surface sediment	LW2-C196-A
Study Area	5.5	subsurface sediment	LW2-C196-B
Study Area	5.5	subsurface sediment	LW2-C196-C
Study Area	5.5	subsurface sediment	LW2-C197-B
Study Area	5.5	subsurface sediment	LW2-C197-C
Study Area	5.5	subsurface sediment	LW2-C197-D
Study Area	5.5	subsurface sediment	LW2-C197-E
Study Area	5.5	subsurface sediment	LW2-C210-B
Study Area	5.5	subsurface sediment	LW2-C210-C
Study Area	5.5	subsurface sediment	LW2-C210-E
Study Area	5.5	subsurface sediment	LW2-C213-B
Study Area	5.5	subsurface sediment	LW2-C213-C
Study Area	5.5	subsurface sediment	LW2-C213-D
Study Area	5.5	surface sediment	LW2-G192
Study Area	5.5	surface sediment	LW2-G193
Study Area	5.5	surface sediment	LW2-G196
Study Area	5.5	surface sediment	LW2-G197-1
Study Area	5.5	surface sediment	LW2-G197-2
Study Area	5.5	surface sediment	LW2-G208
Study Area	5.5	surface sediment	LW2-G210
Study Area	5.5	surface sediment	LW2-G212-1
Study Area	5.5	surface sediment	LW2-G212-2
Study Area	5.5	surface sediment	LW2-G213
Study Area	5.5	surface sediment	LW2-G217
Study Area	5.5	surface sediment	LW3-G641-1
Study Area	5.5	surface sediment	LW3-G641-2
Study Area	5.5	surface sediment	LW3-G642
Study Area	5.5	surface sediment	LW3-G643
Study Area	5.5	surface sediment	LW3-GCA05E-C00
Study Area	5.5	surface sediment	LW3-GSP05E
Study Area	5.5	surface sediment	WLCASF97S018W4160
Study Area	5.5	surface sediment	WLCDRD05PG02323
Study Area	5.5	surface sediment	WLCDRD05PG04242
Study Area	5.5	subsurface sediment	WLCDRD05VC02323
Study Area	5.5	surface sediment	WLCMCB02SED03SED03
Study Area	5.5	surface sediment	WLCOFJ0252A0552A050
Study Area	5.6	subsurface sediment	LW2-C199-B
Study Area	5.6	subsurface sediment	LW2-C199-C
Study Area	5.6	subsurface sediment	LW2-C199-E
Study Area	5.6	subsurface sediment	LW2-C202-B
Study Area	5.6	subsurface sediment	LW2-C202-C
Study Area	5.6	subsurface sediment	LW2-C202-D
Study Area	5.6	subsurface sediment	LW2-C203-B
Study Area	5.6	subsurface sediment	LW2-C203-C
Study Area	5.6	subsurface sediment	LW2-C203-E
Study Area	5.6	subsurface sediment	LW2-C206-B
Study Area	5.6	subsurface sediment	LW2-C206-C
Study Area	5.6	subsurface sediment	LW2-C206-D
Study Area	5.6	subsurface sediment	LW2-C207-B
Study Area	5.6	subsurface sediment	LW2-C207-B2
Study Area	5.6	subsurface sediment	LW2-C207-C
Study Area	5.6	subsurface sediment	LW2-C207-C2
Study Area	5.6	subsurface sediment	LW2-C207-D
Study Area	5.6	subsurface sediment	LW2-C220-B
Study Area	5.6	subsurface sediment	LW2-C220-C
Study Area	5.6	surface sediment	LW2-C221-A

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	5.6	subsurface sediment	LW2-C221-B
Study Area	5.6	subsurface sediment	LW2-C221-C
Study Area	5.6	subsurface sediment	LW2-C221-D
Study Area	5.6	subsurface sediment	LW2-C227-B
Study Area	5.6	subsurface sediment	LW2-C227-C
Study Area	5.6	subsurface sediment	LW2-C228-B
Study Area	5.6	surface sediment	LW2-G198
Study Area	5.6	surface sediment	LW2-G199
Study Area	5.6	surface sediment	LW2-G202
Study Area	5.6	surface sediment	LW2-G203-1
Study Area	5.6	surface sediment	LW2-G203-2
Study Area	5.6	surface sediment	LW2-G204
Study Area	5.6	surface sediment	LW2-G206
Study Area	5.6	surface sediment	LW2-G207
Study Area	5.6	surface sediment	LW2-G209
Study Area	5.6	surface sediment	LW2-G216
Study Area	5.6	surface sediment	LW2-G219
Study Area	5.6	surface sediment	LW2-G220
Study Area	5.6	surface sediment	LW2-G221
Study Area	5.6	surface sediment	LW2-G222
Study Area	5.6	surface sediment	LW2-G223
Study Area	5.6	surface sediment	LW2-G227
Study Area	5.6	surface sediment	LW2-G228
Study Area	5.6	surface sediment	LW2-G520
Study Area	5.6	subsurface sediment	LW3-C644-B1
Study Area	5.6	subsurface sediment	LW3-C644-B2
Study Area	5.6	subsurface sediment	LW3-C644-C1
Study Area	5.6	subsurface sediment	LW3-C644-C2
Study Area	5.6	subsurface sediment	LW3-C645-B
Study Area	5.6	subsurface sediment	LW3-C645-C
Study Area	5.6	surface sediment	LW3-G644
Study Area	5.6	surface sediment	LW3-GCA05W-C00
Study Area	5.6	surface sediment	LW3-GCR05W
Study Area	5.6	surface sediment	LWG0105R003SDS015C00
Study Area	5.6	surface sediment	LWG0105R040SDS015C00
Study Area	5.6	subsurface sediment	LWM-METCS7
Study Area	5.6	subsurface sediment	LWM-TCLPC7
Study Area	5.6	surface sediment	WLCASF97S019W4148
Study Area	5.6	surface sediment	WLCDRD05PG04848
Study Area	5.6	surface sediment	WLCDRD05PG138138Dup
Study Area	5.6	subsurface sediment	WLCDRD05VC04646
Study Area	5.6	surface sediment	WLCMCB02SED01SED01
Study Area	5.6	surface sediment	WLCMCB02SED02SED02
Study Area	5.6	surface sediment	WLCMFH00SD02SD02
Study Area	5.6	surface sediment	WLCOFJ0252A0252A020
Study Area	5.6	surface sediment	WLCOFJ0252A0352A030
Study Area	5.6	surface sediment	WLCOFJ0252A0452A040
Study Area	5.6	surface sediment	WR-WSI98SD0530
Study Area	5.6	subsurface sediment	WR-WSI98SD0530000A
Study Area	5.6	surface sediment	WR-WSI98SD0550
Study Area	5.6	subsurface sediment	WR-WSI98SD055C0000A
Study Area	5.7	subsurface sediment	LW2-C215-B
Study Area	5.7	subsurface sediment	LW2-C215-C
Study Area	5.7	subsurface sediment	LW2-C231-B
Study Area	5.7	subsurface sediment	LW2-C231-C
Study Area	5.7	surface sediment	LW2-G214-1
Study Area	5.7	surface sediment	LW2-G215
Study Area	5.7	surface sediment	LW2-G218

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	5.7	surface sediment	LW2-G225
Study Area	5.7	surface sediment	LW2-G229
Study Area	5.7	surface sediment	LW2-G230
Study Area	5.7	surface sediment	LW2-G231
Study Area	5.7	surface sediment	LW2-G234
Study Area	5.7	surface sediment	LW2-GBT013
Study Area	5.7	surface sediment	LW3-G646
Study Area	5.7	surface sediment	LW3-G647
Study Area	5.7	surface sediment	LWG0105R020SDS015C00
Study Area	5.7	surface sediment	WLCDRD05PG02727
Study Area	5.7	surface sediment	WLCDRD05PG137137Dup
Study Area	5.7	surface sediment	WLCMFH00SD03SD03
Study Area	5.7	surface sediment	WLCOFJ02520152010
Study Area	5.7	surface sediment	WLCOFJ02520252020
Study Area	5.7	surface sediment	WLCOFJ02520352030
Study Area	5.7	surface sediment	WR-WSI98SD0560
Study Area	5.8	subsurface sediment	LW2-C240-B
Study Area	5.8	subsurface sediment	LW2-C240-D
Study Area	5.8	subsurface sediment	LW2-C240-E
Study Area	5.8	subsurface sediment	LW2-C245-B
Study Area	5.8	subsurface sediment	LW2-C245-C
Study Area	5.8	subsurface sediment	LW2-C245-D
Study Area	5.8	subsurface sediment	LW2-C245-E
Study Area	5.8	subsurface sediment	LW2-C245-F
Study Area	5.8	surface sediment	LW2-G224
Study Area	5.8	surface sediment	LW2-G226
Study Area	5.8	surface sediment	LW2-G235
Study Area	5.8	surface sediment	LW2-G237
Study Area	5.8	surface sediment	LW2-G240
Study Area	5.8	surface sediment	LW2-G241
Study Area	5.8	surface sediment	LW2-G242
Study Area	5.8	surface sediment	LW2-G245
Study Area	5.8	subsurface sediment	LW3-C648-B
Study Area	5.8	subsurface sediment	LW3-C648-C
Study Area	5.8	subsurface sediment	LW3-C648-D
Study Area	5.8	subsurface sediment	LW3-C651-B
Study Area	5.8	subsurface sediment	LW3-C651-C
Study Area	5.8	surface sediment	LW3-G648
Study Area	5.8	surface sediment	LWG0105B018SDS015C00
Study Area	5.8	subsurface sediment	WLCMFH00SD04SD04D
Study Area	5.8	surface sediment	WLCMFH00SD04SD04S
Study Area	5.8	subsurface sediment	WLCMFH00SD05SD05D
Study Area	5.8	surface sediment	WLCMFH00SD05SD05S
Study Area	5.8	surface sediment	WLCMRD08BH16-1
Study Area	5.8	surface sediment	WLR0797WRBC21WRBC21
Study Area	5.8	surface sediment	WR-WSI98SD0570
Study Area	5.8	subsurface sediment	WR-WSI98SD0570000A
Study Area	5.9	subsurface sediment	LW2-C232-B
Study Area	5.9	subsurface sediment	LW2-C232-C
Study Area	5.9	surface sediment	LW2-C531-A
Study Area	5.9	subsurface sediment	LW2-C531-B
Study Area	5.9	subsurface sediment	LW2-C531-C
Study Area	5.9	subsurface sediment	LW2-C531-D
Study Area	5.9	subsurface sediment	LW2-C531-E
Study Area	5.9	surface sediment	LW2-G232
Study Area	5.9	surface sediment	LW2-G233
Study Area	5.9	surface sediment	LW2-G236
Study Area	5.9	surface sediment	LW2-G246

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	5.9	surface sediment	LW2-GBT014
Study Area	5.9	subsurface sediment	LW3-C652-B
Study Area	5.9	subsurface sediment	LW3-C652-C
Study Area	5.9	subsurface sediment	LW3-C652-D
Study Area	5.9	surface sediment	LW3-G649
Study Area	5.9	surface sediment	LW3-G650
Study Area	5.9	surface sediment	LW3-G651
Study Area	5.9	surface sediment	LW3-G652
Study Area	5.9	surface sediment	LW3-G653
Study Area	5.9	surface sediment	LW3-G654
Study Area	5.9	subsurface sediment	WLCMFH00SD06SD06D
Study Area	5.9	surface sediment	WLCMFH00SD06SD06S
Study Area	5.9	surface sediment	WLCMRD08BH11-1
Study Area	5.9	surface sediment	WLCMRD08BH12-1
Study Area	5.9	surface sediment	WLCMRD08BH13-1
Study Area	5.9	surface sediment	WLCMRD08BH14-1
Study Area	5.9	surface sediment	WLCMRD08BH15-1
Study Area	5.9	subsurface sediment	WLCMRI02CS003CS003
Study Area	5.9	surface sediment	WLCMRI02CS005CS005
Study Area	5.9	surface sediment	WLCOFJ02500150010
Study Area	5.9	surface sediment	WLCOFJ02500250020
Study Area	5.9	surface sediment	WLCOFJ02500350030
Study Area	5.9	surface sediment	WLCOFJ02500450040
Study Area	5.9	surface sediment	WLCOFJ02500550050
Study Area	5.9	surface sediment	WLCOFJ02500650060
Study Area	5.9	surface sediment	WR-WSI98SD0580
Study Area	5.9	surface sediment	WR-WSI98SD0590
Study Area	6	surface sediment	LW2-C528-A
Study Area	6	subsurface sediment	LW2-C528-B
Study Area	6	subsurface sediment	LW2-C528-C
Study Area	6	subsurface sediment	LW2-C528-D
Study Area	6	subsurface sediment	LW2-C528-F
Study Area	6	surface sediment	LW2-C529-A
Study Area	6	subsurface sediment	LW2-C529-B
Study Area	6	subsurface sediment	LW2-C529-C
Study Area	6	subsurface sediment	LW2-C529-E
Study Area	6	surface sediment	LW2-C530-A
Study Area	6	subsurface sediment	LW2-C530-B
Study Area	6	subsurface sediment	LW2-C530-C
Study Area	6	subsurface sediment	LW2-C530-E
Study Area	6	surface sediment	LW2-G238
Study Area	6	surface sediment	LW2-G239
Study Area	6	surface sediment	LW2-G248
Study Area	6	surface sediment	LW2-G251-1
Study Area	6	surface sediment	LW2-G251-2
Study Area	6	surface sediment	LW3-G655
Study Area	6	surface sediment	LW3-G656
Study Area	6	surface sediment	LWG0106R001SDS015C00
Study Area	6	surface sediment	WLCMRD08BH10-1
Study Area	6	surface sediment	WLCMRD08BH4-1
Study Area	6	surface sediment	WLCMRD08BH5-1
Study Area	6	surface sediment	WLCMRD08BH6-1
Study Area	6	surface sediment	WLCMRD08BH7-1
Study Area	6	surface sediment	WLCMRD08BH8-1
Study Area	6	surface sediment	WLCMRD08BH9-1
Study Area	6	surface sediment	WLCMRD08DA18-1
Study Area	6	subsurface sediment	WLCMRD08DA18-2
Study Area	6	subsurface sediment	WLCMRD08DA18-3

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	6	subsurface sediment	WLCMRD08DA18-4
Study Area	6	surface sediment	WLCMRD08DA19-1
Study Area	6	subsurface sediment	WLCMRD08DA19-2
Study Area	6	subsurface sediment	WLCMRD08DA19-3
Study Area	6	subsurface sediment	WLCMRD08DA19-4
Study Area	6	subsurface sediment	WLCMRD08DB20-3
Study Area	6	subsurface sediment	WLCMRD08DB20-4
Study Area	6	subsurface sediment	WLCMRD08DB21-3
Study Area	6	subsurface sediment	WLCMRD08DB21-4
Study Area	6	subsurface sediment	WLCMRD08DB22-3
Study Area	6	subsurface sediment	WLCMRD08DB22-4
Study Area	6	surface sediment	WLCMRD08OF28-1
Study Area	6	subsurface sediment	WLCMRD08OF28-2
Study Area	6	subsurface sediment	WLCMRI02CS002CS002
Study Area	6	surface sediment	WLCMRI02CS004CS004
Study Area	6.1	subsurface sediment	LW2-C244-B
Study Area	6.1	subsurface sediment	LW2-C244-C
Study Area	6.1	subsurface sediment	LW2-C247-B
Study Area	6.1	subsurface sediment	LW2-C247-C
Study Area	6.1	subsurface sediment	LW2-C247-D
Study Area	6.1	subsurface sediment	LW2-C247-E
Study Area	6.1	subsurface sediment	LW2-C252-B
Study Area	6.1	subsurface sediment	LW2-C252-C
Study Area	6.1	subsurface sediment	LW2-C252-D
Study Area	6.1	subsurface sediment	LW2-C263-B
Study Area	6.1	subsurface sediment	LW2-C263-C
Study Area	6.1	subsurface sediment	LW2-C263-D
Study Area	6.1	subsurface sediment	LW2-C264-B
Study Area	6.1	subsurface sediment	LW2-C264-C
Study Area	6.1	subsurface sediment	LW2-C264-D
Study Area	6.1	surface sediment	LW2-C269-A
Study Area	6.1	subsurface sediment	LW2-C269-B
Study Area	6.1	subsurface sediment	LW2-C269-C
Study Area	6.1	subsurface sediment	LW2-C269-D
Study Area	6.1	subsurface sediment	LW2-C269-F
Study Area	6.1	surface sediment	LW2-C525-A
Study Area	6.1	subsurface sediment	LW2-C525-B
Study Area	6.1	subsurface sediment	LW2-C525-C
Study Area	6.1	subsurface sediment	LW2-C525-D
Study Area	6.1	subsurface sediment	LW2-C525-E
Study Area	6.1	surface sediment	LW2-C527-A
Study Area	6.1	subsurface sediment	LW2-C527-B
Study Area	6.1	subsurface sediment	LW2-C527-C
Study Area	6.1	subsurface sediment	LW2-C527-D
Study Area	6.1	subsurface sediment	LW2-C527-E
Study Area	6.1	surface sediment	LW2-G243
Study Area	6.1	surface sediment	LW2-G244
Study Area	6.1	surface sediment	LW2-G247
Study Area	6.1	surface sediment	LW2-G252
Study Area	6.1	surface sediment	LW2-G253
Study Area	6.1	surface sediment	LW2-G256
Study Area	6.1	surface sediment	LW2-G259
Study Area	6.1	surface sediment	LW2-G263
Study Area	6.1	surface sediment	LW2-G264
Study Area	6.1	surface sediment	LW2-G269
Study Area	6.1	subsurface sediment	LW3-C658-B
Study Area	6.1	subsurface sediment	LW3-C658-C
Study Area	6.1	subsurface sediment	LW3-C658-D

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	6.1	surface sediment	LW3-G657
Study Area	6.1	surface sediment	LW3-G658
Study Area	6.1	surface sediment	LWG0106B030SDS015C00
Study Area	6.1	subsurface sediment	WLCGSG07GSB2S02
Study Area	6.1	subsurface sediment	WLCGSG07GSB2S1315
Study Area	6.1	subsurface sediment	WLCGSG07GSB2S57
Study Area	6.1	subsurface sediment	WLCGSG07GSC2S02
Study Area	6.1	subsurface sediment	WLCGSG07GSC2S57
Study Area	6.1	surface sediment	WLCMRD08DA17-1
Study Area	6.1	subsurface sediment	WLCMRD08DA17-2
Study Area	6.1	subsurface sediment	WLCMRD08DA17-3
Study Area	6.1	subsurface sediment	WLCMRD08DA17-4
Study Area	6.1	subsurface sediment	WLCMRD08DC23-3
Study Area	6.1	subsurface sediment	WLCMRD08DC23-4
Study Area	6.1	subsurface sediment	WLCMRD08DC24-3
Study Area	6.1	subsurface sediment	WLCMRD08DC24-4
Study Area	6.1	surface sediment	WLCMRD08DC25-1
Study Area	6.1	subsurface sediment	WLCMRD08DC25-3
Study Area	6.1	subsurface sediment	WLCMRD08DC25-4
Study Area	6.1	surface sediment	WLCMRD08UD1-1
Study Area	6.1	subsurface sediment	WLCMRD08UD1-2
Study Area	6.1	subsurface sediment	WLCMRD08UD1-3
Study Area	6.1	subsurface sediment	WLCMRD08UD1-4
Study Area	6.1	surface sediment	WLCMRD08UD2-1
Study Area	6.1	subsurface sediment	WLCMRD08UD2-2
Study Area	6.1	subsurface sediment	WLCMRD08UD2-3
Study Area	6.1	subsurface sediment	WLCMRD08UD2-4
Study Area	6.1	surface sediment	WLCMRD08UD26-1
Study Area	6.1	subsurface sediment	WLCMRD08UD26-2
Study Area	6.1	subsurface sediment	WLCMRD08UD26-3
Study Area	6.1	subsurface sediment	WLCMRD08UD26-4
Study Area	6.1	surface sediment	WLCMRD08UD27-1
Study Area	6.1	subsurface sediment	WLCMRD08UD27-2
Study Area	6.1	subsurface sediment	WLCMRD08UD27-3
Study Area	6.1	subsurface sediment	WLCMRD08UD27-4
Study Area	6.1	subsurface sediment	WLCMRI02CS001CS001
Study Area	6.1	surface sediment	WLCT0I98GRAB04GRAB04
Study Area	6.1	surface sediment	WLCT0I98GRAB05GRAB05
Study Area	6.1	surface sediment	WR-WSI98SD0610
Study Area	6.1	surface sediment	WR-WSI98SD0620
Study Area	6.2	subsurface sediment	LW2-C258-B
Study Area	6.2	subsurface sediment	LW2-C258-C
Study Area	6.2	subsurface sediment	LW2-C258-D
Study Area	6.2	subsurface sediment	LW2-C270-B
Study Area	6.2	subsurface sediment	LW2-C270-C
Study Area	6.2	subsurface sediment	LW2-C270-D
Study Area	6.2	subsurface sediment	LW2-C273-B
Study Area	6.2	subsurface sediment	LW2-C273-C
Study Area	6.2	subsurface sediment	LW2-C273-D
Study Area	6.2	subsurface sediment	LW2-C283-B
Study Area	6.2	subsurface sediment	LW2-C283-C
Study Area	6.2	subsurface sediment	LW2-C283-D
Study Area	6.2	subsurface sediment	LW2-C283-E
Study Area	6.2	surface sediment	LW2-G249
Study Area	6.2	surface sediment	LW2-G250
Study Area	6.2	surface sediment	LW2-G258
Study Area	6.2	surface sediment	LW2-G261
Study Area	6.2	surface sediment	LW2-G265

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	6.2	surface sediment	LW2-G270-1
Study Area	6.2	surface sediment	LW2-G270-2
Study Area	6.2	surface sediment	LW2-G273
Study Area	6.2	surface sediment	LW2-G274
Study Area	6.2	surface sediment	LW2-G283
Study Area	6.2	surface sediment	LW3-G659-1
Study Area	6.2	surface sediment	LW3-G659-2
Study Area	6.2	surface sediment	LW3-G660
Study Area	6.2	surface sediment	LWG0106B025SDS015C00
Study Area	6.2	surface sediment	LWG2-PG-GS4A
Study Area	6.2	surface sediment	LWG2-PG-GS4A-2
Study Area	6.2	subsurface sediment	LWM-METCS11
Study Area	6.2	subsurface sediment	LWM-METCS11-2
Study Area	6.2	subsurface sediment	LWM-TCLPC11A
Study Area	6.2	subsurface sediment	LWM-TCLPC11B
Study Area	6.2	subsurface sediment	LWM-TCLPC11C
Study Area	6.2	subsurface sediment	WLCGSG04RAA17SD0010
Study Area	6.2	subsurface sediment	WLCGSG04RAA17SD1420
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S1011
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S109110
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S130131
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S147148
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S1921
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S2427
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S3031
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S3840
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S4548
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S46
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S5051
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S6061
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S6970
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S7071
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S7881
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S911
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S9193
Study Area	6.2	subsurface sediment	WLCGSJ06GS04S9598
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S110111
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S120123
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S130131
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S145148
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S150151
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S170171
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S170173
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S190191
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S2022
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S3336
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S34
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S3942
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S411
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S4548
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S5964
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S6973
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S7982
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S8992
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S911
Study Area	6.2	subsurface sediment	WLCGSJ06GS05S9598
Study Area	6.2	subsurface sediment	WLCGSJ06GS06S2023
Study Area	6.2	subsurface sediment	WLCGSJ06GS06S2833

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	6.2	subsurface sediment	WLCGSJ06GS06S4144
Study Area	6.2	subsurface sediment	WLCGSJ06GS06S46
Study Area	6.2	subsurface sediment	WLCGSJ06GS06S4852
Study Area	6.2	subsurface sediment	WLCGSJ06GS06S6164
Study Area	6.2	subsurface sediment	WLCGSJ06GS06S6569
Study Area	6.2	subsurface sediment	WLCGSJ06GS06S6973
Study Area	6.2	subsurface sediment	WLCGSJ06GS06S720
Study Area	6.2	subsurface sediment	WLCGSJ06GS06S8083
Study Area	6.2	subsurface sediment	WLCGSJ06GS06S9092
Study Area	6.2	subsurface sediment	WLCGSJ06GS06S911
Study Area	6.2	subsurface sediment	WLCGSJ06GS06S9598
Study Area	6.2	surface sediment	WLR0797WRBC22WRBC22
Study Area	6.2	surface sediment	WR-WSI98SD0600
Study Area	6.2	surface sediment	WR-WSI98SD0630
Study Area	6.3	subsurface sediment	LW2-C254-B
Study Area	6.3	subsurface sediment	LW2-C254-C
Study Area	6.3	surface sediment	LW2-C255-A
Study Area	6.3	subsurface sediment	LW2-C255-B
Study Area	6.3	subsurface sediment	LW2-C255-C
Study Area	6.3	subsurface sediment	LW2-C272-B
Study Area	6.3	subsurface sediment	LW2-C272-C
Study Area	6.3	subsurface sediment	LW2-C289-B
Study Area	6.3	subsurface sediment	LW2-C289-C
Study Area	6.3	subsurface sediment	LW2-C289-E
Study Area	6.3	surface sediment	LW2-G254
Study Area	6.3	surface sediment	LW2-G255
Study Area	6.3	surface sediment	LW2-G271
Study Area	6.3	surface sediment	LW2-G272
Study Area	6.3	surface sediment	LW2-G289
Study Area	6.3	surface sediment	LW2-G294-1
Study Area	6.3	surface sediment	LW2-G294-2
Study Area	6.3	surface sediment	LWG0106R040SDS015C00
Study Area	6.3	surface sediment	LWG2-PG-GS7B
Study Area	6.3	surface sediment	LWG2-PG-GS7D
Study Area	6.3	surface sediment	WLCGSD01AN0101_00-10
Study Area	6.3	subsurface sediment	WLCGSD01AN0101_10-20
Study Area	6.3	subsurface sediment	WLCGSD01AN0101_30-40
Study Area	6.3	surface sediment	WLCGSD01AN0102_00-10
Study Area	6.3	subsurface sediment	WLCGSD01AN0102_10-20
Study Area	6.3	subsurface sediment	WLCGSD01AN0102_30-40
Study Area	6.3	surface sediment	WLCGSD01AN0105_00-10
Study Area	6.3	subsurface sediment	WLCGSD01AN0105_10-20
Study Area	6.3	subsurface sediment	WLCGSD01AN0105_30-40
Study Area	6.3	surface sediment	WLCGSD01AN0205_00-10
Study Area	6.3	subsurface sediment	WLCGSD01AN0205_10-20
Study Area	6.3	subsurface sediment	WLCGSD01AN0205_30-40
Study Area	6.3	subsurface sediment	WLCGSG07GSB5S02
Study Area	6.3	subsurface sediment	WLCGSG07GSB5S1315
Study Area	6.3	subsurface sediment	WLCGSG07GSB5S57
Study Area	6.3	subsurface sediment	WLCGSG07GSC5S02
Study Area	6.3	subsurface sediment	WLCGSG07GSC5S1315
Study Area	6.3	subsurface sediment	WLCGSG07GSC5S57
Study Area	6.3	subsurface sediment	WLCGSG07GSD2S02
Study Area	6.3	subsurface sediment	WLCGSG07GSD2S57
Study Area	6.3	subsurface sediment	WLCGSJ06GS07S123127
Study Area	6.3	subsurface sediment	WLCGSJ06GS07S145148
Study Area	6.3	subsurface sediment	WLCGSJ06GS07S1518
Study Area	6.3	subsurface sediment	WLCGSJ06GS07S170173

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	6.3	subsurface sediment	WLCGSJ06GS07S2327
Study Area	6.3	subsurface sediment	WLCGSJ06GS07S2830
Study Area	6.3	subsurface sediment	WLCGSJ06GS07S4143
Study Area	6.3	subsurface sediment	WLCGSJ06GS07S46
Study Area	6.3	subsurface sediment	WLCGSJ06GS07S4852
Study Area	6.3	subsurface sediment	WLCGSJ06GS07S5355
Study Area	6.3	subsurface sediment	WLCGSJ06GS07S6263
Study Area	6.3	subsurface sediment	WLCGSJ06GS07S7072
Study Area	6.3	subsurface sediment	WLCGSJ06GS07S8082
Study Area	6.3	subsurface sediment	WLCGSJ06GS07S9092
Study Area	6.3	subsurface sediment	WLCGSJ06GS07S911
Study Area	6.3	subsurface sediment	WLCGSJ06GS07S98102
Study Area	6.3	subsurface sediment	WLCGSJ06GS08S2023
Study Area	6.3	subsurface sediment	WLCGSJ06GS08S2930
Study Area	6.3	subsurface sediment	WLCGSJ06GS08S34
Study Area	6.3	subsurface sediment	WLCGSJ06GS08S4043
Study Area	6.3	subsurface sediment	WLCGSJ06GS08S5053
Study Area	6.3	subsurface sediment	WLCGSJ06GS08S6365
Study Area	6.3	subsurface sediment	WLCGSJ06GS08S68
Study Area	6.3	subsurface sediment	WLCGSJ06GS08S6970
Study Area	6.3	subsurface sediment	WLCGSJ06GS08S8284
Study Area	6.3	subsurface sediment	WLCGSJ06GS08S89
Study Area	6.3	subsurface sediment	WLCGSJ06GS08S9092
Study Area	6.3	subsurface sediment	WLCGSJ06GS58S4345
Study Area	6.3	subsurface sediment	WLCGSJ06GS8S4345
Study Area	6.3	subsurface sediment	WLCGSJ06GS8S9598
Study Area	6.3	surface sediment	WLCT0I98GRAB06GRAB06
Study Area	6.3	surface sediment	WR-WSI98SD0670
Study Area	6.4	subsurface sediment	LW2-C257-B
Study Area	6.4	subsurface sediment	LW2-C260-B
Study Area	6.4	subsurface sediment	LW2-C260-C
Study Area	6.4	subsurface sediment	LW2-C260-D
Study Area	6.4	surface sediment	LW2-C299-A
Study Area	6.4	subsurface sediment	LW2-C299-B
Study Area	6.4	subsurface sediment	LW2-C299-C
Study Area	6.4	surface sediment	LW2-C301-A
Study Area	6.4	subsurface sediment	LW2-C301-B
Study Area	6.4	subsurface sediment	LW2-C301-C
Study Area	6.4	subsurface sediment	LW2-C301-D
Study Area	6.4	subsurface sediment	LW2-C301-E
Study Area	6.4	subsurface sediment	LW2-C301-G
Study Area	6.4	subsurface sediment	LW2-C302-B
Study Area	6.4	subsurface sediment	LW2-C302-C
Study Area	6.4	subsurface sediment	LW2-C302-D
Study Area	6.4	subsurface sediment	LW2-C305-B1
Study Area	6.4	subsurface sediment	LW2-C305-B2
Study Area	6.4	subsurface sediment	LW2-C305-C1
Study Area	6.4	subsurface sediment	LW2-C305-C2
Study Area	6.4	subsurface sediment	LW2-C305-D1
Study Area	6.4	subsurface sediment	LW2-C305-D2
Study Area	6.4	subsurface sediment	LW2-C521-B
Study Area	6.4	subsurface sediment	LW2-C521-C
Study Area	6.4	subsurface sediment	LW2-C521-D
Study Area	6.4	subsurface sediment	LW2-C521-E
Study Area	6.4	surface sediment	LW2-G257
Study Area	6.4	surface sediment	LW2-G260
Study Area	6.4	surface sediment	LW2-G262
Study Area	6.4	surface sediment	LW2-G281

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	6.4	surface sediment	LW2-G285
Study Area	6.4	surface sediment	LW2-G287
Study Area	6.4	surface sediment	LW2-G297
Study Area	6.4	surface sediment	LW2-G299
Study Area	6.4	surface sediment	LW2-G301
Study Area	6.4	surface sediment	LW2-G302
Study Area	6.4	surface sediment	LW2-G305
Study Area	6.4	surface sediment	LW2-G308
Study Area	6.4	surface sediment	LW2-G521
Study Area	6.4	surface sediment	LW2-GBT015
Study Area	6.4	subsurface sediment	LW3-C662-B
Study Area	6.4	subsurface sediment	LW3-C662-C
Study Area	6.4	subsurface sediment	LW3-C662-D
Study Area	6.4	subsurface sediment	LW3-C662-E
Study Area	6.4	surface sediment	LW3-GCRSP06W
Study Area	6.4	surface sediment	LWG2-PG-SL2A
Study Area	6.4	surface sediment	LWG2-PG-SL2E
Study Area	6.4	surface sediment	LWG2-PG-SL3F
Study Area	6.4	surface sediment	WLCDRD05PG05252
Study Area	6.4	surface sediment	WLCDRD05PG05454
Study Area	6.4	subsurface sediment	WLCDRD05VC05252
Study Area	6.4	subsurface sediment	WLCDRD05VC05454
Study Area	6.4	surface sediment	WLCGSD01AN0103_00-10
Study Area	6.4	subsurface sediment	WLCGSD01AN0103_10-20
Study Area	6.4	subsurface sediment	WLCGSD01AN0103_30-40
Study Area	6.4	subsurface sediment	WLCGSG07GSB7S02
Study Area	6.4	subsurface sediment	WLCGSG07GSB7S1315
Study Area	6.4	subsurface sediment	WLCGSG07GSB7S57
Study Area	6.4	subsurface sediment	WLCGSG07GSB7SC071011
Study Area	6.4	subsurface sediment	WLCGSG07GSC7S02
Study Area	6.4	subsurface sediment	WLCGSG07GSC7S1315
Study Area	6.4	subsurface sediment	WLCGSG07GSC7S57
Study Area	6.4	subsurface sediment	WLCGSG07GSC7SC071011
Study Area	6.4	subsurface sediment	WLCGSG07GSD4S02
Study Area	6.4	subsurface sediment	WLCGSG07GSD4S57
Study Area	6.4	subsurface sediment	WLCGSG07GSD5SC071011
Study Area	6.4	subsurface sediment	WLCGSJ06GS09S123127
Study Area	6.4	subsurface sediment	WLCGSJ06GS09S148152
Study Area	6.4	subsurface sediment	WLCGSJ06GS09S173177
Study Area	6.4	subsurface sediment	WLCGSJ06GS09S2327
Study Area	6.4	subsurface sediment	WLCGSJ06GS09S46
Study Area	6.4	subsurface sediment	WLCGSJ06GS09S4852
Study Area	6.4	subsurface sediment	WLCGSJ06GS09S6566
Study Area	6.4	subsurface sediment	WLCGSJ06GS09S911
Study Area	6.4	subsurface sediment	WLCGSJ06GS09S9798
Study Area	6.4	subsurface sediment	WLCGSJ06GS09S98102
Study Area	6.4	surface sediment	WLCOFJ02490149010
Study Area	6.4	surface sediment	WLCOFJ02490249020
Study Area	6.4	surface sediment	WLCOFJ02490349030
Study Area	6.4	surface sediment	WLCOFJ02490449040
Study Area	6.4	surface sediment	WLCOFJ02490549050
Study Area	6.4	surface sediment	WLCOFJ02490649060
Study Area	6.4	subsurface sediment	WLCSLH01GP25S1
Study Area	6.4	subsurface sediment	WLCSLH01GP25S11
Study Area	6.4	subsurface sediment	WLCSLH01GP25S146
Study Area	6.4	subsurface sediment	WLCSLH01GP25S16
Study Area	6.4	subsurface sediment	WLCSLH01GP25S21
Study Area	6.4	subsurface sediment	WLCSLH01GP25S26

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	6.4	subsurface sediment	WLCSLH01GP25S31
Study Area	6.4	subsurface sediment	WLCSLH01GP25S36
Study Area	6.4	subsurface sediment	WLCSLH01GP25S41
Study Area	6.4	subsurface sediment	WLCSLH01GP25S6
Study Area	6.4	subsurface sediment	WLCSLH01GP25S91
Study Area	6.4	subsurface sediment	WLCSLH01GP26S1
Study Area	6.4	subsurface sediment	WLCSLH01GP26S118
Study Area	6.4	subsurface sediment	WLCSLH01GP26S13
Study Area	6.4	subsurface sediment	WLCSLH01GP26S18
Study Area	6.4	subsurface sediment	WLCSLH01GP26S23
Study Area	6.4	subsurface sediment	WLCSLH01GP26S28
Study Area	6.4	subsurface sediment	WLCSLH01GP26S58
Study Area	6.4	subsurface sediment	WLCSLH01GP26S63
Study Area	6.4	subsurface sediment	WLCSLH01GP26S8
Study Area	6.4	subsurface sediment	WLCSLH01GP26S83
Study Area	6.4	subsurface sediment	WLCSLH01GP27S1
Study Area	6.4	subsurface sediment	WLCSLH01GP27S10
Study Area	6.4	subsurface sediment	WLCSLH01GP27S100
Study Area	6.4	subsurface sediment	WLCSLH01GP27S15
Study Area	6.4	subsurface sediment	WLCSLH01GP27S20
Study Area	6.4	subsurface sediment	WLCSLH01GP27S25
Study Area	6.4	subsurface sediment	WLCSLH01GP27S30
Study Area	6.4	subsurface sediment	WLCSLH01GP27S35
Study Area	6.4	subsurface sediment	WLCSLH01GP27S40
Study Area	6.4	subsurface sediment	WLCSLH01GP27S45
Study Area	6.4	subsurface sediment	WLCSLH01GP27S50
Study Area	6.4	subsurface sediment	WLCSLH01GP27S55
Study Area	6.4	subsurface sediment	WLCSLH01GP27S60
Study Area	6.4	subsurface sediment	WLCSLH01GP28S1
Study Area	6.4	subsurface sediment	WLCSLH01GP28S10
Study Area	6.4	subsurface sediment	WLCSLH01GP28S15
Study Area	6.4	subsurface sediment	WLCSLH01GP28S20
Study Area	6.4	subsurface sediment	WLCSLH01GP28S25
Study Area	6.4	subsurface sediment	WLCSLH01GP28S30
Study Area	6.4	subsurface sediment	WLCSLH01GP28S35
Study Area	6.4	subsurface sediment	WLCSLH01GP28S5
Study Area	6.4	subsurface sediment	WLCSLH01GP29S1
Study Area	6.4	subsurface sediment	WLCSLH01GP29S12
Study Area	6.4	subsurface sediment	WLCSLH01GP29S17
Study Area	6.4	subsurface sediment	WLCSLH01GP29S27
Study Area	6.4	subsurface sediment	WLCSLH01GP29S32
Study Area	6.4	subsurface sediment	WLCSLH01GP29S37
Study Area	6.4	subsurface sediment	WLCSLH01GP29S42
Study Area	6.4	subsurface sediment	WLCSLH01GP29S47
Study Area	6.4	subsurface sediment	WLCSLH01GP29S52
Study Area	6.4	subsurface sediment	WLCSLH01GP29S57
Study Area	6.4	subsurface sediment	WLCSLH01GP29S62
Study Area	6.4	subsurface sediment	WLCSLH01GP29S67
Study Area	6.4	subsurface sediment	WLCSLH01GP29S72
Study Area	6.4	subsurface sediment	WLCSLH01GP29S77
Study Area	6.4	subsurface sediment	WLCSLH01GP30S1
Study Area	6.4	subsurface sediment	WLCSLH01GP30S13
Study Area	6.4	subsurface sediment	WLCSLH01GP30S18
Study Area	6.4	subsurface sediment	WLCSLH01GP30S23
Study Area	6.4	subsurface sediment	WLCSLH01GP30S8
Study Area	6.4	subsurface sediment	WLCSLH01GP31S1
Study Area	6.4	subsurface sediment	WLCSLH01GP31S12
Study Area	6.4	subsurface sediment	WLCSLH01GP31S17

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	6.4	subsurface sediment	WLCSLH01GP31S22
Study Area	6.4	subsurface sediment	WLCSLH01GP31S27
Study Area	6.4	subsurface sediment	WLCSLH01GP31S32
Study Area	6.4	subsurface sediment	WLCSLH01GP31S37
Study Area	6.4	subsurface sediment	WLCSLH01GP31S7
Study Area	6.4	subsurface sediment	WLCSLH01GP32S1
Study Area	6.4	subsurface sediment	WLCSLH01GP32S16
Study Area	6.4	subsurface sediment	WLCSLH01GP32S21
Study Area	6.4	subsurface sediment	WLCSLH01GP32S6
Study Area	6.4	surface sediment	WR-WSI98SD0660
Study Area	6.4	surface sediment	WR-WSI98SD0680
Study Area	6.4	surface sediment	WR-WSI98SD0690
Study Area	6.5	subsurface sediment	LW2-C266-B
Study Area	6.5	subsurface sediment	LW2-C266-C
Study Area	6.5	subsurface sediment	LW2-C267-B
Study Area	6.5	subsurface sediment	LW2-C267-C
Study Area	6.5	subsurface sediment	LW2-C268-B
Study Area	6.5	subsurface sediment	LW2-C268-C
Study Area	6.5	surface sediment	LW2-C300-A
Study Area	6.5	subsurface sediment	LW2-C300-B
Study Area	6.5	subsurface sediment	LW2-C300-C
Study Area	6.5	subsurface sediment	LW2-C300-D
Study Area	6.5	subsurface sediment	LW2-C311-B
Study Area	6.5	subsurface sediment	LW2-C311-C
Study Area	6.5	subsurface sediment	LW2-C311-E
Study Area	6.5	surface sediment	LW2-C312-A
Study Area	6.5	subsurface sediment	LW2-C312-B
Study Area	6.5	subsurface sediment	LW2-C312-C
Study Area	6.5	surface sediment	LW2-G266
Study Area	6.5	surface sediment	LW2-G267
Study Area	6.5	surface sediment	LW2-G268
Study Area	6.5	surface sediment	LW2-G300
Study Area	6.5	surface sediment	LW2-G309
Study Area	6.5	surface sediment	LW2-G311-1
Study Area	6.5	surface sediment	LW2-G311-2
Study Area	6.5	surface sediment	LW3-G663
Study Area	6.5	surface sediment	LWG2-PG-SL4A
Study Area	6.5	surface sediment	LWG2-PG-SL4F
Study Area	6.5	surface sediment	LWG2-PG-SL5A
Study Area	6.5	surface sediment	WLCASF97S016W4150
Study Area	6.5	surface sediment	WLCDRD05PG05656
Study Area	6.5	subsurface sediment	WLCDRD05VC05656
Study Area	6.5	surface sediment	WLR0797WRBC23WRBC23
Study Area	6.5	surface sediment	WR-WSI98SD0700000CC
Study Area	6.6	surface sediment	LW2-B015
Study Area	6.6	surface sediment	LW2-C290-A
Study Area	6.6	subsurface sediment	LW2-C290-B
Study Area	6.6	subsurface sediment	LW2-C290-C
Study Area	6.6	subsurface sediment	LW2-C290-D
Study Area	6.6	subsurface sediment	LW2-C314-B
Study Area	6.6	subsurface sediment	LW2-C314-C
Study Area	6.6	subsurface sediment	LW2-C314-D
Study Area	6.6	subsurface sediment	LW2-C316-B
Study Area	6.6	subsurface sediment	LW2-C316-C
Study Area	6.6	subsurface sediment	LW2-C316-D
Study Area	6.6	surface sediment	LW2-C523-A
Study Area	6.6	subsurface sediment	LW2-C523-B
Study Area	6.6	subsurface sediment	LW2-C523-C

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	6.6	subsurface sediment	LW2-C523-D
Study Area	6.6	surface sediment	LW2-G275-1
Study Area	6.6	surface sediment	LW2-G275-2
Study Area	6.6	surface sediment	LW2-G290
Study Area	6.6	surface sediment	LW2-G306
Study Area	6.6	surface sediment	LW2-G307
Study Area	6.6	surface sediment	LW2-G314
Study Area	6.6	surface sediment	LW2-G315
Study Area	6.6	surface sediment	LW2-G316
Study Area	6.6	surface sediment	LW2-G318
Study Area	6.6	subsurface sediment	LW3-C664-B
Study Area	6.6	subsurface sediment	LW3-C664-C
Study Area	6.6	subsurface sediment	LW3-C665-B
Study Area	6.6	subsurface sediment	LW3-C665-C
Study Area	6.6	subsurface sediment	LW3-C665-D
Study Area	6.6	surface sediment	LW3-G664
Study Area	6.6	surface sediment	LW3-G665
Study Area	6.6	surface sediment	LWG0106B029SDS015C00
Study Area	6.6	surface sediment	WLCDRD05PG05858
Study Area	6.6	subsurface sediment	WLCDRD05VC05858
Study Area	6.6	surface sediment	WR-WSI98SD0710
Study Area	6.6	subsurface sediment	WR-WSI98SD0710000A
Study Area	6.6	surface sediment	WR-WSI98SD0720
Study Area	6.6	subsurface sediment	WR-WSI98SD0720000A
Study Area	6.6	surface sediment	WR-WSI98SD0750
Study Area	6.7	subsurface sediment	LW2-C277-B
Study Area	6.7	subsurface sediment	LW2-C277-C
Study Area	6.7	subsurface sediment	LW2-C277-D
Study Area	6.7	subsurface sediment	LW2-C280-B
Study Area	6.7	subsurface sediment	LW2-C280-C
Study Area	6.7	subsurface sediment	LW2-C280-D
Study Area	6.7	surface sediment	LW2-C291-A
Study Area	6.7	subsurface sediment	LW2-C291-B
Study Area	6.7	subsurface sediment	LW2-C291-C
Study Area	6.7	surface sediment	LW2-C293-A2
Study Area	6.7	subsurface sediment	LW2-C293-B
Study Area	6.7	subsurface sediment	LW2-C293-B2
Study Area	6.7	subsurface sediment	LW2-C293-C
Study Area	6.7	subsurface sediment	LW2-C293-C2
Study Area	6.7	subsurface sediment	LW2-C293-D
Study Area	6.7	subsurface sediment	LW2-C293-D2
Study Area	6.7	subsurface sediment	LW2-C295-B
Study Area	6.7	subsurface sediment	LW2-C295-C
Study Area	6.7	subsurface sediment	LW2-C313-B
Study Area	6.7	subsurface sediment	LW2-C313-C
Study Area	6.7	subsurface sediment	LW2-C321-B1
Study Area	6.7	subsurface sediment	LW2-C321-B2
Study Area	6.7	subsurface sediment	LW2-C321-C1
Study Area	6.7	subsurface sediment	LW2-C321-C2
Study Area	6.7	subsurface sediment	LW2-C321-D2
Study Area	6.7	subsurface sediment	LW2-C321-E1
Study Area	6.7	subsurface sediment	LW2-C321-E2
Study Area	6.7	subsurface sediment	LW2-C323-B
Study Area	6.7	subsurface sediment	LW2-C323-C
Study Area	6.7	subsurface sediment	LW2-C323-D
Study Area	6.7	subsurface sediment	LW2-C323-E
Study Area	6.7	surface sediment	LW2-C533-A
Study Area	6.7	subsurface sediment	LW2-C533-B

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	6.7	subsurface sediment	LW2-C533-C
Study Area	6.7	subsurface sediment	LW2-C533-D
Study Area	6.7	surface sediment	LW2-G277
Study Area	6.7	surface sediment	LW2-G280
Study Area	6.7	surface sediment	LW2-G282
Study Area	6.7	surface sediment	LW2-G291
Study Area	6.7	surface sediment	LW2-G293
Study Area	6.7	surface sediment	LW2-G295
Study Area	6.7	surface sediment	LW2-G310
Study Area	6.7	surface sediment	LW2-G313
Study Area	6.7	surface sediment	LW2-G317
Study Area	6.7	surface sediment	LW2-G320
Study Area	6.7	surface sediment	LW2-G321
Study Area	6.7	surface sediment	LW2-G323
Study Area	6.7	surface sediment	LW2-G324-2
Study Area	6.7	surface sediment	LW2-GBT016
Study Area	6.7	surface sediment	LW3-G667
Study Area	6.7	surface sediment	LW3-G670
Study Area	6.7	surface sediment	LW3-G671
Study Area	6.7	surface sediment	LW3-GWC1
Study Area	6.7	surface sediment	LWG0106R002SDS015C10
Study Area	6.7	surface sediment	LWG0106R002SDS015C20
Study Area	6.7	surface sediment	LWG0106R002SDS015C31
Study Area	6.7	surface sediment	NA-2A-0005
Study Area	6.7	subsurface sediment	NA-2A-0508
Study Area	6.7	subsurface sediment	NA-2A-0812
Study Area	6.7	subsurface sediment	NA-2A-1216
Study Area	6.7	subsurface sediment	NA-2A-1620
Study Area	6.7	subsurface sediment	NA-2A-2024
Study Area	6.7	subsurface sediment	NA-2A-2428
Study Area	6.7	subsurface sediment	NA-2A-2832
Study Area	6.7	subsurface sediment	NA-2A-3238
Study Area	6.7	subsurface sediment	NA-2A-3844
Study Area	6.7	subsurface sediment	NA-2A-4854
Study Area	6.7	subsurface sediment	NA-2A-5864
Study Area	6.7	subsurface sediment	NA-2A-6874
Study Area	6.7	subsurface sediment	NA-2A-7884
Study Area	6.7	subsurface sediment	NA-2A-8894
Study Area	6.7	surface sediment	NA-2B-0031
Study Area	6.7	subsurface sediment	NA-2B-3157
Study Area	6.7	subsurface sediment	NA-2B-5794
Study Area	6.7	surface sediment	WLCDRD05PG06060
Study Area	6.7	subsurface sediment	WLCDRD05VC06060
Study Area	6.7	surface sediment	WLCMBA01ED0104ED0104
Study Area	6.7	surface sediment	WLCMBA01ED0105ED0105
Study Area	6.7	surface sediment	WLCMBA01ED0108ED0108
Study Area	6.7	surface sediment	WLCMBA01ED0109ED0109
Study Area	6.7	subsurface sediment	WLCMBI02SED02SED02
Study Area	6.7	surface sediment	WLCMBJ99D09901D09901
Study Area	6.7	surface sediment	WLCMBJ99D09902D09902
Study Area	6.7	subsurface sediment	WLR0797WRGC24RGC24A
Study Area	6.7	subsurface sediment	WLR0797WRGC24RGC24B
Study Area	6.7	subsurface sediment	WLR0797WRGC25RGC25A
Study Area	6.7	surface sediment	WR-WSI98SD0730
Study Area	6.8	surface sediment	LW2-C282-A
Study Area	6.8	subsurface sediment	LW2-C282-B
Study Area	6.8	subsurface sediment	LW2-C282-C
Study Area	6.8	subsurface sediment	LW2-C282-D

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	6.8	subsurface sediment	LW2-C296-B
Study Area	6.8	subsurface sediment	LW2-C296-C
Study Area	6.8	subsurface sediment	LW2-C296-D
Study Area	6.8	subsurface sediment	LW2-C303-B
Study Area	6.8	subsurface sediment	LW2-C303-C
Study Area	6.8	subsurface sediment	LW2-C303-D
Study Area	6.8	subsurface sediment	LW2-C324-B
Study Area	6.8	subsurface sediment	LW2-C324-D
Study Area	6.8	subsurface sediment	LW2-C324-E
Study Area	6.8	subsurface sediment	LW2-C326-B
Study Area	6.8	subsurface sediment	LW2-C326-C
Study Area	6.8	subsurface sediment	LW2-C326-D
Study Area	6.8	subsurface sediment	LW2-C327-B
Study Area	6.8	subsurface sediment	LW2-C327-C
Study Area	6.8	subsurface sediment	LW2-C327-D
Study Area	6.8	surface sediment	LW2-C329-A
Study Area	6.8	subsurface sediment	LW2-C329-B
Study Area	6.8	subsurface sediment	LW2-C329-C
Study Area	6.8	subsurface sediment	LW2-C329-D
Study Area	6.8	subsurface sediment	LW2-C331-B
Study Area	6.8	subsurface sediment	LW2-C331-C
Study Area	6.8	subsurface sediment	LW2-C331-D
Study Area	6.8	subsurface sediment	LW2-C331-E
Study Area	6.8	subsurface sediment	LW2-C331-G
Study Area	6.8	subsurface sediment	LW2-C333-B
Study Area	6.8	subsurface sediment	LW2-C333-C
Study Area	6.8	subsurface sediment	LW2-C333-E
Study Area	6.8	subsurface sediment	LW2-C333-G
Study Area	6.8	surface sediment	LW2-C524-A
Study Area	6.8	subsurface sediment	LW2-C524-B
Study Area	6.8	surface sediment	LW2-G296
Study Area	6.8	surface sediment	LW2-G303
Study Area	6.8	surface sediment	LW2-G319
Study Area	6.8	surface sediment	LW2-G322
Study Area	6.8	surface sediment	LW2-G324-1
Study Area	6.8	surface sediment	LW2-G325
Study Area	6.8	surface sediment	LW2-G326
Study Area	6.8	surface sediment	LW2-G327
Study Area	6.8	surface sediment	LW2-G329
Study Area	6.8	surface sediment	LW2-G330
Study Area	6.8	surface sediment	LW2-G331
Study Area	6.8	surface sediment	LW2-G333
Study Area	6.8	surface sediment	LW3-G666
Study Area	6.8	surface sediment	LWG0106B022SDS015C00
Study Area	6.8	surface sediment	LWG0106R004SDS015C00
Study Area	6.8	surface sediment	LWG2-PG-R2RP3
Study Area	6.8	surface sediment	LWG2-PG-RP3C
Study Area	6.8	surface sediment	WLCMBA01ED0103ED0103
Study Area	6.8	surface sediment	WLCMBA01ED0103ED0140
Study Area	6.8	surface sediment	WLCMBA01ED0110ED0110
Study Area	6.8	surface sediment	WLCMBA01ED0111ED0111
Study Area	6.8	surface sediment	WLCMBA01ED0112ED0112
Study Area	6.8	surface sediment	WLCMBA01ED0114ED0114
Study Area	6.8	surface sediment	WLCMBJ99D09905D09905
Study Area	6.8	surface sediment	WLCMBJ99D09906D09906
Study Area	6.8	surface sediment	WLCOFJ0222C0122C010
Study Area	6.8	surface sediment	WLCOFJ0222C0222C020
Study Area	6.8	surface sediment	WLCOFJ0222C0322C030

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	6.8	surface sediment	WLCOFJ0222C0422C040
Study Area	6.8	surface sediment	WR-WSI98SD0740
Study Area	6.8	subsurface sediment	WR-WSI98SD0740000A
Study Area	6.8	surface sediment	WR-WSI98SD0770
Study Area	6.9	surface sediment	LW2-B050
Study Area	6.9	subsurface sediment	LW2-C332-B
Study Area	6.9	subsurface sediment	LW2-C332-C
Study Area	6.9	subsurface sediment	LW2-C332-D
Study Area	6.9	subsurface sediment	LW2-C334-B
Study Area	6.9	subsurface sediment	LW2-C334-C
Study Area	6.9	subsurface sediment	LW2-C334-D
Study Area	6.9	surface sediment	LW2-C335-A
Study Area	6.9	subsurface sediment	LW2-C335-B
Study Area	6.9	subsurface sediment	LW2-C335-C
Study Area	6.9	subsurface sediment	LW2-C335-E
Study Area	6.9	surface sediment	LW2-G328
Study Area	6.9	surface sediment	LW2-G332
Study Area	6.9	surface sediment	LW2-G334
Study Area	6.9	surface sediment	LW2-G335
Study Area	6.9	surface sediment	LW2-G336
Study Area	6.9	surface sediment	LW2-GBT017
Study Area	6.9	surface sediment	LW3-G668
Study Area	6.9	surface sediment	LW3-G669
Study Area	6.9	surface sediment	LW3-G672
Study Area	6.9	surface sediment	LWG2-PG-RP7B
Study Area	6.9	subsurface sediment	LWM-METCS13
Study Area	6.9	surface sediment	WLCDRD05PG06262
Study Area	6.9	surface sediment	WLCDRD05PG06464
Study Area	6.9	subsurface sediment	WLCDRD05VC06262
Study Area	6.9	surface sediment	WLCMBA01ED0115ED0115
Study Area	6.9	surface sediment	WLCMBA01ED0116ED0116
Study Area	6.9	surface sediment	WLCMBA01ED0118ED0118
Study Area	6.9	surface sediment	WLCMBA01ED0119ED0119
Study Area	6.9	surface sediment	WLCOFJ0222B0122B010
Study Area	6.9	surface sediment	WLCOFJ0222B0222B020
Study Area	6.9	surface sediment	WLCOFJ0222B0322B030
Study Area	6.9	surface sediment	WLCOFJ0222B0422B040
Study Area	6.9	surface sediment	WRD&M98DMLDML
Study Area	6.9	surface sediment	WR-WSI98SD0780
Study Area	6.9	surface sediment	WR-WSI98SD0800
Study Area	6.9	surface sediment	WR-WSI98SD0810
Study Area	6.9	subsurface sediment	WR-WSI98SD081C0000A
Study Area	7	subsurface sediment	ARK-WB-64-0-2
Study Area	7	subsurface sediment	ARK-WB-64-10-12
Study Area	7	subsurface sediment	ARK-WB-64-10-12_EPAsplit
Study Area	7	subsurface sediment	ARK-WB-64-12-14
Study Area	7	subsurface sediment	ARK-WB-64-14-16
Study Area	7	subsurface sediment	ARK-WB-64-16-18
Study Area	7	subsurface sediment	ARK-WB-64-18-20
Study Area	7	subsurface sediment	ARK-WB-64-20-22
Study Area	7	subsurface sediment	ARK-WB-64-22-24
Study Area	7	subsurface sediment	ARK-WB-64-2-4
Study Area	7	subsurface sediment	ARK-WB-64-24-26
Study Area	7	subsurface sediment	ARK-WB-64-26-26.5
Study Area	7	subsurface sediment	ARK-WB-64-4-6
Study Area	7	subsurface sediment	ARK-WB-64-6-8
Study Area	7	subsurface sediment	ARK-WB-64-8-10
Study Area	7	subsurface sediment	ARK-WB-65-0-1.5

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	7	subsurface sediment	ARK-WB-65-10-15
Study Area	7	subsurface sediment	ARK-WB-65-15-16
Study Area	7	subsurface sediment	ARK-WB-65-16-18
Study Area	7	subsurface sediment	ARK-WB-65-6.5-8
Study Area	7	subsurface sediment	ARK-WB-65-8-10
Study Area	7	subsurface sediment	ARK-WB-65-8-10_EPAsplit
Study Area	7	surface sediment	LW2-G338
Study Area	7	surface sediment	LW2-G339
Study Area	7	surface sediment	LW3-G673
Study Area	7	surface sediment	LW3-G674
Study Area	7	surface sediment	LW3-G675
Study Area	7	surface sediment	LWG0107B024SDS015C00
Study Area	7	surface sediment	WLCDRD05PG06666
Study Area	7	subsurface sediment	WLCDRD05VC06464
Study Area	7	subsurface sediment	WLCDRD05VC06666
Study Area	7	surface sediment	WLCMBA01ED0121ED0121
Study Area	7	surface sediment	WLCMBA01ED0122ED0122
Study Area	7	surface sediment	WLCMBA01ED0123ED0123
Study Area	7	surface sediment	WLCMBA01ED0123ED0145
Study Area	7	surface sediment	WLCMBA01ED0124ED0124
Study Area	7	surface sediment	WLCMBA01ED0125ED0125
Study Area	7	surface sediment	WLR0797262728WRBC26
Study Area	7	surface sediment	WLRELF99RB6SD1011
Study Area	7	subsurface sediment	WLRELF99RB6SD1012
Study Area	7	surface sediment	WLRELF99RB6SD1013
Study Area	7	subsurface sediment	WLRELF99RB6SD1014
Study Area	7	surface sediment	WRD&M98DMKDMK
Study Area	7	surface sediment	WR-WSI98SD0830
Study Area	7	surface sediment	WR-WSI98SD0840
Study Area	7	subsurface sediment	WR-WSI98SD084000ACC
Study Area	7	surface sediment	WR-WSI98SD0850
Study Area	7.1	subsurface sediment	ARK-WB-50-0-2
Study Area	7.1	subsurface sediment	ARK-WB-50-10-12
Study Area	7.1	subsurface sediment	ARK-WB-50-12-14
Study Area	7.1	subsurface sediment	ARK-WB-50-14-14.5
Study Area	7.1	subsurface sediment	ARK-WB-50-2-4
Study Area	7.1	subsurface sediment	ARK-WB-50-4-6
Study Area	7.1	subsurface sediment	ARK-WB-50-6-8
Study Area	7.1	subsurface sediment	ARK-WB-50-8-10
Study Area	7.1	subsurface sediment	ARK-WB-51-0-2
Study Area	7.1	subsurface sediment	ARK-WB-51-10-12
Study Area	7.1	subsurface sediment	ARK-WB-51-10-12_EPAsplit
Study Area	7.1	subsurface sediment	ARK-WB-51-12-14
Study Area	7.1	subsurface sediment	ARK-WB-51-14-16
Study Area	7.1	subsurface sediment	ARK-WB-51-16-18
Study Area	7.1	subsurface sediment	ARK-WB-51-18-20
Study Area	7.1	subsurface sediment	ARK-WB-51-20-21.5
Study Area	7.1	subsurface sediment	ARK-WB-51-2-4
Study Area	7.1	subsurface sediment	ARK-WB-51-4-6
Study Area	7.1	subsurface sediment	ARK-WB-51-6-8
Study Area	7.1	subsurface sediment	ARK-WB-51-8-10
Study Area	7.1	subsurface sediment	ARK-WB-52-0-2
Study Area	7.1	subsurface sediment	ARK-WB-52-10-12
Study Area	7.1	subsurface sediment	ARK-WB-52-12-14
Study Area	7.1	subsurface sediment	ARK-WB-52-14-16
Study Area	7.1	subsurface sediment	ARK-WB-52-16-18
Study Area	7.1	subsurface sediment	ARK-WB-52-2-4
Study Area	7.1	subsurface sediment	ARK-WB-52-4-6

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	7.1	subsurface sediment	ARK-WB-52-6-8
Study Area	7.1	subsurface sediment	ARK-WB-52-8-10
Study Area	7.1	subsurface sediment	ARK-WB-53-0-2
Study Area	7.1	subsurface sediment	ARK-WB-53-10-12
Study Area	7.1	subsurface sediment	ARK-WB-53-12-14
Study Area	7.1	subsurface sediment	ARK-WB-53-14-15.3
Study Area	7.1	subsurface sediment	ARK-WB-53-2-4
Study Area	7.1	subsurface sediment	ARK-WB-53-4-6
Study Area	7.1	subsurface sediment	ARK-WB-53-6-8
Study Area	7.1	subsurface sediment	ARK-WB-53-8-10
Study Area	7.1	subsurface sediment	ARK-WB-54-0-2
Study Area	7.1	subsurface sediment	ARK-WB-54-10-12.3
Study Area	7.1	subsurface sediment	ARK-WB-54-12.3-14
Study Area	7.1	subsurface sediment	ARK-WB-54-14-16
Study Area	7.1	subsurface sediment	ARK-WB-54-16-18
Study Area	7.1	subsurface sediment	ARK-WB-54-2-4
Study Area	7.1	subsurface sediment	ARK-WB-54-4-6
Study Area	7.1	subsurface sediment	ARK-WB-54-6-8
Study Area	7.1	subsurface sediment	ARK-WB-54-8-10
Study Area	7.1	subsurface sediment	ARK-WB-55-0-2
Study Area	7.1	subsurface sediment	ARK-WB-55-10-12
Study Area	7.1	subsurface sediment	ARK-WB-55-12-14
Study Area	7.1	subsurface sediment	ARK-WB-55-14-16
Study Area	7.1	subsurface sediment	ARK-WB-55-16-18
Study Area	7.1	subsurface sediment	ARK-WB-55-18-20
Study Area	7.1	subsurface sediment	ARK-WB-55-20-21
Study Area	7.1	subsurface sediment	ARK-WB-55-2-4
Study Area	7.1	subsurface sediment	ARK-WB-55-4-6
Study Area	7.1	subsurface sediment	ARK-WB-55-6-8
Study Area	7.1	subsurface sediment	ARK-WB-55-8-10
Study Area	7.1	subsurface sediment	ARK-WB-63-0-2
Study Area	7.1	subsurface sediment	ARK-WB-63-10-12
Study Area	7.1	subsurface sediment	ARK-WB-63-10-12_EPAsplit
Study Area	7.1	subsurface sediment	ARK-WB-63-12-14
Study Area	7.1	subsurface sediment	ARK-WB-63-14-16
Study Area	7.1	subsurface sediment	ARK-WB-63-16-16.7
Study Area	7.1	subsurface sediment	ARK-WB-63-2-4
Study Area	7.1	subsurface sediment	ARK-WB-63-4-6
Study Area	7.1	subsurface sediment	ARK-WB-63-6-8
Study Area	7.1	subsurface sediment	ARK-WB-63-8-10
Study Area	7.1	subsurface sediment	ARK-WB-66-0-2
Study Area	7.1	subsurface sediment	ARK-WB-66-10-12
Study Area	7.1	subsurface sediment	ARK-WB-66-12-14
Study Area	7.1	subsurface sediment	ARK-WB-66-14-16
Study Area	7.1	subsurface sediment	ARK-WB-66-16-17.5
Study Area	7.1	subsurface sediment	ARK-WB-66-2-4
Study Area	7.1	subsurface sediment	ARK-WB-66-4-6
Study Area	7.1	subsurface sediment	ARK-WB-66-6-8
Study Area	7.1	subsurface sediment	ARK-WB-66-8-10
Study Area	7.1	subsurface sediment	ARK-WB-66-8-10_EPAsplit
Study Area	7.1	subsurface sediment	LW2-C341-B
Study Area	7.1	surface sediment	LW2-C348-A
Study Area	7.1	subsurface sediment	LW2-C348-B
Study Area	7.1	subsurface sediment	LW2-C348-C
Study Area	7.1	subsurface sediment	LW2-C348-D
Study Area	7.1	surface sediment	LW2-G337
Study Area	7.1	surface sediment	LW2-G341
Study Area	7.1	surface sediment	LW2-G344

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	7.1	surface sediment	LW2-G345-1
Study Area	7.1	surface sediment	LW2-G345-2
Study Area	7.1	surface sediment	LW2-G348
Study Area	7.1	subsurface sediment	LW3-C676-B
Study Area	7.1	subsurface sediment	LW3-C676-C
Study Area	7.1	surface sediment	LW3-G676
Study Area	7.1	surface sediment	LW3-G677
Study Area	7.1	surface sediment	WLCDRD05PG06868
Study Area	7.1	subsurface sediment	WLCDRD05VC06868
Study Area	7.1	subsurface sediment	WLCMBI02SED08SED08
Study Area	7.1	surface sediment	WLCMBJ99D09930D09930
Study Area	7.1	surface sediment	WLCMBJ99D09931D09931
Study Area	7.1	surface sediment	WLCMBJ99D09932D09932
Study Area	7.1	surface sediment	WR-WSI98SD0870
Study Area	7.1	surface sediment	WR-WSI98SD0880
Study Area	7.2	subsurface sediment	ARK-WB-40-0-2
Study Area	7.2	subsurface sediment	ARK-WB-40-0-2_EPAsplit
Study Area	7.2	subsurface sediment	ARK-WB-40-10-12
Study Area	7.2	subsurface sediment	ARK-WB-40-10-12_EPAsplit
Study Area	7.2	subsurface sediment	ARK-WB-40-12-14
Study Area	7.2	subsurface sediment	ARK-WB-40-14-16
Study Area	7.2	subsurface sediment	ARK-WB-40-2-4
Study Area	7.2	subsurface sediment	ARK-WB-40-4-6
Study Area	7.2	subsurface sediment	ARK-WB-40-6-8
Study Area	7.2	subsurface sediment	ARK-WB-40-6-8_EPAsplit
Study Area	7.2	subsurface sediment	ARK-WB-40-8-10
Study Area	7.2	subsurface sediment	ARK-WB-41-0-6
Study Area	7.2	subsurface sediment	ARK-WB-41-14-17
Study Area	7.2	subsurface sediment	ARK-WB-41-17-20
Study Area	7.2	subsurface sediment	ARK-WB-41-20-22.8
Study Area	7.2	subsurface sediment	ARK-WB-41-6-14
Study Area	7.2	subsurface sediment	ARK-WB-42-0-6
Study Area	7.2	subsurface sediment	ARK-WB-42-0-6_EPAsplit
Study Area	7.2	subsurface sediment	ARK-WB-42-14-17
Study Area	7.2	subsurface sediment	ARK-WB-42-17-20
Study Area	7.2	subsurface sediment	ARK-WB-42-20-23
Study Area	7.2	subsurface sediment	ARK-WB-42-20-23_EPAsplit
Study Area	7.2	subsurface sediment	ARK-WB-42-23-26
Study Area	7.2	subsurface sediment	ARK-WB-42-23-26_EPAsplit
Study Area	7.2	subsurface sediment	ARK-WB-42-6-14
Study Area	7.2	subsurface sediment	ARK-WB-42-6-14_EPAsplit
Study Area	7.2	subsurface sediment	ARK-WB-43-0-8
Study Area	7.2	subsurface sediment	ARK-WB-43-12-14
Study Area	7.2	subsurface sediment	ARK-WB-43-14-16
Study Area	7.2	subsurface sediment	ARK-WB-43-16-18
Study Area	7.2	subsurface sediment	ARK-WB-43-18-19
Study Area	7.2	subsurface sediment	ARK-WB-43-8-18
Study Area	7.2	subsurface sediment	ARK-WB-44-2-4_EPAsplit
Study Area	7.2	subsurface sediment	ARK-WB-45-0-2
Study Area	7.2	subsurface sediment	ARK-WB-45-10-12
Study Area	7.2	subsurface sediment	ARK-WB-45-12-14
Study Area	7.2	subsurface sediment	ARK-WB-45-2-4
Study Area	7.2	subsurface sediment	ARK-WB-45-4-6
Study Area	7.2	subsurface sediment	ARK-WB-45-6-8
Study Area	7.2	subsurface sediment	ARK-WB-45-8-10
Study Area	7.2	subsurface sediment	ARK-WB-46-0-2
Study Area	7.2	subsurface sediment	ARK-WB-46-10-12
Study Area	7.2	subsurface sediment	ARK-WB-46-12-14

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	7.2	subsurface sediment	ARK-WB-46-14-16
Study Area	7.2	subsurface sediment	ARK-WB-46-16-18
Study Area	7.2	subsurface sediment	ARK-WB-46-18-20
Study Area	7.2	subsurface sediment	ARK-WB-46-20-22
Study Area	7.2	subsurface sediment	ARK-WB-46-22-24
Study Area	7.2	subsurface sediment	ARK-WB-46-2-4
Study Area	7.2	subsurface sediment	ARK-WB-46-24-25
Study Area	7.2	subsurface sediment	ARK-WB-46-4-6
Study Area	7.2	subsurface sediment	ARK-WB-46-8-10
Study Area	7.2	subsurface sediment	ARK-WB-47-0-2
Study Area	7.2	subsurface sediment	ARK-WB-47-10-12
Study Area	7.2	subsurface sediment	ARK-WB-47-12-14
Study Area	7.2	subsurface sediment	ARK-WB-47-14-16
Study Area	7.2	subsurface sediment	ARK-WB-47-16-18
Study Area	7.2	subsurface sediment	ARK-WB-47-18-20
Study Area	7.2	subsurface sediment	ARK-WB-47-20-22
Study Area	7.2	subsurface sediment	ARK-WB-47-22-23
Study Area	7.2	subsurface sediment	ARK-WB-47-2-4
Study Area	7.2	subsurface sediment	ARK-WB-47-6-8
Study Area	7.2	subsurface sediment	ARK-WB-47-8-10
Study Area	7.2	subsurface sediment	ARK-WB-48-10-12
Study Area	7.2	subsurface sediment	ARK-WB-48-12-14
Study Area	7.2	subsurface sediment	ARK-WB-48-14-16
Study Area	7.2	subsurface sediment	ARK-WB-48-16-18
Study Area	7.2	subsurface sediment	ARK-WB-48-18-20
Study Area	7.2	subsurface sediment	ARK-WB-48-20-21.9
Study Area	7.2	subsurface sediment	ARK-WB-48-2-4
Study Area	7.2	subsurface sediment	ARK-WB-48-4-6
Study Area	7.2	subsurface sediment	ARK-WB-48-6-8
Study Area	7.2	subsurface sediment	ARK-WB-48-8-10
Study Area	7.2	subsurface sediment	ARK-WB-49-0-2
Study Area	7.2	subsurface sediment	ARK-WB-49-10-12
Study Area	7.2	subsurface sediment	ARK-WB-49-12-14
Study Area	7.2	subsurface sediment	ARK-WB-49-14-16
Study Area	7.2	subsurface sediment	ARK-WB-49-14-16_EPAsplit
Study Area	7.2	subsurface sediment	ARK-WB-49-16-18
Study Area	7.2	subsurface sediment	ARK-WB-49-18-20
Study Area	7.2	subsurface sediment	ARK-WB-49-20-22
Study Area	7.2	subsurface sediment	ARK-WB-49-20-22_EPAsplit
Study Area	7.2	subsurface sediment	ARK-WB-49-22-23.5
Study Area	7.2	subsurface sediment	ARK-WB-49-22-23_5_EPAsplit
Study Area	7.2	subsurface sediment	ARK-WB-49-2-4
Study Area	7.2	subsurface sediment	ARK-WB-49-4-6
Study Area	7.2	subsurface sediment	ARK-WB-49-4-6_EPAsplit
Study Area	7.2	subsurface sediment	ARK-WB-49-6-8
Study Area	7.2	subsurface sediment	ARK-WB-49-6-8_EPAsplit
Study Area	7.2	subsurface sediment	ARK-WB-49-8-10
Study Area	7.2	subsurface sediment	ARK-WB-60-0-2
Study Area	7.2	subsurface sediment	ARK-WB-60-2-3.5
Study Area	7.2	subsurface sediment	ARK-WB-62-0-2
Study Area	7.2	subsurface sediment	ARK-WB-62-2-4
Study Area	7.2	subsurface sediment	ARK-WB-62-4-6
Study Area	7.2	subsurface sediment	ARK-WB-62-6-8
Study Area	7.2	subsurface sediment	ARK-WB-62-8-8.8
Study Area	7.2	surface sediment	LW2-B018
Study Area	7.2	subsurface sediment	LW2-C351-B
Study Area	7.2	subsurface sediment	LW2-C351-C
Study Area	7.2	subsurface sediment	LW2-C351-D

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	7.2	subsurface sediment	LW2-C351-E
Study Area	7.2	surface sediment	LW2-G350
Study Area	7.2	surface sediment	LW2-G351
Study Area	7.2	surface sediment	LW2-G351-2
Study Area	7.2	surface sediment	LW2-G353-1
Study Area	7.2	surface sediment	LW2-G353-2
Study Area	7.2	surface sediment	LW2-GBT018
Study Area	7.2	subsurface sediment	LW3-C678-B
Study Area	7.2	subsurface sediment	LW3-C678-C
Study Area	7.2	subsurface sediment	LW3-C678-D
Study Area	7.2	subsurface sediment	LW3-C678-E
Study Area	7.2	subsurface sediment	LW3-C679-B
Study Area	7.2	subsurface sediment	LW3-C679-C
Study Area	7.2	subsurface sediment	LW3-C679-D
Study Area	7.2	surface sediment	LWG0107R004SDS015C00
Study Area	7.2	surface sediment	LWG2-PG-AP2A
Study Area	7.2	surface sediment	LWG2-PG-AP2D
Study Area	7.2	surface sediment	WLCDRD05PG07070
Study Area	7.2	subsurface sediment	WLCDRD05VC07070
Study Area	7.2	subsurface sediment	WLCEAF02WB02SO1725
Study Area	7.2	subsurface sediment	WLCEAF02WB13SO1896
Study Area	7.2	subsurface sediment	WLCEAF02WB13SO1901
Study Area	7.2	subsurface sediment	WLCEAF02WB14SO1906
Study Area	7.2	subsurface sediment	WLCEAF02WB14SO1912
Study Area	7.2	subsurface sediment	WLCEAF02WB17SO1904
Study Area	7.2	subsurface sediment	WLCEAF02WB18SO1888
Study Area	7.2	subsurface sediment	WLCEAF02WB18SO1890
Study Area	7.2	subsurface sediment	WLCEAF02WB18SO1894
Study Area	7.2	subsurface sediment	WLCEAF02WB19SO1885
Study Area	7.2	subsurface sediment	WLCEAF02WB20SO1882
Study Area	7.2	surface sediment	WLCMBJ99D09934D09934
Study Area	7.2	surface sediment	WLCMBJ99D09935D09935
Study Area	7.2	surface sediment	WLCMBJ99D09936D09936
Study Area	7.2	surface sediment	WLCMBJ99D09938D09938
Study Area	7.2	surface sediment	WLCMBJ99D09939D09939
Study Area	7.2	surface sediment	WLCOFJ02480348030
Study Area	7.2	surface sediment	WLCOFJ02480548050
Study Area	7.2	surface sediment	WLCOFJ02480648060
Study Area	7.2	surface sediment	WLRELF99OSS001SD0001
Study Area	7.2	subsurface sediment	WLRELF99OSS001SD0004
Study Area	7.2	surface sediment	WLRELF99OSS002SD0006
Study Area	7.2	subsurface sediment	WLRELF99OSS002SD0008
Study Area	7.2	subsurface sediment	WLRELF99OSS002SDC001
Study Area	7.2	surface sediment	WLRELF99OSS003SD0021
Study Area	7.2	subsurface sediment	WLRELF99OSS003SD0022
Study Area	7.2	surface sediment	WR-WSI98SD0860
Study Area	7.2	surface sediment	WR-WSI98SD0900
Study Area	7.2	subsurface sediment	WR-WSI98SD0900000A
Study Area	7.3	subsurface sediment	ARK-WB-32-10-12
Study Area	7.3	subsurface sediment	ARK-WB-32-12-14
Study Area	7.3	subsurface sediment	ARK-WB-32-14-16
Study Area	7.3	subsurface sediment	ARK-WB-32-16-18
Study Area	7.3	subsurface sediment	ARK-WB-32-18-20
Study Area	7.3	subsurface sediment	ARK-WB-32-20-22
Study Area	7.3	subsurface sediment	ARK-WB-32-22-24
Study Area	7.3	subsurface sediment	ARK-WB-32-24-26
Study Area	7.3	subsurface sediment	ARK-WB-32-26-28
Study Area	7.3	subsurface sediment	ARK-WB-32-28-30

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	7.3	subsurface sediment	ARK-WB-32-30-32
Study Area	7.3	subsurface sediment	ARK-WB-32-32-34
Study Area	7.3	subsurface sediment	ARK-WB-32-34-36
Study Area	7.3	subsurface sediment	ARK-WB-33-12-14
Study Area	7.3	subsurface sediment	ARK-WB-34-0-2
Study Area	7.3	subsurface sediment	ARK-WB-34-2-4
Study Area	7.3	subsurface sediment	ARK-WB-34-4-6
Study Area	7.3	subsurface sediment	ARK-WB-34-4-6_EPAsplit
Study Area	7.3	subsurface sediment	ARK-WB-35-0-10
Study Area	7.3	subsurface sediment	ARK-WB-35-0-10_EPAsplit
Study Area	7.3	subsurface sediment	ARK-WB-35-10-20
Study Area	7.3	subsurface sediment	ARK-WB-35-10-20_EPAsplit
Study Area	7.3	subsurface sediment	ARK-WB-35-16-18
Study Area	7.3	subsurface sediment	ARK-WB-35-18-20
Study Area	7.3	subsurface sediment	ARK-WB-35-20-23
Study Area	7.3	subsurface sediment	ARK-WB-35-20-23_EPAsplit
Study Area	7.3	subsurface sediment	ARK-WB-35-23-26
Study Area	7.3	subsurface sediment	ARK-WB-35-23-26_EPAsplit
Study Area	7.3	subsurface sediment	ARK-WB-35-26-29
Study Area	7.3	subsurface sediment	ARK-WB-35-29-32
Study Area	7.3	subsurface sediment	ARK-WB-35-32-35
Study Area	7.3	subsurface sediment	ARK-WB-35-32-35_EPAsplit
Study Area	7.3	subsurface sediment	ARK-WB-35-35-35.6
Study Area	7.3	subsurface sediment	ARK-WB-36-0-10
Study Area	7.3	subsurface sediment	ARK-WB-36-10-22
Study Area	7.3	subsurface sediment	ARK-WB-36-22-25
Study Area	7.3	subsurface sediment	ARK-WB-36-25-28
Study Area	7.3	subsurface sediment	ARK-WB-36-28-31
Study Area	7.3	subsurface sediment	ARK-WB-36-31-34
Study Area	7.3	subsurface sediment	ARK-WB-36-34-37
Study Area	7.3	subsurface sediment	ARK-WB-36-37-40
Study Area	7.3	subsurface sediment	ARK-WB-37-0-6
Study Area	7.3	subsurface sediment	ARK-WB-37-10-12
Study Area	7.3	subsurface sediment	ARK-WB-37-12-14
Study Area	7.3	subsurface sediment	ARK-WB-37-14-17
Study Area	7.3	subsurface sediment	ARK-WB-37-17-20
Study Area	7.3	subsurface sediment	ARK-WB-37-20-23
Study Area	7.3	subsurface sediment	ARK-WB-37-6-14
Study Area	7.3	subsurface sediment	ARK-WB-38-2-4
Study Area	7.3	subsurface sediment	ARK-WB-39-0-8
Study Area	7.3	subsurface sediment	ARK-WB-39-14-16
Study Area	7.3	subsurface sediment	ARK-WB-39-16-18
Study Area	7.3	subsurface sediment	ARK-WB-39-18-21
Study Area	7.3	subsurface sediment	ARK-WB-39-21-24
Study Area	7.3	subsurface sediment	ARK-WB-39-24-25.7
Study Area	7.3	subsurface sediment	ARK-WB-39-8-18
Study Area	7.3	surface sediment	LW2-B017
Study Area	7.3	subsurface sediment	LW2-C349-B
Study Area	7.3	subsurface sediment	LW2-C349-C
Study Area	7.3	subsurface sediment	LW2-C349-D
Study Area	7.3	surface sediment	LW2-C356-A
Study Area	7.3	subsurface sediment	LW2-C356-B
Study Area	7.3	subsurface sediment	LW2-C356-C
Study Area	7.3	subsurface sediment	LW2-C356-D
Study Area	7.3	subsurface sediment	LW2-C356-E
Study Area	7.3	surface sediment	LW2-G340
Study Area	7.3	surface sediment	LW2-G343
Study Area	7.3	surface sediment	LW2-G349

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	7.3	surface sediment	LW2-G355
Study Area	7.3	surface sediment	LW2-G356
Study Area	7.3	surface sediment	LW3-G680
Study Area	7.3	surface sediment	LW3-G681
Study Area	7.3	surface sediment	LW3-G682
Study Area	7.3	surface sediment	LW3-G683
Study Area	7.3	surface sediment	LW3-G684-1
Study Area	7.3	surface sediment	LW3-G684-2
Study Area	7.3	surface sediment	LWG0107R006SDS015C00
Study Area	7.3	surface sediment	LWG2-PG-AP4C
Study Area	7.3	surface sediment	LWG2-PG-AP4C-2
Study Area	7.3	surface sediment	LWG2-PG-R2AP2
Study Area	7.3	subsurface sediment	LWM-METCS14
Study Area	7.3	subsurface sediment	LWM-TCLPC14A
Study Area	7.3	subsurface sediment	LWM-TCLPC14B
Study Area	7.3	subsurface sediment	LWM-TCLPC15
Study Area	7.3	surface sediment	LWP-TZSAP03B-1
Study Area	7.3	surface sediment	LWP-TZSAP03B-2
Study Area	7.3	surface sediment	LWP-TZSAP04B
Study Area	7.3	surface sediment	LWP-TZSAP04D
Study Area	7.3	surface sediment	RIEDEL97SED14D140.5
Study Area	7.3	subsurface sediment	RIEDEL97SED14D141.5
Study Area	7.3	surface sediment	RIEDEL97SED15D150.5
Study Area	7.3	subsurface sediment	RIEDEL97SED15D151.5
Study Area	7.3	subsurface sediment	RIEDEL97SED15SED155
Study Area	7.3	surface sediment	RIEDEL97SED16D160.5
Study Area	7.3	subsurface sediment	RIEDEL97SED16D161.5
Study Area	7.3	subsurface sediment	RIEDEL97SED16D162.5
Study Area	7.3	subsurface sediment	RIEDEL97SED16ED1610
Study Area	7.3	subsurface sediment	RIEDEL97SED16ED1615
Study Area	7.3	subsurface sediment	RIEDEL97SED16SED165
Study Area	7.3	surface sediment	WLCDRD05PG07272
Study Area	7.3	subsurface sediment	WLCDRD05VC07272
Study Area	7.3	subsurface sediment	WLCEAF02WB04SO1743
Study Area	7.3	subsurface sediment	WLCEAF02WB05SO1775
Study Area	7.3	subsurface sediment	WLCEAF02WB08SO1915
Study Area	7.3	subsurface sediment	WLCEAF02WB08SO1917
Study Area	7.3	subsurface sediment	WLCEAF02WB08SO1919
Study Area	7.3	subsurface sediment	WLCEAF02WB08SO1929
Study Area	7.3	subsurface sediment	WLCEAF02WB09SO1931
Study Area	7.3	subsurface sediment	WLCEAF02WB09SO1934
Study Area	7.3	subsurface sediment	WLCEAF02WB09SO1938
Study Area	7.3	subsurface sediment	WLCEAF02WB09SO1945
Study Area	7.3	subsurface sediment	WLCEAF02WB10SO1947
Study Area	7.3	subsurface sediment	WLCEAF02WB10SO1952
Study Area	7.3	subsurface sediment	WLCEAF02WB10SO1956
Study Area	7.3	subsurface sediment	WLCEAF02WB10SO1961
Study Area	7.3	subsurface sediment	WLCEAF02WB11SO1963
Study Area	7.3	subsurface sediment	WLCEAF02WB11SO1967
Study Area	7.3	subsurface sediment	WLCEAF02WB11SO1971
Study Area	7.3	subsurface sediment	WLCEAF02WB12SO1870
Study Area	7.3	subsurface sediment	WLCEAF02WB15SO1850
Study Area	7.3	subsurface sediment	WLCEAF02WB16SO1867
Study Area	7.3	subsurface sediment	WLCEAF02WB21SO1873
Study Area	7.3	subsurface sediment	WLCEAF02WB22SO1877
Study Area	7.3	subsurface sediment	WLCEAF02WB22SO1879
Study Area	7.3	subsurface sediment	WLCEAF02WB24SO1972
Study Area	7.3	subsurface sediment	WLCEAF02WB24SO1975

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	7.3	subsurface sediment	WLCEAF02WB25SO1978
Study Area	7.3	subsurface sediment	WLCEAF02WB25SO1983
Study Area	7.3	subsurface sediment	WLCEAF02WB25SO1985
Study Area	7.3	subsurface sediment	WLCEAF02WB25SO1988
Study Area	7.3	surface sediment	WLCT0I98GRAB07GRAB07
Study Area	7.3	surface sediment	WLR0797WRBC29WRBC29
Study Area	7.3	surface sediment	WLR0797WRBC29WRC
Study Area	7.3	surface sediment	WLRELF99OSS004SD0011
Study Area	7.3	subsurface sediment	WLRELF99OSS004SD0013
Study Area	7.3	surface sediment	WLRELF99OSS005SD0024
Study Area	7.3	subsurface sediment	WLRELF99OSS005SD0026
Study Area	7.3	subsurface sediment	WLRELF99OSS005SDC002
Study Area	7.3	surface sediment	WLRELF99RB2SD1003
Study Area	7.3	subsurface sediment	WLRELF99RB2SD1004
Study Area	7.3	surface sediment	WR-WSI98SD0890
Study Area	7.3	surface sediment	WR-WSI98SD0910
Study Area	7.3	subsurface sediment	WR-WSI98SD0920000A
Study Area	7.3	surface sediment	WR-WSI98SD0920000CC
Study Area	7.3	surface sediment	WR-WSI98SD0930
Study Area	7.3	surface sediment	WR-WSI98SD0940
Study Area	7.3	surface sediment	WR-WSI98SD0950
Study Area	7.3	surface sediment	WR-WSI98SD0960
Study Area	7.3	subsurface sediment	WR-WSI98SD0960000A
Study Area	7.4	subsurface sediment	ARK-WB-30-0-2
Study Area	7.4	subsurface sediment	ARK-WB-30-10-12
Study Area	7.4	subsurface sediment	ARK-WB-30-10-12_EPAsplit
Study Area	7.4	subsurface sediment	ARK-WB-30-12-14
Study Area	7.4	subsurface sediment	ARK-WB-30-14-16
Study Area	7.4	subsurface sediment	ARK-WB-30-16-18
Study Area	7.4	subsurface sediment	ARK-WB-30-18-20
Study Area	7.4	subsurface sediment	ARK-WB-30-20-22
Study Area	7.4	subsurface sediment	ARK-WB-30-22-24
Study Area	7.4	subsurface sediment	ARK-WB-30-2-4
Study Area	7.4	subsurface sediment	ARK-WB-30-24-26
Study Area	7.4	subsurface sediment	ARK-WB-30-26-28
Study Area	7.4	subsurface sediment	ARK-WB-30-26-28_EPAsplit
Study Area	7.4	subsurface sediment	ARK-WB-30-28-30
Study Area	7.4	subsurface sediment	ARK-WB-30-30-32
Study Area	7.4	subsurface sediment	ARK-WB-30-32-34
Study Area	7.4	subsurface sediment	ARK-WB-30-34-36
Study Area	7.4	subsurface sediment	ARK-WB-30-36-38
Study Area	7.4	subsurface sediment	ARK-WB-30-38-40
Study Area	7.4	subsurface sediment	ARK-WB-30-40-42
Study Area	7.4	subsurface sediment	ARK-WB-30-40-42_EPAsplit
Study Area	7.4	subsurface sediment	ARK-WB-30-42-44
Study Area	7.4	subsurface sediment	ARK-WB-30-44-46
Study Area	7.4	subsurface sediment	ARK-WB-30-4-6
Study Area	7.4	subsurface sediment	ARK-WB-30-46-48
Study Area	7.4	subsurface sediment	ARK-WB-30-48-49.2
Study Area	7.4	subsurface sediment	ARK-WB-30-6-8
Study Area	7.4	subsurface sediment	ARK-WB-30-8-10
Study Area	7.4	subsurface sediment	ARK-WB-31-0-2
Study Area	7.4	subsurface sediment	ARK-WB-31-10-12
Study Area	7.4	subsurface sediment	ARK-WB-31-12-14
Study Area	7.4	subsurface sediment	ARK-WB-31-14-16
Study Area	7.4	subsurface sediment	ARK-WB-31-16-18
Study Area	7.4	subsurface sediment	ARK-WB-31-18-20
Study Area	7.4	subsurface sediment	ARK-WB-31-20-22

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	7.4	subsurface sediment	ARK-WB-31-22-24
Study Area	7.4	subsurface sediment	ARK-WB-31-2-4
Study Area	7.4	subsurface sediment	ARK-WB-31-24-26
Study Area	7.4	subsurface sediment	ARK-WB-31-26-28
Study Area	7.4	subsurface sediment	ARK-WB-31-28-30
Study Area	7.4	subsurface sediment	ARK-WB-31-4-6
Study Area	7.4	subsurface sediment	ARK-WB-31-6-8
Study Area	7.4	subsurface sediment	ARK-WB-31-8-10
Study Area	7.4	subsurface sediment	ARK-WB-31b-24.7-26.7
Study Area	7.4	subsurface sediment	ARK-WB-31b-26.7-28.7
Study Area	7.4	subsurface sediment	ARK-WB-31b-28.7-30.7
Study Area	7.4	subsurface sediment	ARK-WB-31b-30.7-32.7
Study Area	7.4	subsurface sediment	ARK-WB-31b-32.7-34.7
Study Area	7.4	subsurface sediment	ARK-WB-31b-34.7-36.7
Study Area	7.4	subsurface sediment	ARK-WB-31b-36.7-38.7
Study Area	7.4	subsurface sediment	ARK-WB-31b-38.7-40.5
Study Area	7.4	subsurface sediment	ARK-WB-56-0-2
Study Area	7.4	subsurface sediment	ARK-WB-56-10-11
Study Area	7.4	subsurface sediment	ARK-WB-56-12-14
Study Area	7.4	subsurface sediment	ARK-WB-56-14-16
Study Area	7.4	subsurface sediment	ARK-WB-56-16-18
Study Area	7.4	subsurface sediment	ARK-WB-56-18-20
Study Area	7.4	subsurface sediment	ARK-WB-56-18-20_EPAsplit
Study Area	7.4	subsurface sediment	ARK-WB-56-20-22
Study Area	7.4	subsurface sediment	ARK-WB-56-22-24
Study Area	7.4	subsurface sediment	ARK-WB-56-2-4
Study Area	7.4	subsurface sediment	ARK-WB-56-4-6
Study Area	7.4	subsurface sediment	ARK-WB-56-6-8
Study Area	7.4	subsurface sediment	ARK-WB-56-8-10
Study Area	7.4	subsurface sediment	ARK-WB-56b-20.7-22.7
Study Area	7.4	subsurface sediment	ARK-WB-56b-22.7-24.7
Study Area	7.4	subsurface sediment	ARK-WB-56b-24.7-26.7
Study Area	7.4	subsurface sediment	ARK-WB-56b-26.7-28.7
Study Area	7.4	subsurface sediment	ARK-WB-56b-28.7-30.7
Study Area	7.4	subsurface sediment	ARK-WB-56b-30.7-32.7
Study Area	7.4	subsurface sediment	ARK-WB-56b-32.7-34.7
Study Area	7.4	subsurface sediment	ARK-WB-56b-34.7-36.7
Study Area	7.4	subsurface sediment	ARK-WB-56b-36.7-38.7
Study Area	7.4	subsurface sediment	ARK-WB-56b-38.7-40.7
Study Area	7.4	subsurface sediment	ARK-WB-56b-40.7-42.7
Study Area	7.4	subsurface sediment	ARK-WB-56b-42.7-44.7
Study Area	7.4	subsurface sediment	ARK-WB-56b-44.7-46.7
Study Area	7.4	subsurface sediment	ARK-WB-56b-46.7-47.5
Study Area	7.4	subsurface sediment	ARK-WB-57-0-2
Study Area	7.4	subsurface sediment	ARK-WB-57-10-12
Study Area	7.4	subsurface sediment	ARK-WB-57-12-14
Study Area	7.4	subsurface sediment	ARK-WB-57-14-16
Study Area	7.4	subsurface sediment	ARK-WB-57-16-18
Study Area	7.4	subsurface sediment	ARK-WB-57-18-20
Study Area	7.4	subsurface sediment	ARK-WB-57-20-22
Study Area	7.4	subsurface sediment	ARK-WB-57-22-24
Study Area	7.4	subsurface sediment	ARK-WB-57-2-4
Study Area	7.4	subsurface sediment	ARK-WB-57-24-26
Study Area	7.4	subsurface sediment	ARK-WB-57-26-27.2
Study Area	7.4	subsurface sediment	ARK-WB-57-4-6
Study Area	7.4	subsurface sediment	ARK-WB-57-6-8
Study Area	7.4	subsurface sediment	ARK-WB-57-8-10
Study Area	7.4	subsurface sediment	ARK-WB-58-0-2

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	7.4	subsurface sediment	ARK-WB-58-10-12
Study Area	7.4	subsurface sediment	ARK-WB-58-12-14
Study Area	7.4	subsurface sediment	ARK-WB-58-14-15.2
Study Area	7.4	subsurface sediment	ARK-WB-58-2-4
Study Area	7.4	subsurface sediment	ARK-WB-58-4-6
Study Area	7.4	subsurface sediment	ARK-WB-58-6-8
Study Area	7.4	subsurface sediment	ARK-WB-58-8-10
Study Area	7.4	surface sediment	LW2-C342-A
Study Area	7.4	subsurface sediment	LW2-C342-B
Study Area	7.4	subsurface sediment	LW2-C342-C
Study Area	7.4	subsurface sediment	LW2-C342-D
Study Area	7.4	subsurface sediment	LW2-C342-E
Study Area	7.4	subsurface sediment	LW2-C346-B
Study Area	7.4	subsurface sediment	LW2-C346-C
Study Area	7.4	subsurface sediment	LW2-C346-D
Study Area	7.4	subsurface sediment	LW2-C347-B
Study Area	7.4	subsurface sediment	LW2-C347-C
Study Area	7.4	subsurface sediment	LW2-C347-E
Study Area	7.4	subsurface sediment	LW2-C347-F
Study Area	7.4	surface sediment	LW2-C358-A
Study Area	7.4	subsurface sediment	LW2-C358-B
Study Area	7.4	subsurface sediment	LW2-C358-C
Study Area	7.4	subsurface sediment	LW2-C358-D
Study Area	7.4	surface sediment	LW2-C359-A
Study Area	7.4	subsurface sediment	LW2-C359-B
Study Area	7.4	subsurface sediment	LW2-C359-C
Study Area	7.4	subsurface sediment	LW2-C359-D
Study Area	7.4	subsurface sediment	LW2-C360-B1
Study Area	7.4	subsurface sediment	LW2-C360-B2
Study Area	7.4	subsurface sediment	LW2-C360-C1
Study Area	7.4	subsurface sediment	LW2-C360-C2
Study Area	7.4	subsurface sediment	LW2-C360-D2
Study Area	7.4	subsurface sediment	LW2-C360-F1
Study Area	7.4	subsurface sediment	LW2-C360-F2
Study Area	7.4	subsurface sediment	LW2-C362-B
Study Area	7.4	subsurface sediment	LW2-C362-C
Study Area	7.4	subsurface sediment	LW2-C362-D
Study Area	7.4	subsurface sediment	LW2-C366-B1
Study Area	7.4	subsurface sediment	LW2-C366-B2
Study Area	7.4	subsurface sediment	LW2-C366-C1
Study Area	7.4	subsurface sediment	LW2-C366-C2
Study Area	7.4	subsurface sediment	LW2-C366-D1
Study Area	7.4	subsurface sediment	LW2-C366-D2
Study Area	7.4	subsurface sediment	LW2-C366-E1
Study Area	7.4	subsurface sediment	LW2-C366-F1
Study Area	7.4	subsurface sediment	LW2-C366-F2
Study Area	7.4	subsurface sediment	LW2-C366-G1
Study Area	7.4	subsurface sediment	LW2-C368-B
Study Area	7.4	subsurface sediment	LW2-C368-C
Study Area	7.4	subsurface sediment	LW2-C368-D
Study Area	7.4	subsurface sediment	LW2-C368-E
Study Area	7.4	surface sediment	LW2-G342
Study Area	7.4	surface sediment	LW2-G346
Study Area	7.4	surface sediment	LW2-G347
Study Area	7.4	surface sediment	LW2-G358
Study Area	7.4	surface sediment	LW2-G359
Study Area	7.4	surface sediment	LW2-G360
Study Area	7.4	surface sediment	LW2-G362-1

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	7.4	surface sediment	LW2-G362-2
Study Area	7.4	surface sediment	LW2-G366
Study Area	7.4	surface sediment	LW2-G368
Study Area	7.4	surface sediment	LW2-GBT019
Study Area	7.4	subsurface sediment	LW3-C686-B
Study Area	7.4	subsurface sediment	LW3-C686-C
Study Area	7.4	subsurface sediment	LW3-C686-D
Study Area	7.4	surface sediment	LW3-G685
Study Area	7.4	surface sediment	LW3-G686
Study Area	7.4	surface sediment	LW3-GSP07E
Study Area	7.4	surface sediment	LWG2-PG-CP7A
Study Area	7.4	surface sediment	LWG2-PG-CP7D
Study Area	7.4	surface sediment	LWG2-PG-CP9A
Study Area	7.4	surface sediment	LWG2-PG-CP9D
Study Area	7.4	surface sediment	LWP-TZSCP06C
Study Area	7.4	surface sediment	LWP-TZSCP07B
Study Area	7.4	surface sediment	LWP-TZSCP08D-1
Study Area	7.4	surface sediment	LWP-TZSCP08D-2
Study Area	7.4	surface sediment	RIEDEL97SED10D100.5
Study Area	7.4	subsurface sediment	RIEDEL97SED10D101.5
Study Area	7.4	subsurface sediment	RIEDEL97SED10D102.5
Study Area	7.4	subsurface sediment	RIEDEL97SED10ED1010
Study Area	7.4	subsurface sediment	RIEDEL97SED10ED1015
Study Area	7.4	subsurface sediment	RIEDEL97SED10SED105
Study Area	7.4	surface sediment	RIEDEL97SED11D110.5
Study Area	7.4	subsurface sediment	RIEDEL97SED11D111.5
Study Area	7.4	subsurface sediment	RIEDEL97SED11SED115
Study Area	7.4	surface sediment	RIEDEL97SED12D120.5
Study Area	7.4	subsurface sediment	RIEDEL97SED12D121.5
Study Area	7.4	subsurface sediment	RIEDEL97SED12ED1215
Study Area	7.4	surface sediment	RIEDEL97SED13D130.5
Study Area	7.4	subsurface sediment	RIEDEL97SED13D131.5
Study Area	7.4	surface sediment	WLCASF97S014W4166
Study Area	7.4	subsurface sediment	WLCEAF02WB23SO1855
Study Area	7.4	subsurface sediment	WLCEAF02WB23SO1858
Study Area	7.4	subsurface sediment	WLCEAF02WB23SO1864
Study Area	7.4	surface sediment	WLRELF99OSS006SD0016
Study Area	7.4	subsurface sediment	WLRELF99OSS006SD0017
Study Area	7.4	surface sediment	WRD&M98DMJDMJ
Study Area	7.4	surface sediment	WR-WSI98SD0970
Study Area	7.4	surface sediment	WR-WSI98SD0980
Study Area	7.4	surface sediment	WR-WSI98SD0990
Study Area	7.5	subsurface sediment	LW2-C352-B
Study Area	7.5	subsurface sediment	LW2-C352-C
Study Area	7.5	subsurface sediment	LW2-C352-D
Study Area	7.5	subsurface sediment	LW2-C357-B
Study Area	7.5	subsurface sediment	LW2-C357-C
Study Area	7.5	subsurface sediment	LW2-C357-D
Study Area	7.5	surface sediment	LW2-C361-A
Study Area	7.5	subsurface sediment	LW2-C361-B
Study Area	7.5	subsurface sediment	LW2-C371-B
Study Area	7.5	subsurface sediment	LW2-C371-C
Study Area	7.5	subsurface sediment	LW2-C371-E
Study Area	7.5	subsurface sediment	LW2-C377-B
Study Area	7.5	subsurface sediment	LW2-C377-C
Study Area	7.5	subsurface sediment	LW2-C377-D
Study Area	7.5	subsurface sediment	LW2-C377-E
Study Area	7.5	surface sediment	LW2-G352

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	7.5	surface sediment	LW2-G354
Study Area	7.5	surface sediment	LW2-G357
Study Area	7.5	surface sediment	LW2-G361
Study Area	7.5	surface sediment	LW2-G365
Study Area	7.5	surface sediment	LW2-G369
Study Area	7.5	surface sediment	LW2-G371
Study Area	7.5	surface sediment	LW2-G377
Study Area	7.5	surface sediment	LW2-GBT020
Study Area	7.5	subsurface sediment	LW3-C688-B
Study Area	7.5	subsurface sediment	LW3-C688-C
Study Area	7.5	subsurface sediment	LW3-C688-D
Study Area	7.5	subsurface sediment	LW3-C688-F
Study Area	7.5	subsurface sediment	LW3-C690-B
Study Area	7.5	subsurface sediment	LW3-C690-C
Study Area	7.5	subsurface sediment	LW3-C690-D
Study Area	7.5	subsurface sediment	LW3-C690-E
Study Area	7.5	surface sediment	LW3-G687
Study Area	7.5	surface sediment	LW3-G689
Study Area	7.5	surface sediment	LWG0107B022SDS015C00
Study Area	7.5	surface sediment	LWG0107R003SDS015C00
Study Area	7.5	surface sediment	LWG0107R030SDS015C00
Study Area	7.5	surface sediment	RIEDEL97SED09D090.5
Study Area	7.5	subsurface sediment	RIEDEL97SED09D091.5
Study Area	7.5	surface sediment	WLCASF97S013W4167
Study Area	7.5	surface sediment	WLRWTF98ATXSD1ATXSD1
Study Area	7.5	surface sediment	WLRWTF98ATXSD1TXSD1D
Study Area	7.5	surface sediment	WLRWTF98ATXSD2ATXSD2
Study Area	7.5	surface sediment	WLRWTF98ATXSD2TXSD2D
Study Area	7.5	surface sediment	WLRWTF98ATXSD3ATXSD3
Study Area	7.5	surface sediment	WR-WSI98SD1000
Study Area	7.5	subsurface sediment	WR-WSI98SD1000000A
Study Area	7.5	surface sediment	WR-WSI98SD1010
Study Area	7.5	surface sediment	WR-WSI98SD1020
Study Area	7.5	subsurface sediment	WR-WSI98SD1020000A
Study Area	7.5	surface sediment	WR-WSI98SD1030
Study Area	7.5	surface sediment	WR-WSI98SD1040
Study Area	7.6	subsurface sediment	LW2-C381-B
Study Area	7.6	subsurface sediment	LW2-C381-C
Study Area	7.6	subsurface sediment	LW2-C381-E
Study Area	7.6	surface sediment	LW2-G374
Study Area	7.6	surface sediment	LW2-G381
Study Area	7.6	surface sediment	LW2-G389
Study Area	7.6	surface sediment	LW3-G691
Study Area	7.6	surface sediment	LW3-G692-1
Study Area	7.6	surface sediment	LW3-G692-2
Study Area	7.6	surface sediment	LW3-G693
Study Area	7.6	surface sediment	PSYSEA98PSY38PSY38S
Study Area	7.6	subsurface sediment	PSYSEA98PSY39CPSY39A
Study Area	7.6	subsurface sediment	PSYSEA98PSY39CPSY39B
Study Area	7.6	surface sediment	PSYSEA98PSY39PSY39S
Study Area	7.6	surface sediment	WLCASF97S009W4172
Study Area	7.6	surface sediment	WLCASF97S010W4171
Study Area	7.6	surface sediment	WLCASF97S011W4170
Study Area	7.6	surface sediment	WLCASF97S012W4168
Study Area	7.6	surface sediment	WLCASF97S012W4169
Study Area	7.6	surface sediment	WLCCWI08ANCTPD03
Study Area	7.6	surface sediment	WLCCWI08ANCTPD04
Study Area	7.6	surface sediment	WLCCWI08DMMU1A

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	7.6	subsurface sediment	WLCCWI08DMMU1A4041
Study Area	7.6	subsurface sediment	WLCCWI08DMMU1A4142
Study Area	7.6	subsurface sediment	WLCCWI08DMMU1ABC
Study Area	7.6	surface sediment	WLCCWI08DMMU1B
Study Area	7.6	subsurface sediment	WLCCWI08DMMU1B4041
Study Area	7.6	subsurface sediment	WLCCWI08DMMU1B4142
Study Area	7.6	surface sediment	WLCCWI08DMMU1C
Study Area	7.6	subsurface sediment	WLCCWI08DMMU1C4041
Study Area	7.6	subsurface sediment	WLCCWI08DMMU1C4142
Study Area	7.6	surface sediment	WLCCWI08DMMU3A
Study Area	7.6	subsurface sediment	WLCCWI08DMMU3A13
Study Area	7.6	surface sediment	WLCDRD05PG02929
Study Area	7.6	surface sediment	WLCDRD05PG07474
Study Area	7.6	subsurface sediment	WLCDRI03C07-08CSS03
Study Area	7.6	surface sediment	WLCWTG02ANCTPD01A
Study Area	7.6	surface sediment	WLCWTG02ANCTPD01B
Study Area	7.6	surface sediment	WLCWTG02ANCTPD02A
Study Area	7.6	surface sediment	WLCWTG02ANCTPD02B
Study Area	7.6	surface sediment	WLCWTG02ANCTPD03A
Study Area	7.6	surface sediment	WLCWTG02ANCTPD03B
Study Area	7.6	surface sediment	WLCWTG02ANCTPD04A
Study Area	7.6	surface sediment	WLCWTG02ANCTPD04B
Study Area	7.6	surface sediment	WLRWTF98ATXSD4ATXSD4
Study Area	7.6	surface sediment	WLRWTF98ATXSD5ATXSD5
Study Area	7.6	surface sediment	WLRWTF98HEVSD3HEVSD3
Study Area	7.6	surface sediment	WRD&M98DMIDMI
Study Area	7.6	surface sediment	WR-WSI98SD1050
Study Area	7.6	surface sediment	WR-WSI98SD1060
Study Area	7.6	subsurface sediment	WR-WSI98SD1060000A
Study Area	7.6	surface sediment	WR-WSI98SD1070
Study Area	7.6	surface sediment	WR-WSI98SD1080
Study Area	7.6	surface sediment	WR-WSI98SD1100
Study Area	7.7	surface sediment	LW2-B019
Study Area	7.7	subsurface sediment	LW2-C373-B
Study Area	7.7	subsurface sediment	LW2-C373-C
Study Area	7.7	subsurface sediment	LW2-C373-D
Study Area	7.7	subsurface sediment	LW2-C401-B
Study Area	7.7	subsurface sediment	LW2-C401-C
Study Area	7.7	subsurface sediment	LW2-C401-D
Study Area	7.7	subsurface sediment	LW2-C401-E
Study Area	7.7	subsurface sediment	LW2-C401-F
Study Area	7.7	surface sediment	LW2-C532-A
Study Area	7.7	subsurface sediment	LW2-C532-B
Study Area	7.7	subsurface sediment	LW2-C532-C
Study Area	7.7	subsurface sediment	LW2-C532-D
Study Area	7.7	subsurface sediment	LW2-C532-E
Study Area	7.7	subsurface sediment	LW2-C532-F
Study Area	7.7	surface sediment	LW2-G363
Study Area	7.7	surface sediment	LW2-G373
Study Area	7.7	surface sediment	LW2-G378
Study Area	7.7	surface sediment	LW2-G394
Study Area	7.7	surface sediment	LW2-G401
Study Area	7.7	surface sediment	LW2-G404
Study Area	7.7	surface sediment	LW3-G694
Study Area	7.7	surface sediment	LW3-GSP07W
Study Area	7.7	surface sediment	LWG2-PG-W9A
Study Area	7.7	surface sediment	LWG2-PG-W9C
Study Area	7.7	subsurface sediment	TOSCO99DMMU1SDO1

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	7.7	subsurface sediment	TOSCO99DMMU1SDO3
Study Area	7.7	subsurface sediment	TOSCO99DMMU2SDO4
Study Area	7.7	surface sediment	WLCASF97S004W4156
Study Area	7.7	surface sediment	WLCASF97S005W4155
Study Area	7.7	surface sediment	WLCASF97S006W4154
Study Area	7.7	surface sediment	WLCASF97S008W4152
Study Area	7.7	surface sediment	WLCCWI08ANCTPD05
Study Area	7.7	surface sediment	WLCCWI08ANCTPD06
Study Area	7.7	surface sediment	WLCCWI08DMMU2A
Study Area	7.7	subsurface sediment	WLCCWI08DMMU2A4041
Study Area	7.7	subsurface sediment	WLCCWI08DMMU2A4142
Study Area	7.7	subsurface sediment	WLCCWI08DMMU2ABC
Study Area	7.7	surface sediment	WLCCWI08DMMU2B
Study Area	7.7	subsurface sediment	WLCCWI08DMMU2B4041
Study Area	7.7	subsurface sediment	WLCCWI08DMMU2B4142
Study Area	7.7	surface sediment	WLCCWI08DMMU2C
Study Area	7.7	subsurface sediment	WLCCWI08DMMU2C4041
Study Area	7.7	subsurface sediment	WLCCWI08DMMU2C4142
Study Area	7.7	subsurface sediment	WLCCWI08DMMU3ABC
Study Area	7.7	surface sediment	WLCCWI08DMMU3B
Study Area	7.7	subsurface sediment	WLCCWI08DMMU3B13
Study Area	7.7	surface sediment	WLCCWI08DMMU3D
Study Area	7.7	subsurface sediment	WLCCWI08DMMU3D13
Study Area	7.7	surface sediment	WLCCWI08DMMU3E
Study Area	7.7	subsurface sediment	WLCCWI08DMMU3E13
Study Area	7.7	subsurface sediment	WLCDRD05VC02929
Study Area	7.7	surface sediment	WLCOFJ02220122010
Study Area	7.7	surface sediment	WLCOFJ02220222020
Study Area	7.7	surface sediment	WLCOFJ022203122031
Study Area	7.7	surface sediment	WLCOFJ02220322030
Study Area	7.7	surface sediment	WLCOFJ02220422040
Study Area	7.7	surface sediment	WLCOFJ02220522050
Study Area	7.7	surface sediment	WLCOFJ02220622060
Study Area	7.7	subsurface sediment	WLCPWL09APS-1B
Study Area	7.7	subsurface sediment	WLCPWL09APS-1T
Study Area	7.7	subsurface sediment	WLCPWL09APS-2B
Study Area	7.7	subsurface sediment	WLCPWL09APS-2T
Study Area	7.7	subsurface sediment	WLCPWL09APS-3B
Study Area	7.7	subsurface sediment	WLCPWL09APS-3T
Study Area	7.7	subsurface sediment	WLCPWL09DRB-1Z
Study Area	7.7	subsurface sediment	WLCPWL09DRB-2Z
Study Area	7.7	subsurface sediment	WLCPWL09DRB-3Z
Study Area	7.7	subsurface sediment	WLCPWL09DRB-DP
Study Area	7.7	subsurface sediment	WLCPWL09URB-1Z
Study Area	7.7	subsurface sediment	WLCPWL09URB-2Z
Study Area	7.7	subsurface sediment	WLCPWL09URB-3Z
Study Area	7.7	subsurface sediment	WLCPWL09URB-DP
Study Area	7.7	surface sediment	WLCWTG02ANCTPD05A
Study Area	7.7	surface sediment	WLCWTG02ANCTPD05B
Study Area	7.7	surface sediment	WLCWTG02ANCTPD06A
Study Area	7.7	surface sediment	WLCWTG02ANCTPD06B
Study Area	7.7	surface sediment	WLCWTG02ANCTPD07A
Study Area	7.7	surface sediment	WLCWTG02ANCTPD07B
Study Area	7.7	surface sediment	WLCWTG02ANCTPD08A
Study Area	7.7	surface sediment	WLCWTG02ANCTPD08B
Study Area	7.7	surface sediment	WLCWTG02ANCTPD09R
Study Area	7.7	subsurface sediment	WLCWTI00N20N20
Study Area	7.7	subsurface sediment	WLCWTI00N40N40

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	7.7	subsurface sediment	WLCWTI00S20S20
Study Area	7.7	subsurface sediment	WLCWTI00S40S40
Study Area	7.7	subsurface sediment	WLCWTI00TP11TP11
Study Area	7.7	surface sediment	WLRWTF98HEVSD1HEVSD1
Study Area	7.7	surface sediment	WLRWTF98HEVSD2HEVSD2
Study Area	7.7	surface sediment	WLRWTF98TOSSD1TOSSD1
Study Area	7.7	surface sediment	WLRWTF98TOSSD2TOSSD2
Study Area	7.7	surface sediment	WLRWTF98TOSSD3TOSSD3
Study Area	7.7	surface sediment	WR-WSI98SD1110
Study Area	7.7	surface sediment	WR-WSI98SD1130
Study Area	7.7	surface sediment	WR-WSI98SD1140
Study Area	7.7	surface sediment	WR-WSI98SD1150
Study Area	7.7	surface sediment	WR-WSI98SD1160
Study Area	7.7	subsurface sediment	WR-WSI98SD1160000A
Study Area	7.8	subsurface sediment	LW2-C403-B
Study Area	7.8	subsurface sediment	LW2-C403-C
Study Area	7.8	subsurface sediment	LW2-C403-D
Study Area	7.8	subsurface sediment	LW2-C403-F
Study Area	7.8	surface sediment	LW2-G391
Study Area	7.8	surface sediment	LW2-G399
Study Area	7.8	surface sediment	LW2-G403
Study Area	7.8	surface sediment	LW2-GBT021
Study Area	7.8	subsurface sediment	LW3-C695-B
Study Area	7.8	subsurface sediment	LW3-C695-D
Study Area	7.8	subsurface sediment	LW3-C695-E
Study Area	7.8	surface sediment	NA-3A-0005
Study Area	7.8	subsurface sediment	NA-3A-0508
Study Area	7.8	subsurface sediment	NA-3A-0812
Study Area	7.8	subsurface sediment	NA-3A-1216
Study Area	7.8	subsurface sediment	NA-3A-1620
Study Area	7.8	subsurface sediment	NA-3A-2024
Study Area	7.8	subsurface sediment	NA-3A-2428
Study Area	7.8	subsurface sediment	NA-3A-2832
Study Area	7.8	subsurface sediment	NA-3A-3238
Study Area	7.8	subsurface sediment	NA-3A-3844
Study Area	7.8	subsurface sediment	NA-3A-4854
Study Area	7.8	subsurface sediment	NA-3A-5864
Study Area	7.8	subsurface sediment	NA-3A-6874
Study Area	7.8	subsurface sediment	NA-3A-7884
Study Area	7.8	subsurface sediment	NA-3A-8894
Study Area	7.8	surface sediment	NA-3B-0034
Study Area	7.8	subsurface sediment	NA-3B-3464
Study Area	7.8	subsurface sediment	NA-3B-6494
Study Area	7.8	surface sediment	PSYSEA98PSY37PSY37S
Study Area	7.8	surface sediment	PSYSEA98PSY40PSY40S
Study Area	7.8	surface sediment	WLCASF97S003W4157
Study Area	7.8	subsurface sediment	WLCDRD05VC03131
Study Area	7.8	subsurface sediment	WLCDRI03C09-11CSS04
Study Area	7.8	surface sediment	WLRWTF98TOSSD4TOSSD4
Study Area	7.8	surface sediment	WLRWTF98TOSSD5TOSSD5
Study Area	7.8	subsurface sediment	WR-WSI98SD1170000A
Study Area	7.8	surface sediment	WR-WSI98SD1170000CC
Study Area	7.8	surface sediment	WR-WSI98SD1180
Study Area	7.8	surface sediment	WR-WSI98SD1190
Study Area	7.8	surface sediment	WR-WSI98SD1210
Study Area	7.8	surface sediment	WR-WSI98SD1220
Study Area	7.8	subsurface sediment	WR-WSI98SD1220000A
Study Area	7.9	subsurface sediment	LW2-C386-B

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	7.9	subsurface sediment	LW2-C386-C
Study Area	7.9	surface sediment	LW2-G370
Study Area	7.9	surface sediment	LW2-G375
Study Area	7.9	surface sediment	LW2-G386
Study Area	7.9	surface sediment	LW2-G407
Study Area	7.9	subsurface sediment	LW3-C698-B
Study Area	7.9	surface sediment	LW3-G696
Study Area	7.9	surface sediment	LW3-G697
Study Area	7.9	surface sediment	LWG0107R040SDS015C00
Study Area	7.9	subsurface sediment	PSYSEA98PSY36CPSY36A
Study Area	7.9	subsurface sediment	PSYSEA98PSY36CPSY36B
Study Area	7.9	subsurface sediment	PSYSEA98PSY36CPSY36C
Study Area	7.9	subsurface sediment	PSYSEA98PSY36CPSY36D
Study Area	7.9	surface sediment	PSYSEA98PSY36PSY36S
Study Area	7.9	surface sediment	WLCASF97S002W4158
Study Area	7.9	surface sediment	WLCT0I98GRAB08GRAB08
Study Area	7.9	surface sediment	WR-WSI98SD1200
Study Area	7.9	subsurface sediment	WR-WSI98SD1200000A
Study Area	7.9	surface sediment	WR-WSI98SD1240
Study Area	8	subsurface sediment	LW2-C372-B
Study Area	8	subsurface sediment	LW2-C372-C
Study Area	8	subsurface sediment	LW2-C372-E
Study Area	8	surface sediment	LW2-C400-A
Study Area	8	subsurface sediment	LW2-C400-B
Study Area	8	subsurface sediment	LW2-C400-C
Study Area	8	subsurface sediment	LW2-C400-D
Study Area	8	subsurface sediment	LW2-C413-B1
Study Area	8	subsurface sediment	LW2-C413-B2
Study Area	8	subsurface sediment	LW2-C413-C1
Study Area	8	subsurface sediment	LW2-C413-C2
Study Area	8	subsurface sediment	LW2-C413-D2
Study Area	8	surface sediment	LW2-G367
Study Area	8	surface sediment	LW2-G372-1
Study Area	8	surface sediment	LW2-G372-2
Study Area	8	surface sediment	LW2-G387
Study Area	8	surface sediment	LW2-G400
Study Area	8	surface sediment	LW2-G410-1
Study Area	8	surface sediment	LW2-G410-2
Study Area	8	surface sediment	LW2-G413
Study Area	8	surface sediment	LW2-GBT022
Study Area	8	subsurface sediment	LW3-C701-B
Study Area	8	subsurface sediment	LW3-C701-D
Study Area	8	subsurface sediment	LW3-C701-E
Study Area	8	subsurface sediment	LW3-C702-B
Study Area	8	subsurface sediment	LW3-C702-C
Study Area	8	subsurface sediment	LW3-C702-D
Study Area	8	subsurface sediment	LW3-C702-F
Study Area	8	subsurface sediment	LW3-C703-B
Study Area	8	subsurface sediment	LW3-C703-C
Study Area	8	subsurface sediment	LW3-C703-D
Study Area	8	surface sediment	LW3-G699
Study Area	8	surface sediment	LW3-G700
Study Area	8	surface sediment	LWG0107B023SDS015C00
Study Area	8	surface sediment	LWG0108R002SDS015C00
Study Area	8	surface sediment	PSYD&M97DM22DM22
Study Area	8	subsurface sediment	PSYSEA98PSY18CPSY18A
Study Area	8	subsurface sediment	PSYSEA98PSY18CPSY18B
Study Area	8	subsurface sediment	PSYSEA98PSY18CPSY18C

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	8	surface sediment	PSYSEA98PSY18PSY18S
Study Area	8	surface sediment	PSYSEA98PSY21PSY21S
Study Area	8	subsurface sediment	PSYSEA98PSY24CPSY24A
Study Area	8	subsurface sediment	PSYSEA98PSY24CPSY24B
Study Area	8	surface sediment	PSYSEA98PSY24PSY24S
Study Area	8	surface sediment	PSYSEA98PSY25PSY25S
Study Area	8	surface sediment	PSYSEA98PSY26PSY26S
Study Area	8	subsurface sediment	PSYSEA98PSY34CPSY34A
Study Area	8	subsurface sediment	PSYSEA98PSY34CPSY34B
Study Area	8	subsurface sediment	PSYSEA98PSY34CPSY34C
Study Area	8	surface sediment	PSYSEA98PSY34PSY34S
Study Area	8	surface sediment	PSYSEA98PSY35PSY35S
Study Area	8	subsurface sediment	PSYSEA98PSY41CPSY41A
Study Area	8	subsurface sediment	PSYSEA98PSY41CPSY41B
Study Area	8	subsurface sediment	PSYSEA98PSY41CPSY41C
Study Area	8	surface sediment	PSYSEA98PSY41PSY41S
Study Area	8	surface sediment	PSYSEA98PSY42PSY42S
Study Area	8	surface sediment	WLCASF97S001W4159
Study Area	8	subsurface sediment	WLCDRI03C04-06CSS02
Study Area	8	subsurface sediment	WLCDRI03C12-14CSS05
Study Area	8	subsurface sediment	WLCPSK092-A
Study Area	8	subsurface sediment	WLCPSK092-B
Study Area	8	subsurface sediment	WLCPSK092-Z
Study Area	8	subsurface sediment	WLCPSK093-A
Study Area	8	subsurface sediment	WLCPSK093-B
Study Area	8	subsurface sediment	WLCPSK093-Z
Study Area	8	surface sediment	WR-WSI98SD1230
Study Area	8	surface sediment	WR-WSI98SD1250
Study Area	8	subsurface sediment	WR-WSI98SD1250000A
Study Area	8	surface sediment	WR-WSI98SD1260
Study Area	8.1	surface sediment	LW2-B021
Study Area	8.1	subsurface sediment	LW2-C364-B
Study Area	8.1	subsurface sediment	LW2-C364-C
Study Area	8.1	subsurface sediment	LW2-C364-D
Study Area	8.1	subsurface sediment	LW2-C392-B
Study Area	8.1	subsurface sediment	LW2-C392-C
Study Area	8.1	subsurface sediment	LW2-C392-D
Study Area	8.1	surface sediment	LW2-G364
Study Area	8.1	surface sediment	LW2-G376
Study Area	8.1	surface sediment	LW2-G392
Study Area	8.1	surface sediment	LW2-G395
Study Area	8.1	surface sediment	LW2-G414
Study Area	8.1	surface sediment	LW2-G418
Study Area	8.1	surface sediment	LW2-G422
Study Area	8.1	surface sediment	LW2-GBT023
Study Area	8.1	surface sediment	LW2-GBT024
Study Area	8.1	subsurface sediment	LW3-C704-B
Study Area	8.1	subsurface sediment	LW3-C704-C
Study Area	8.1	subsurface sediment	LW3-C704-D
Study Area	8.1	subsurface sediment	LW3-C706-B
Study Area	8.1	subsurface sediment	LW3-C706-C
Study Area	8.1	subsurface sediment	LW3-C706-D
Study Area	8.1	subsurface sediment	LW3-C706-E
Study Area	8.1	surface sediment	LW3-G705
Study Area	8.1	surface sediment	LW3-G706
Study Area	8.1	surface sediment	LW3-G707
Study Area	8.1	subsurface sediment	LWM-METCS23
Study Area	8.1	surface sediment	PSYD&M97DM04DM04

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	8.1	surface sediment	PSYD&M97DM09DM09T
Study Area	8.1	subsurface sediment	PSYD&M97DM20DM20
Study Area	8.1	subsurface sediment	PSYD&M97DM20DM20C
Study Area	8.1	surface sediment	PSYSEA98PSY15PSY15S
Study Area	8.1	surface sediment	PSYSEA98PSY19PSY19S
Study Area	8.1	subsurface sediment	PSYSEA98PSY20CPSY20A
Study Area	8.1	subsurface sediment	PSYSEA98PSY20CPSY20B
Study Area	8.1	subsurface sediment	PSYSEA98PSY20CPSY20C
Study Area	8.1	subsurface sediment	PSYSEA98PSY20CPSY20D
Study Area	8.1	surface sediment	PSYSEA98PSY20PSY20S
Study Area	8.1	surface sediment	PSYSEA98PSY22PSY22S
Study Area	8.1	subsurface sediment	PSYSEA98PSY23CPSY23A
Study Area	8.1	subsurface sediment	PSYSEA98PSY23CPSY23B
Study Area	8.1	subsurface sediment	PSYSEA98PSY23CPSY23C
Study Area	8.1	subsurface sediment	PSYSEA98PSY23CPSY23D
Study Area	8.1	surface sediment	PSYSEA98PSY23PSY23S
Study Area	8.1	surface sediment	PSYSEA98PSY29PSY29S
Study Area	8.1	surface sediment	PSYSEA98PSY31PSY31S
Study Area	8.1	surface sediment	PSYSEA98PSY32PSY32S
Study Area	8.1	subsurface sediment	PSYSEA98PSY33CPSY33A
Study Area	8.1	subsurface sediment	PSYSEA98PSY33CPSY33B
Study Area	8.1	subsurface sediment	PSYSEA98PSY33CPSY33C
Study Area	8.1	surface sediment	PSYSEA98PSY33PSY33S
Study Area	8.1	surface sediment	WLCDRD05PG07676
Study Area	8.1	subsurface sediment	WLCPSK094-A
Study Area	8.1	subsurface sediment	WLCPSK094-B
Study Area	8.1	subsurface sediment	WLCPSK094-Z
Study Area	8.1	subsurface sediment	WLCPSK095-A
Study Area	8.1	subsurface sediment	WLCPSK095-B
Study Area	8.1	subsurface sediment	WLCPSK095-Z
Study Area	8.1	surface sediment	WR-WSI98SD1270
Study Area	8.1	subsurface sediment	WR-WSI98SD1270000A
Study Area	8.1	surface sediment	WR-WSI98SD1280
Study Area	8.1	surface sediment	WR-WSI98SD1290
Study Area	8.1	surface sediment	WR-WSI98SD1300
Study Area	8.2	subsurface sediment	LW2-C382-B
Study Area	8.2	subsurface sediment	LW2-C382-C
Study Area	8.2	subsurface sediment	LW2-C382-D
Study Area	8.2	subsurface sediment	LW2-C384-B
Study Area	8.2	subsurface sediment	LW2-C384-C
Study Area	8.2	subsurface sediment	LW2-C384-E
Study Area	8.2	subsurface sediment	LW2-C384-F
Study Area	8.2	surface sediment	LW2-C409-A
Study Area	8.2	subsurface sediment	LW2-C409-B
Study Area	8.2	subsurface sediment	LW2-C409-C
Study Area	8.2	subsurface sediment	LW2-C409-D
Study Area	8.2	surface sediment	LW2-G382
Study Area	8.2	surface sediment	LW2-G384-1
Study Area	8.2	surface sediment	LW2-G384-2
Study Area	8.2	surface sediment	LW2-G390
Study Area	8.2	surface sediment	LW2-G398
Study Area	8.2	surface sediment	LW2-G406
Study Area	8.2	surface sediment	LW2-G409
Study Area	8.2	surface sediment	LW2-G423
Study Area	8.2	subsurface sediment	LW3-C708-B
Study Area	8.2	subsurface sediment	LW3-C708-C
Study Area	8.2	subsurface sediment	LW3-C708-D
Study Area	8.2	subsurface sediment	LW3-C708-F

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	8.2	subsurface sediment	LW3-C708-G
Study Area	8.2	subsurface sediment	LW3-C709-B
Study Area	8.2	surface sediment	LW3-G710
Study Area	8.2	surface sediment	LW3-G711
Study Area	8.2	surface sediment	LW3-GSP08E
Study Area	8.2	surface sediment	LWG0108R003SDS015C00
Study Area	8.2	surface sediment	LWG0108R040SDS015C00
Study Area	8.2	subsurface sediment	LWM-METCS21
Study Area	8.2	surface sediment	PSYD&M97DM01DM01
Study Area	8.2	surface sediment	PSYD&M97DM18DM18
Study Area	8.2	subsurface sediment	PSYD&M97DM24DM24C1
Study Area	8.2	subsurface sediment	PSYD&M97DM24DM24C2
Study Area	8.2	subsurface sediment	PSYSEA98PSY16CPSY16A
Study Area	8.2	subsurface sediment	PSYSEA98PSY16CPSY16B
Study Area	8.2	subsurface sediment	PSYSEA98PSY16CPSY16C
Study Area	8.2	surface sediment	PSYSEA98PSY16PSY16S
Study Area	8.2	surface sediment	PSYSEA98PSY17PSY17S
Study Area	8.2	subsurface sediment	PSYSEA98PSY27CPSY27A
Study Area	8.2	subsurface sediment	PSYSEA98PSY27CPSY27B
Study Area	8.2	subsurface sediment	PSYSEA98PSY27CPSY27C
Study Area	8.2	surface sediment	PSYSEA98PSY27CY27A01
Study Area	8.2	subsurface sediment	PSYSEA98PSY27CY27A02
Study Area	8.2	subsurface sediment	PSYSEA98PSY27CY27A03
Study Area	8.2	subsurface sediment	PSYSEA98PSY27CY27A04
Study Area	8.2	subsurface sediment	PSYSEA98PSY27CY27B05
Study Area	8.2	subsurface sediment	PSYSEA98PSY27CY27B06
Study Area	8.2	subsurface sediment	PSYSEA98PSY27CY27B07
Study Area	8.2	subsurface sediment	PSYSEA98PSY27CY27B08
Study Area	8.2	subsurface sediment	PSYSEA98PSY27CY27C09
Study Area	8.2	subsurface sediment	PSYSEA98PSY27CY27C10
Study Area	8.2	subsurface sediment	PSYSEA98PSY27CY27C11
Study Area	8.2	surface sediment	PSYSEA98PSY27PSY27S
Study Area	8.2	surface sediment	PSYSEA98PSY28PSY28S
Study Area	8.2	subsurface sediment	PSYSEA98PSY30CPSY30A
Study Area	8.2	subsurface sediment	PSYSEA98PSY30CPSY30B
Study Area	8.2	surface sediment	PSYSEA98PSY30CY30A01
Study Area	8.2	subsurface sediment	PSYSEA98PSY30CY30A02
Study Area	8.2	subsurface sediment	PSYSEA98PSY30CY30A03
Study Area	8.2	subsurface sediment	PSYSEA98PSY30CY30A04
Study Area	8.2	subsurface sediment	PSYSEA98PSY30CY30B05
Study Area	8.2	subsurface sediment	PSYSEA98PSY30CY30B06
Study Area	8.2	subsurface sediment	PSYSEA98PSY30CY30B07
Study Area	8.2	subsurface sediment	PSYSEA98PSY30CY30B08
Study Area	8.2	surface sediment	PSYSEA98PSY30PSY30S
Study Area	8.2	subsurface sediment	PSYSEA98PSY43CPSY43A
Study Area	8.2	subsurface sediment	PSYSEA98PSY43CPSY43B
Study Area	8.2	surface sediment	PSYSEA98PSY43PSY43S
Study Area	8.2	surface sediment	PSYSEA98PSY44PSY44S
Study Area	8.2	surface sediment	WLCDRD05PG07878
Study Area	8.2	surface sediment	WLCDRD05PG08080
Study Area	8.2	subsurface sediment	WLCPSK091-A
Study Area	8.2	subsurface sediment	WLCPSK091-Z
Study Area	8.2	surface sediment	WR-WSI98SD1310
Study Area	8.2	surface sediment	WR-WSI98SD1320
Study Area	8.2	surface sediment	WR-WSI98SD1330
Study Area	8.2	subsurface sediment	WR-WSI98SD1330000A
Study Area	8.2	surface sediment	WR-WSI98SD1340
Study Area	8.3	surface sediment	LW2-B022-1

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	8.3	surface sediment	LW2-B022-2
Study Area	8.3	surface sediment	LW2-C379-A
Study Area	8.3	subsurface sediment	LW2-C379-B
Study Area	8.3	subsurface sediment	LW2-C379-C
Study Area	8.3	subsurface sediment	LW2-C379-D
Study Area	8.3	subsurface sediment	LW2-C431-B
Study Area	8.3	subsurface sediment	LW2-C431-C
Study Area	8.3	subsurface sediment	LW2-C431-D
Study Area	8.3	subsurface sediment	LW2-C431-F
Study Area	8.3	surface sediment	LW2-C434-A
Study Area	8.3	subsurface sediment	LW2-C434-B
Study Area	8.3	subsurface sediment	LW2-C434-C
Study Area	8.3	subsurface sediment	LW2-C434-D
Study Area	8.3	surface sediment	LW2-G379
Study Area	8.3	surface sediment	LW2-G412
Study Area	8.3	surface sediment	LW2-G427
Study Area	8.3	surface sediment	LW2-G431
Study Area	8.3	surface sediment	LW2-G432
Study Area	8.3	surface sediment	LW2-G434
Study Area	8.3	subsurface sediment	LW3-C712-B
Study Area	8.3	subsurface sediment	LW3-C712-C
Study Area	8.3	surface sediment	LW3-G713
Study Area	8.3	surface sediment	LWG2-PG-R2GN1
Study Area	8.3	surface sediment	PSYSEA98PSY12PSY12S
Study Area	8.3	surface sediment	PSYSEA98PSY14PSY14S
Study Area	8.3	surface sediment	PSYSEA98PSY45PSY45S
Study Area	8.3	surface sediment	WLCDRD05PG08282
Study Area	8.3	subsurface sediment	WLCDRI03C15-17CSS06
Study Area	8.3	surface sediment	WLCOFJ02190119010
Study Area	8.3	surface sediment	WLCOFJ02190219020
Study Area	8.3	surface sediment	WLCOFJ02190319030
Study Area	8.3	surface sediment	WLCOFJ0219A0119A010
Study Area	8.3	surface sediment	WLCOFJ0219A0219A020
Study Area	8.3	surface sediment	WLCOFJ0219A0319A030
Study Area	8.3	surface sediment	WRD&M98DMHDMH
Study Area	8.3	surface sediment	WR-WSI98SD1350
Study Area	8.3	subsurface sediment	WR-WSI98SD1350000A
Study Area	8.4	surface sediment	LW2-C380-A
Study Area	8.4	subsurface sediment	LW2-C380-B
Study Area	8.4	subsurface sediment	LW2-C380-C
Study Area	8.4	subsurface sediment	LW2-C380-E
Study Area	8.4	subsurface sediment	LW2-C383-B
Study Area	8.4	subsurface sediment	LW2-C383-C
Study Area	8.4	subsurface sediment	LW2-C383-D
Study Area	8.4	subsurface sediment	LW2-C393-B
Study Area	8.4	subsurface sediment	LW2-C393-C
Study Area	8.4	surface sediment	LW2-C420-A
Study Area	8.4	subsurface sediment	LW2-C420-B
Study Area	8.4	subsurface sediment	LW2-C420-C
Study Area	8.4	subsurface sediment	LW2-C420-D
Study Area	8.4	surface sediment	LW2-C436-A
Study Area	8.4	subsurface sediment	LW2-C436-B
Study Area	8.4	subsurface sediment	LW2-C436-C
Study Area	8.4	subsurface sediment	LW2-C436-D
Study Area	8.4	subsurface sediment	LW2-C436-E
Study Area	8.4	subsurface sediment	LW2-C437-B
Study Area	8.4	subsurface sediment	LW2-C437-C
Study Area	8.4	subsurface sediment	LW2-C437-D

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	8.4	subsurface sediment	LW2-C437-F
Study Area	8.4	subsurface sediment	LW2-C439-B
Study Area	8.4	subsurface sediment	LW2-C439-C
Study Area	8.4	subsurface sediment	LW2-C439-D
Study Area	8.4	subsurface sediment	LW2-C439-E
Study Area	8.4	surface sediment	LW2-G380
Study Area	8.4	surface sediment	LW2-G383
Study Area	8.4	surface sediment	LW2-G385
Study Area	8.4	surface sediment	LW2-G393
Study Area	8.4	surface sediment	LW2-G419
Study Area	8.4	surface sediment	LW2-G420
Study Area	8.4	surface sediment	LW2-G428
Study Area	8.4	surface sediment	LW2-G436
Study Area	8.4	surface sediment	LW2-G437
Study Area	8.4	surface sediment	LW2-G439
Study Area	8.4	subsurface sediment	LW3-C714-B
Study Area	8.4	surface sediment	LW3-G715
Study Area	8.4	surface sediment	LWG2-PG-GN1E
Study Area	8.4	surface sediment	LWG2-PG-GN2E
Study Area	8.4	subsurface sediment	LWM-TCLPC18
Study Area	8.4	surface sediment	PSYSEA98PSY08PSY08S
Study Area	8.4	surface sediment	PSYSEA98PSY08PSY52S
Study Area	8.4	surface sediment	PSYSEA98PSY08PSY53S
Study Area	8.4	subsurface sediment	PSYSEA98PSY11CPSY11A
Study Area	8.4	subsurface sediment	PSYSEA98PSY11CPSY11B
Study Area	8.4	subsurface sediment	PSYSEA98PSY11CPSY11C
Study Area	8.4	subsurface sediment	PSYSEA98PSY11CPSY11D
Study Area	8.4	surface sediment	PSYSEA98PSY11PSY11S
Study Area	8.4	surface sediment	PSYSEA98PSY46PSY46S
Study Area	8.4	surface sediment	WLCDRD05PG08484
Study Area	8.4	surface sediment	WLCOFH02M101M101
Study Area	8.4	surface sediment	WLCOFH02M103M103
Study Area	8.4	surface sediment	WLCOFH02M104M104
Study Area	8.4	surface sediment	WLCOFH02M105M105
Study Area	8.4	surface sediment	WLCOFH02M106M106
Study Area	8.4	surface sediment	WLCOFH02M107M107
Study Area	8.4	surface sediment	WLCOFH02M108M108
Study Area	8.4	surface sediment	WLCOFH02M109M109
Study Area	8.4	surface sediment	WLCOFH02M110M110
Study Area	8.4	surface sediment	WLCOFJ02S0601S6010
Study Area	8.4	surface sediment	WR-WSI98SD1360
Study Area	8.4	subsurface sediment	WR-WSI98SD1360000A
Study Area	8.4	surface sediment	WR-WSI98SD1370000CC
Study Area	8.5	subsurface sediment	LW2-C388-B
Study Area	8.5	subsurface sediment	LW2-C388-C
Study Area	8.5	surface sediment	LW2-C397-A
Study Area	8.5	subsurface sediment	LW2-C397-B
Study Area	8.5	subsurface sediment	LW2-C397-C
Study Area	8.5	subsurface sediment	LW2-C397-D
Study Area	8.5	subsurface sediment	LW2-C402-B
Study Area	8.5	subsurface sediment	LW2-C402-C
Study Area	8.5	subsurface sediment	LW2-C402-D
Study Area	8.5	surface sediment	LW2-C440-A
Study Area	8.5	subsurface sediment	LW2-C440-B
Study Area	8.5	subsurface sediment	LW2-C440-C
Study Area	8.5	subsurface sediment	LW2-C440-D
Study Area	8.5	surface sediment	LW2-C441-A1
Study Area	8.5	subsurface sediment	LW2-C441-B1

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	8.5	subsurface sediment	LW2-C441-B2
Study Area	8.5	subsurface sediment	LW2-C441-C1
Study Area	8.5	subsurface sediment	LW2-C441-C2
Study Area	8.5	subsurface sediment	LW2-C441-D1
Study Area	8.5	subsurface sediment	LW2-C441-D2
Study Area	8.5	subsurface sediment	LW2-C445-B
Study Area	8.5	subsurface sediment	LW2-C445-C
Study Area	8.5	subsurface sediment	LW2-C445-D
Study Area	8.5	subsurface sediment	LW2-C445-E
Study Area	8.5	surface sediment	LW2-G388
Study Area	8.5	surface sediment	LW2-G397
Study Area	8.5	surface sediment	LW2-G402
Study Area	8.5	surface sediment	LW2-G424
Study Area	8.5	surface sediment	LW2-G440
Study Area	8.5	surface sediment	LW2-G441
Study Area	8.5	surface sediment	LW2-G445
Study Area	8.5	surface sediment	LW2-GBT025
Study Area	8.5	surface sediment	LW2-GBT026
Study Area	8.5	subsurface sediment	LW3-C717-B
Study Area	8.5	surface sediment	LW3-G716
Study Area	8.5	surface sediment	LW3-G717
Study Area	8.5	surface sediment	LW3-G718
Study Area	8.5	surface sediment	LWG0108R001SDS015C00
Study Area	8.5	surface sediment	LWG2-PG-GN5A
Study Area	8.5	surface sediment	LWG2-PG-GN5A-2
Study Area	8.5	surface sediment	PSYD&M97DM21DM21
Study Area	8.5	surface sediment	WLCDRD05PG08686
Study Area	8.5	subsurface sediment	WLCDRI03C18-20CSS07
Study Area	8.6	subsurface sediment	LW2-C396-B
Study Area	8.6	subsurface sediment	LW2-C396-C
Study Area	8.6	subsurface sediment	LW2-C444-B
Study Area	8.6	subsurface sediment	LW2-C444-C
Study Area	8.6	subsurface sediment	LW2-C444-D
Study Area	8.6	subsurface sediment	LW2-C444-E
Study Area	8.6	surface sediment	LW2-C447-A
Study Area	8.6	subsurface sediment	LW2-C447-B
Study Area	8.6	subsurface sediment	LW2-C447-C
Study Area	8.6	subsurface sediment	LW2-C447-D
Study Area	8.6	subsurface sediment	LW2-C447-F
Study Area	8.6	surface sediment	LW2-G396
Study Area	8.6	surface sediment	LW2-G408
Study Area	8.6	surface sediment	LW2-G429
Study Area	8.6	surface sediment	LW2-G435
Study Area	8.6	surface sediment	LW2-G444
Study Area	8.6	surface sediment	LW2-G447
Study Area	8.6	subsurface sediment	LW3-C720-B
Study Area	8.6	subsurface sediment	LW3-C721-B
Study Area	8.6	subsurface sediment	LW3-C721-C
Study Area	8.6	subsurface sediment	LW3-C721-D
Study Area	8.6	subsurface sediment	LW3-C721-E
Study Area	8.6	surface sediment	LW3-G719
Study Area	8.6	surface sediment	LW3-G720
Study Area	8.6	surface sediment	LW3-G722
Study Area	8.6	surface sediment	LWG0108R041SDS015C00
Study Area	8.6	surface sediment	PSYSEA98PSY10PSY10S
Study Area	8.6	surface sediment	PSYSEA98PSY47PSY47S
Study Area	8.6	surface sediment	PSYSEA98PSY48PSY48S
Study Area	8.6	surface sediment	WLCDRD05PG08888

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	8.6	surface sediment	WLCGNG03A2GS09A2GS09
Study Area	8.6	surface sediment	WLCGNG03A2GS10A2GS10
Study Area	8.6	subsurface sediment	WLR0499WRVC08WRVC08
Study Area	8.6	subsurface sediment	WLR0499WRVC08WRVC8C
Study Area	8.6	subsurface sediment	WLR1199WRVC03WRVC03
Study Area	8.6	surface sediment	WR-WSI98SD1380
Study Area	8.6	subsurface sediment	WR-WSI98SD1380000A
Study Area	8.6	surface sediment	WR-WSI98SD1390
Study Area	8.7	surface sediment	LW2-B023
Study Area	8.7	subsurface sediment	LW2-C415-B
Study Area	8.7	subsurface sediment	LW2-C415-C
Study Area	8.7	subsurface sediment	LW2-C415-D
Study Area	8.7	subsurface sediment	LW2-C415-E
Study Area	8.7	surface sediment	LW2-C448-A
Study Area	8.7	subsurface sediment	LW2-C448-B
Study Area	8.7	subsurface sediment	LW2-C448-C
Study Area	8.7	subsurface sediment	LW2-C448-D
Study Area	8.7	subsurface sediment	LW2-C450-B
Study Area	8.7	subsurface sediment	LW2-C450-C
Study Area	8.7	surface sediment	LW2-G415
Study Area	8.7	surface sediment	LW2-G433-1
Study Area	8.7	surface sediment	LW2-G433-2
Study Area	8.7	surface sediment	LW2-G448
Study Area	8.7	surface sediment	LW2-G450-1
Study Area	8.7	surface sediment	LW2-G450-2
Study Area	8.7	surface sediment	LW2-GBT027-1
Study Area	8.7	surface sediment	LW2-GBT027-2
Study Area	8.7	subsurface sediment	LW3-C724-B
Study Area	8.7	subsurface sediment	LW3-C724-C
Study Area	8.7	subsurface sediment	LW3-C724-E
Study Area	8.7	subsurface sediment	LW3-C724-G
Study Area	8.7	surface sediment	LW3-G725
Study Area	8.7	surface sediment	LW3-GCRSP08W
Study Area	8.7	surface sediment	LWG0108B032SDS015C00
Study Area	8.7	surface sediment	PSYSEA98PSY06PSY06S
Study Area	8.7	subsurface sediment	PSYSEA98PSY07CPSY07A
Study Area	8.7	subsurface sediment	PSYSEA98PSY07CPSY07B
Study Area	8.7	surface sediment	PSYSEA98PSY07PSY07S
Study Area	8.7	subsurface sediment	WLCDRI03C21-23CSS08
Study Area	8.7	subsurface sediment	WLCDRI03C24-26CSS09
Study Area	8.7	surface sediment	WLCGNG03A2GS11A2GS11
Study Area	8.7	subsurface sediment	WLR0499WRVC05WRA
Study Area	8.7	subsurface sediment	WLR0499WRVC05WRVC05
Study Area	8.7	subsurface sediment	WLR0499WRVC06WRVC06
Study Area	8.7	subsurface sediment	WLR0499WRVC07WRVC07
Study Area	8.7	subsurface sediment	WLR1199WRVC04WRVC04
Study Area	8.7	surface sediment	WR-WSI98SD1400
Study Area	8.7	surface sediment	WR-WSI98SD1420
Study Area	8.8	surface sediment	LW2-B024
Study Area	8.8	subsurface sediment	LW2-C405-B
Study Area	8.8	subsurface sediment	LW2-C405-C
Study Area	8.8	subsurface sediment	LW2-C405-E
Study Area	8.8	surface sediment	LW2-C449-A
Study Area	8.8	subsurface sediment	LW2-C449-B
Study Area	8.8	subsurface sediment	LW2-C449-C
Study Area	8.8	subsurface sediment	LW2-C449-E
Study Area	8.8	subsurface sediment	LW2-C453-B
Study Area	8.8	subsurface sediment	LW2-C453-C

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	8.8	subsurface sediment	LW2-C453-D
Study Area	8.8	subsurface sediment	LW2-C455-B
Study Area	8.8	subsurface sediment	LW2-C455-C
Study Area	8.8	subsurface sediment	LW2-C455-D
Study Area	8.8	subsurface sediment	LW2-C455-F
Study Area	8.8	subsurface sediment	LW2-C456-B
Study Area	8.8	subsurface sediment	LW2-C456-C
Study Area	8.8	subsurface sediment	LW2-C456-D
Study Area	8.8	subsurface sediment	LW2-C456-F
Study Area	8.8	subsurface sediment	LW2-C456-G
Study Area	8.8	surface sediment	LW2-G405
Study Area	8.8	surface sediment	LW2-G411
Study Area	8.8	surface sediment	LW2-G443
Study Area	8.8	surface sediment	LW2-G449
Study Area	8.8	surface sediment	LW2-G452
Study Area	8.8	surface sediment	LW2-G453
Study Area	8.8	surface sediment	LW2-G455
Study Area	8.8	surface sediment	LW2-G456
Study Area	8.8	surface sediment	LW2-GBT028
Study Area	8.8	subsurface sediment	LW3-C727-B
Study Area	8.8	surface sediment	LW3-G727
Study Area	8.8	surface sediment	PSYD&M97DM12DM12
Study Area	8.8	surface sediment	PSYSEA98PSY49PSY49S
Study Area	8.8	subsurface sediment	PSYSEA98PSY50CPSY50A
Study Area	8.8	subsurface sediment	PSYSEA98PSY50CPSY50B
Study Area	8.8	surface sediment	PSYSEA98PSY50PSY50S
Study Area	8.8	subsurface sediment	WLCDRI03C27-29CSS10
Study Area	8.8	subsurface sediment	WLCDRI03C30-32CSS11
Study Area	8.8	surface sediment	WLCGNG03A2BGS5S1
Study Area	8.8	surface sediment	WLCGNG03A2GS12A2GS12
Study Area	8.8	surface sediment	WLCOFH0218021802
Study Area	8.8	surface sediment	WLCOFH0218031803
Study Area	8.8	surface sediment	WLCOFH0218051805
Study Area	8.8	surface sediment	WLCOFH0218061806
Study Area	8.8	surface sediment	WLCOFH0218071807
Study Area	8.8	surface sediment	WLCOFH0218081808
Study Area	8.8	surface sediment	WLCOFH0218091809
Study Area	8.8	surface sediment	WLCOFH0218101810
Study Area	8.8	surface sediment	WLCOFJ02M0201M2010
Study Area	8.8	surface sediment	WLCOFJ02M0202M2020
Study Area	8.8	surface sediment	WLCOFJ02M02031M2031
Study Area	8.8	surface sediment	WLCOFJ02M0203M2030
Study Area	8.8	surface sediment	WLCOFJ02M0204M2040
Study Area	8.8	surface sediment	WLCOFJ02M0205M2050
Study Area	8.8	subsurface sediment	WLR0499WRVC09WRVC09
Study Area	8.8	subsurface sediment	WR-WSI98SD1410000A
Study Area	8.8	surface sediment	WR-WSI98SD1410000CC
Study Area	8.8	surface sediment	WR-WSI98SD1430
Study Area	8.8	subsurface sediment	WR-WSI98SD1430000A
Study Area	8.8	surface sediment	WR-WSI98SD1440
Study Area	8.8	surface sediment	WR-WSI98SD1460
Study Area	8.9	surface sediment	LW2-C421-A
Study Area	8.9	subsurface sediment	LW2-C421-B
Study Area	8.9	subsurface sediment	LW2-C421-C
Study Area	8.9	subsurface sediment	LW2-C421-D
Study Area	8.9	subsurface sediment	LW2-C421-E
Study Area	8.9	subsurface sediment	LW2-C421-F
Study Area	8.9	subsurface sediment	LW2-C457-B

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	8.9	subsurface sediment	LW2-C457-C
Study Area	8.9	subsurface sediment	LW2-C457-D
Study Area	8.9	subsurface sediment	LW2-C457-E
Study Area	8.9	subsurface sediment	LW2-C458-B
Study Area	8.9	subsurface sediment	LW2-C458-B2
Study Area	8.9	subsurface sediment	LW2-C458-C
Study Area	8.9	subsurface sediment	LW2-C458-C2
Study Area	8.9	subsurface sediment	LW2-C458-D
Study Area	8.9	subsurface sediment	LW2-C458-D2
Study Area	8.9	surface sediment	LW2-G416
Study Area	8.9	surface sediment	LW2-G421
Study Area	8.9	surface sediment	LW2-G438
Study Area	8.9	surface sediment	LW2-G457
Study Area	8.9	surface sediment	LW2-G458
Study Area	8.9	surface sediment	LW2-G460
Study Area	8.9	surface sediment	LW3-G729
Study Area	8.9	surface sediment	NA-4A-0005
Study Area	8.9	subsurface sediment	NA-4A-0508
Study Area	8.9	subsurface sediment	NA-4A-0812
Study Area	8.9	subsurface sediment	NA-4A-1216
Study Area	8.9	subsurface sediment	NA-4A-1620
Study Area	8.9	subsurface sediment	NA-4A-2024
Study Area	8.9	subsurface sediment	NA-4A-2428
Study Area	8.9	subsurface sediment	NA-4A-2832
Study Area	8.9	subsurface sediment	NA-4A-3238
Study Area	8.9	subsurface sediment	NA-4A-3844
Study Area	8.9	subsurface sediment	NA-4A-4448
Study Area	8.9	subsurface sediment	NA-4A-5864
Study Area	8.9	subsurface sediment	NA-4A-6874
Study Area	8.9	subsurface sediment	NA-4A-7884
Study Area	8.9	subsurface sediment	NA-4A-8894
Study Area	8.9	surface sediment	NA-4B-0024
Study Area	8.9	subsurface sediment	NA-4B-2450
Study Area	8.9	subsurface sediment	NA-4B-5094
Study Area	8.9	surface sediment	PSYD&M97DM16DM16
Study Area	8.9	surface sediment	PSYSEA98PSY05PSY05S
Study Area	8.9	surface sediment	WLCDRD05PG09090
Study Area	8.9	surface sediment	WLCGNG03A2BGS6S1
Study Area	8.9	surface sediment	WLCGNG03A2BGS7S1
Study Area	8.9	surface sediment	WLCGNG03HA37A
Study Area	8.9	subsurface sediment	WLCGNG03HA37B
Study Area	8.9	surface sediment	WRD&M98DMGDMG
Study Area	8.9	surface sediment	WR-WSI98SD1450
Study Area	8.9	surface sediment	WR-WSI98SD1470
Study Area	9	subsurface sediment	LW2-C417-B
Study Area	9	subsurface sediment	LW2-C417-C
Study Area	9	subsurface sediment	LW2-C417-D
Study Area	9	surface sediment	LW2-C426-A
Study Area	9	subsurface sediment	LW2-C426-B
Study Area	9	subsurface sediment	LW2-C426-C
Study Area	9	subsurface sediment	LW2-C426-D
Study Area	9	surface sediment	LW2-C461-A
Study Area	9	subsurface sediment	LW2-C461-B
Study Area	9	subsurface sediment	LW2-C461-C
Study Area	9	subsurface sediment	LW2-C461-D
Study Area	9	subsurface sediment	LW2-C462-B
Study Area	9	subsurface sediment	LW2-C462-C
Study Area	9	subsurface sediment	LW2-C462-D

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	9	surface sediment	LW2-G417
Study Area	9	surface sediment	LW2-G426
Study Area	9	surface sediment	LW2-G442
Study Area	9	surface sediment	LW2-G461
Study Area	9	surface sediment	LW2-G462
Study Area	9	surface sediment	LW2-G467
Study Area	9	surface sediment	LW2-GBT029
Study Area	9	surface sediment	LWG0109B028SDS015C00
Study Area	9	subsurface sediment	LWM-METCS19-1
Study Area	9	subsurface sediment	LWM-METCS19-2
Study Area	9	subsurface sediment	LWM-TCLPC19
Study Area	9	subsurface sediment	LWM-TCLPC19-2
Study Area	9	surface sediment	PSYSEA98PSY04PSY04S
Study Area	9	surface sediment	WLCDRD05PG09292
Study Area	9	subsurface sediment	WLCDRI03C33-35CSS12
Study Area	9	surface sediment	WLCGNG03HA38A
Study Area	9	subsurface sediment	WLCGNG03HA38B
Study Area	9	surface sediment	WLCGNG03HA39A
Study Area	9	subsurface sediment	WLCGNG03HA39B
Study Area	9	surface sediment	WR-WSI98SD1490
Study Area	9.1	surface sediment	LW2-B020
Study Area	9.1	subsurface sediment	LW2-C425-B1
Study Area	9.1	subsurface sediment	LW2-C425-B2
Study Area	9.1	subsurface sediment	LW2-C425-C1
Study Area	9.1	subsurface sediment	LW2-C425-C2
Study Area	9.1	subsurface sediment	LW2-C425-D2
Study Area	9.1	subsurface sediment	LW2-C425-E1
Study Area	9.1	subsurface sediment	LW2-C425-F1
Study Area	9.1	surface sediment	LW2-C430-A
Study Area	9.1	subsurface sediment	LW2-C430-B
Study Area	9.1	subsurface sediment	LW2-C430-C
Study Area	9.1	subsurface sediment	LW2-C430-E
Study Area	9.1	subsurface sediment	LW2-C468-B
Study Area	9.1	subsurface sediment	LW2-C468-C
Study Area	9.1	subsurface sediment	LW2-C468-D
Study Area	9.1	surface sediment	LW2-G425
Study Area	9.1	surface sediment	LW2-G430
Study Area	9.1	surface sediment	LW2-G446
Study Area	9.1	surface sediment	LW2-G464
Study Area	9.1	surface sediment	LW2-G468
Study Area	9.1	surface sediment	LW2-G469
Study Area	9.1	surface sediment	LW2-G473
Study Area	9.1	surface sediment	LW3-G730
Study Area	9.1	surface sediment	LW3-G731
Study Area	9.1	surface sediment	LW3-G732-1
Study Area	9.1	surface sediment	LW3-G732-2
Study Area	9.1	surface sediment	LWG0109R001SDS015C10
Study Area	9.1	surface sediment	LWG0109R001SDS015C20
Study Area	9.1	surface sediment	LWG0109R001SDS015C31
Study Area	9.1	subsurface sediment	LWM-TCLPC23
Study Area	9.1	subsurface sediment	PSYSEA98PSY01CPSY01A
Study Area	9.1	subsurface sediment	PSYSEA98PSY01CPSY01B
Study Area	9.1	surface sediment	PSYSEA98PSY01PSY01S
Study Area	9.1	surface sediment	WLCDRD05PG09494
Study Area	9.1	surface sediment	WLCGNG03HA41A
Study Area	9.1	subsurface sediment	WLCGNG03HA41B
Study Area	9.1	subsurface sediment	WLCGNG03HA42
Study Area	9.1	surface sediment	WLCOFJ02M0302M3020

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	9.1	surface sediment	WLCOFJ02M0303M3030
Study Area	9.1	surface sediment	WLCOFJ02M0304M3040
Study Area	9.1	surface sediment	WLCOFJ02M0305M3050
Study Area	9.1	surface sediment	WLCOFJ02S0203S2030
Study Area	9.1	surface sediment	WLCOFJ02S0204S2040
Study Area	9.1	surface sediment	WR-WSI98SD1480
Study Area	9.1	surface sediment	WR-WSI98SD1500
Study Area	9.1	subsurface sediment	WR-WSI98SD1500000A
Study Area	9.1	subsurface sediment	WR-WSI98SD1510000A
Study Area	9.1	surface sediment	WR-WSI98SD1510000CC
Study Area	9.2	surface sediment	LW2-C471-A
Study Area	9.2	subsurface sediment	LW2-C471-B
Study Area	9.2	subsurface sediment	LW2-C471-C
Study Area	9.2	subsurface sediment	LW2-C471-D
Study Area	9.2	subsurface sediment	LW2-C474-B
Study Area	9.2	subsurface sediment	LW2-C474-C
Study Area	9.2	subsurface sediment	LW2-C474-D
Study Area	9.2	subsurface sediment	LW2-C477-B
Study Area	9.2	subsurface sediment	LW2-C477-C
Study Area	9.2	surface sediment	LW2-G451
Study Area	9.2	surface sediment	LW2-G466
Study Area	9.2	surface sediment	LW2-G471
Study Area	9.2	surface sediment	LW2-G474
Study Area	9.2	surface sediment	LW2-G477
Study Area	9.2	surface sediment	LW2-G479
Study Area	9.2	surface sediment	LW2-G480
Study Area	9.2	subsurface sediment	LW3-C733-B
Study Area	9.2	surface sediment	LW3-GSP09W
Study Area	9.2	surface sediment	PSYSEA98PSY03PSY03S
Study Area	9.2	surface sediment	WLCDRD05PG09696
Study Area	9.2	subsurface sediment	WLCDRI03C36-38CSS13
Study Area	9.2	surface sediment	WLCGNG03HA43A
Study Area	9.2	subsurface sediment	WLCGNG03HA43B
Study Area	9.2	surface sediment	WLCOFJ02S0201S2010
Study Area	9.2	surface sediment	WLCOFJ02S0202S2020
Study Area	9.2	surface sediment	WLCOFJ02S0205S2050
Study Area	9.3	surface sediment	LW2-B025-1
Study Area	9.3	surface sediment	LW2-B025-2
Study Area	9.3	subsurface sediment	LW2-C454-B
Study Area	9.3	subsurface sediment	LW2-C454-C
Study Area	9.3	subsurface sediment	LW2-C454-D
Study Area	9.3	subsurface sediment	LW2-C454-E
Study Area	9.3	subsurface sediment	LW2-C454-H
Study Area	9.3	surface sediment	LW2-G454
Study Area	9.3	surface sediment	LW2-G459
Study Area	9.3	surface sediment	LW2-G475-1
Study Area	9.3	surface sediment	LW2-G475-2
Study Area	9.3	surface sediment	LW2-G482
Study Area	9.3	surface sediment	LW2-GBT030
Study Area	9.3	surface sediment	WLCDRD05PG09898
Study Area	9.3	subsurface sediment	WLCDRI03C39-41CSS14
Study Area	9.3	surface sediment	WLCOFJ02S0502S5020
Study Area	9.3	surface sediment	WLCOFJ02S0503S5030
Study Area	9.3	surface sediment	WLCOFJ02S0504S5040
Study Area	9.3	surface sediment	WLCOFJ02S0505S5050
Study Area	9.3	surface sediment	WLCOFJ02S0506S5060
Study Area	9.3	surface sediment	WLCOFJ02S0507S5070
Study Area	9.3	subsurface sediment	WLR0499WRVC04WRVC04

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	9.4	surface sediment	LW2-G463
Study Area	9.4	surface sediment	LW2-G465
Study Area	9.4	surface sediment	LW2-G478
Study Area	9.4	surface sediment	LW2-G485
Study Area	9.4	subsurface sediment	LW3-C735-B
Study Area	9.4	subsurface sediment	LW3-C735-C
Study Area	9.4	surface sediment	LW3-G734
Study Area	9.4	surface sediment	LW3-G735
Study Area	9.4	surface sediment	LW3-G736
Study Area	9.4	surface sediment	LWG0109B026SDS015C00
Study Area	9.4	surface sediment	WLCDRD05PG03333
Study Area	9.4	surface sediment	WLCDRD05PG03535
Study Area	9.4	surface sediment	WLCDRD05PG100100
Study Area	9.4	subsurface sediment	WLCDRD05VC03333
Study Area	9.4	subsurface sediment	WLCDRI03C42-44CSS15
Study Area	9.5	surface sediment	LW2-G470
Study Area	9.5	surface sediment	LW2-G472
Study Area	9.5	surface sediment	LW2-G483
Study Area	9.5	surface sediment	LW2-G488
Study Area	9.5	surface sediment	LW2-GBT031
Study Area	9.5	surface sediment	LW3-G737
Study Area	9.5	surface sediment	LW3-RC483-001
Study Area	9.5	subsurface sediment	LW3-RC483-005
Study Area	9.5	subsurface sediment	LW3-RC483-009
Study Area	9.5	subsurface sediment	LW3-RC483-013
Study Area	9.5	subsurface sediment	LW3-RC483-017
Study Area	9.5	subsurface sediment	LW3-RC483-021
Study Area	9.5	subsurface sediment	LW3-RC483-025
Study Area	9.5	subsurface sediment	LW3-RC483-029
Study Area	9.5	subsurface sediment	LW3-RC483-033
Study Area	9.5	subsurface sediment	LW3-RC483-037
Study Area	9.5	subsurface sediment	LW3-RC483-041
Study Area	9.5	subsurface sediment	LW3-RC483-045
Study Area	9.5	subsurface sediment	LW3-RC483-049
Study Area	9.5	subsurface sediment	LW3-RC483-053
Study Area	9.5	subsurface sediment	LW3-RC483-057
Study Area	9.5	subsurface sediment	LW3-RC483-061
Study Area	9.5	subsurface sediment	LW3-RC483-065
Study Area	9.5	subsurface sediment	LW3-RC483-069
Study Area	9.5	subsurface sediment	LW3-RC483-073
Study Area	9.5	subsurface sediment	LW3-RC483-077
Study Area	9.5	subsurface sediment	LW3-RC483-081
Study Area	9.5	subsurface sediment	LW3-RC483-085
Study Area	9.5	subsurface sediment	LW3-RC483-089
Study Area	9.5	subsurface sediment	LW3-RC483-093
Study Area	9.5	subsurface sediment	LW3-RC483-097
Study Area	9.5	subsurface sediment	LW3-RC483-101
Study Area	9.5	subsurface sediment	LW3-RC483-105
Study Area	9.5	subsurface sediment	LW3-RC483-109
Study Area	9.5	subsurface sediment	LW3-RC483-113
Study Area	9.5	subsurface sediment	LW3-RC483-117
Study Area	9.5	subsurface sediment	LW3-RC483-121
Study Area	9.5	subsurface sediment	LW3-RC483-125
Study Area	9.5	subsurface sediment	LW3-RC483-129
Study Area	9.5	subsurface sediment	LW3-RC483-133
Study Area	9.5	subsurface sediment	LW3-RC483-137
Study Area	9.5	subsurface sediment	LW3-RC483-141
Study Area	9.5	subsurface sediment	LW3-RC483-145

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	9.5	subsurface sediment	LW3-RC483-149
Study Area	9.5	surface sediment	LW3-RC483-A
Study Area	9.5	subsurface sediment	LW3-RC483-B
Study Area	9.5	subsurface sediment	LW3-RC483-C
Study Area	9.5	subsurface sediment	LW3-RC483-D
Study Area	9.5	subsurface sediment	LW3-RC483-E
Study Area	9.5	subsurface sediment	LW3-RC483-F
Study Area	9.5	subsurface sediment	LW3-RC483-G
Study Area	9.5	subsurface sediment	LW3-RC483-H
Study Area	9.5	subsurface sediment	LW3-RC483-I
Study Area	9.5	subsurface sediment	LW3-RC483-J
Study Area	9.5	surface sediment	WLCDRD05PG03737
Study Area	9.5	surface sediment	WLCDRD05PG102102
Study Area	9.5	subsurface sediment	WLCDRD05VC03535
Study Area	9.5	subsurface sediment	WLCDRD05VC03737
Study Area	9.5	surface sediment	WLCT0I98GRAB09GRAB09
Study Area	9.6	surface sediment	LW2-B026
Study Area	9.6	surface sediment	LW2-G476
Study Area	9.6	surface sediment	LW2-G486
Study Area	9.6	surface sediment	LW2-G494
Study Area	9.6	subsurface sediment	LW3-C738-B
Study Area	9.6	subsurface sediment	LW3-C738-C
Study Area	9.6	subsurface sediment	LW3-C738-D
Study Area	9.6	subsurface sediment	LW3-C738-F
Study Area	9.6	surface sediment	LW3-G738
Study Area	9.6	surface sediment	WLCDRD05PG03939
Study Area	9.6	surface sediment	WLCDRD05PG104104
Study Area	9.6	surface sediment	WLCDRD05PG136136Dup
Study Area	9.6	subsurface sediment	WLCDRD05VC03939
Study Area	9.6	subsurface sediment	WLCDRI03C45-47CSS16
Study Area	9.6	subsurface sediment	WLR0499WRVC03WRVC03
Study Area	9.6	subsurface sediment	WLR1199WRVC05WRVC05
Study Area	9.7	subsurface sediment	LW2-C492-B
Study Area	9.7	subsurface sediment	LW2-C492-C
Study Area	9.7	surface sediment	LW2-G481
Study Area	9.7	surface sediment	LW2-G489
Study Area	9.7	surface sediment	LW2-G492-1
Study Area	9.7	surface sediment	LW2-G492-2
Study Area	9.7	surface sediment	LW2-G497
Study Area	9.7	surface sediment	LW2-GBT032
Study Area	9.7	subsurface sediment	LW3-C739-B
Study Area	9.7	subsurface sediment	LW3-C739-C
Study Area	9.7	subsurface sediment	LW3-C739-D
Study Area	9.7	subsurface sediment	LW3-C739-E
Study Area	9.7	surface sediment	LW3-G739
Study Area	9.7	surface sediment	LW3-G740
Study Area	9.7	surface sediment	LWG0109R002SDS015C00
Study Area	9.7	surface sediment	LWG0109R040SDS015C00
Study Area	9.7	surface sediment	LWG0109R041SDS015C00
Study Area	9.7	subsurface sediment	LWM-METCS24
Study Area	9.7	surface sediment	PSYSEA98PSY70PSY70S
Study Area	9.7	surface sediment	WLCDRD05PG04141
Study Area	9.7	subsurface sediment	WLCDRD05VC04141
Study Area	9.7	subsurface sediment	WLCDRI03C48-50CSS17
Study Area	9.7	subsurface sediment	WLCDRI03HCVC53CSS19
Study Area	9.7	surface sediment	WRD&M98DMEDME
Study Area	9.8	surface sediment	LW2-G484
Study Area	9.8	surface sediment	LW2-G493

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	9.8	surface sediment	LW3-G741
Study Area	9.8	surface sediment	LWG0109B027SDS015C10
Study Area	9.8	surface sediment	LWG0109B027SDS015C20
Study Area	9.8	surface sediment	LWG0109B027SDS015C31
Study Area	9.8	surface sediment	PSYSEA98PSY71PSY71S
Study Area	9.8	surface sediment	PSYSEA98PSY77PSY77S
Study Area	9.8	surface sediment	WLCDRD05PG04343
Study Area	9.8	subsurface sediment	WLCDRD05VC04343
Study Area	9.8	surface sediment	WLCT0I98GRAB10GRAB10
Study Area	9.9	surface sediment	LW2-G487
Study Area	9.9	subsurface sediment	LW3-C742-B
Study Area	9.9	subsurface sediment	LW3-C742-C
Study Area	9.9	subsurface sediment	LW3-C743-B
Study Area	9.9	subsurface sediment	LW3-C743-D
Study Area	9.9	surface sediment	LW3-G742
Study Area	9.9	surface sediment	LW3-G743
Study Area	9.9	surface sediment	LW3-G744
Study Area	9.9	surface sediment	LW3-G745
Study Area	9.9	surface sediment	LW3-GSP10E
Study Area	9.9	surface sediment	WLCDRD05PG04545
Study Area	9.9	surface sediment	WLCDRD05PG135135Dup
Study Area	9.9	subsurface sediment	WLCDRD05VC04545
Study Area	9.9	subsurface sediment	WLCDRI03C51-52CSS18
Study Area	9.9	surface sediment	WRD&M98DMDDMD
Study Area	9.9	surface sediment	WRD&M98DMFDMF
Study Area	10	surface sediment	LW2-G490
Study Area	10	surface sediment	LW2-G491
Study Area	10	surface sediment	LW2-G496
Study Area	10	surface sediment	LW2-G499
Study Area	10	surface sediment	LW2-G501
Study Area	10	surface sediment	LW2-GBT033
Study Area	10	subsurface sediment	LW3-C746-B
Study Area	10	subsurface sediment	LW3-C746-D
Study Area	10	surface sediment	LW3-G746
Study Area	10	subsurface sediment	WLCAYH00SD04SD04D
Study Area	10	surface sediment	WLCAYH00SD04SD04S
Study Area	10	surface sediment	WLCGAL00GAUPOFGAUPOF
Study Area	10	subsurface sediment	WLR0797WRGC32RGC32A
Study Area	10	subsurface sediment	WLR0797WRGC34RGC34A
Study Area	10.1	surface sediment	LW2-G495
Study Area	10.1	surface sediment	LW2-G498
Study Area	10.1	subsurface sediment	LW3-C747-B
Study Area	10.1	subsurface sediment	LW3-C747-C
Study Area	10.1	subsurface sediment	LW3-C747-E
Study Area	10.1	subsurface sediment	LW3-C748-B1
Study Area	10.1	subsurface sediment	LW3-C748-B2
Study Area	10.1	subsurface sediment	LW3-C748-C1
Study Area	10.1	subsurface sediment	LW3-C748-C2
Study Area	10.1	subsurface sediment	LW3-C748-D1
Study Area	10.1	subsurface sediment	LW3-C748-D2
Study Area	10.1	subsurface sediment	LW3-C749-B
Study Area	10.1	subsurface sediment	LW3-C749-C
Study Area	10.1	surface sediment	LW3-G747
Study Area	10.1	surface sediment	LW3-G748
Study Area	10.1	surface sediment	LW3-G750
Study Area	10.1	surface sediment	LW3-G751
Study Area	10.1	surface sediment	WLCDRD05PG04747
Study Area	10.1	subsurface sediment	WLCDRD05VC04747

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	10.1	surface sediment	WLCGAL00GAPD01GAPD01
Study Area	10.1	surface sediment	WLCGAL00GAPD02APD02D
Study Area	10.1	surface sediment	WLCGAL00GAPD02GAPD02
Study Area	10.1	subsurface sediment	WLR0797WRGC33RGC33A
Study Area	10.1	subsurface sediment	WLR0797WRGC35RGC35A
Study Area	10.2	surface sediment	LW2-G500
Study Area	10.2	surface sediment	LW2-G503
Study Area	10.2	subsurface sediment	LW3-C752-B
Study Area	10.2	subsurface sediment	LW3-C752-C
Study Area	10.2	subsurface sediment	LW3-C752-D
Study Area	10.2	surface sediment	LW3-G752
Study Area	10.2	surface sediment	LW3-GCA10W-C00
Study Area	10.2	surface sediment	LW3-GCR10W
Study Area	10.2	surface sediment	PSYSEA98PSY76PSY76S
Study Area	10.2	surface sediment	WLCDRD05PG106106
Study Area	10.2	subsurface sediment	WLCDRD05VC04949
Study Area	10.2	subsurface sediment	WLCDRD05VC106106
Study Area	10.2	surface sediment	WLCSPL03SED10SED10
Study Area	10.2	surface sediment	WLCSPL03SED11SED11
Study Area	10.2	surface sediment	WLCT1F00T1S01T1S01
Study Area	10.3	surface sediment	LW2-G502
Study Area	10.3	surface sediment	LW2-G504
Study Area	10.3	surface sediment	LW2-G506
Study Area	10.3	subsurface sediment	LW3-C753-B
Study Area	10.3	subsurface sediment	LW3-C753-C
Study Area	10.3	surface sediment	LW3-G753
Study Area	10.3	surface sediment	LW3-GSP10W
Study Area	10.3	surface sediment	WLCDRD05PG108108
Study Area	10.3	subsurface sediment	WLCDRD05VC05151
Study Area	10.3	subsurface sediment	WLCDRD05VC108108
Study Area	10.3	subsurface sediment	WLCDRD05VC110110
Study Area	10.3	surface sediment	WLCSPL03SED01SED01
Study Area	10.3	surface sediment	WLCSPL03SED02SED02
Study Area	10.3	surface sediment	WLCSPL03SED03SED03
Study Area	10.3	surface sediment	WLCSPL03SED04SED04
Study Area	10.3	surface sediment	WLCSPL03SED05SED05
Study Area	10.3	surface sediment	WLCSPL03SED06SED06
Study Area	10.3	surface sediment	WLCSPL03SED07SED07
Study Area	10.3	surface sediment	WLCSPL03SED08SED08
Study Area	10.3	surface sediment	WLCSPL03SED09SED09
Study Area	10.3	surface sediment	WLCSPL03SED12SED12
Study Area	10.3	surface sediment	WLCSPL03SED13SED13
Study Area	10.3	surface sediment	WLCSPL03SED14SED14
Study Area	10.3	surface sediment	WLCSPL03SED15SED15
Study Area	10.3	surface sediment	WLCSPL03SED16SED16
Study Area	10.3	surface sediment	WLR0797WRBC36WRBC36
Study Area	10.4	surface sediment	LW2-G505
Study Area	10.4	surface sediment	LW2-G508
Study Area	10.4	subsurface sediment	LW3-C757-B
Study Area	10.4	subsurface sediment	LW3-C757-C
Study Area	10.4	subsurface sediment	LW3-C757-E
Study Area	10.4	surface sediment	LW3-G754
Study Area	10.4	surface sediment	LW3-G755
Study Area	10.4	surface sediment	LW3-G756
Study Area	10.4	surface sediment	LW3-RC01-001
Study Area	10.4	subsurface sediment	LW3-RC01-005
Study Area	10.4	subsurface sediment	LW3-RC01-009
Study Area	10.4	subsurface sediment	LW3-RC01-013

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	10.4	subsurface sediment	LW3-RC01-017
Study Area	10.4	subsurface sediment	LW3-RC01-021
Study Area	10.4	subsurface sediment	LW3-RC01-025
Study Area	10.4	subsurface sediment	LW3-RC01-029
Study Area	10.4	subsurface sediment	LW3-RC01-033
Study Area	10.4	subsurface sediment	LW3-RC01-037
Study Area	10.4	subsurface sediment	LW3-RC01-041
Study Area	10.4	subsurface sediment	LW3-RC01-045
Study Area	10.4	subsurface sediment	LW3-RC01-049
Study Area	10.4	subsurface sediment	LW3-RC01-053
Study Area	10.4	subsurface sediment	LW3-RC01-057
Study Area	10.4	subsurface sediment	LW3-RC01-061
Study Area	10.4	subsurface sediment	LW3-RC01-065
Study Area	10.4	subsurface sediment	LW3-RC01-069
Study Area	10.4	subsurface sediment	LW3-RC01-073
Study Area	10.4	subsurface sediment	LW3-RC01-077
Study Area	10.4	subsurface sediment	LW3-RC01-081
Study Area	10.4	subsurface sediment	LW3-RC01-085
Study Area	10.4	subsurface sediment	LW3-RC01-089
Study Area	10.4	subsurface sediment	LW3-RC01-093
Study Area	10.4	subsurface sediment	LW3-RC01-097
Study Area	10.4	subsurface sediment	LW3-RC01-101
Study Area	10.4	subsurface sediment	LW3-RC01-105
Study Area	10.4	subsurface sediment	LW3-RC01-109
Study Area	10.4	subsurface sediment	LW3-RC01-113
Study Area	10.4	subsurface sediment	LW3-RC01-117
Study Area	10.4	subsurface sediment	LW3-RC01-121
Study Area	10.4	subsurface sediment	LW3-RC01-125
Study Area	10.4	subsurface sediment	LW3-RC01-129
Study Area	10.4	subsurface sediment	LW3-RC01-133
Study Area	10.4	subsurface sediment	LW3-RC01-137
Study Area	10.4	surface sediment	LW3-RC01-A
Study Area	10.4	subsurface sediment	LW3-RC01-B
Study Area	10.4	subsurface sediment	LW3-RC01-C
Study Area	10.4	subsurface sediment	LW3-RC01-D
Study Area	10.4	subsurface sediment	LW3-RC01-E
Study Area	10.4	subsurface sediment	LW3-RC01-F
Study Area	10.4	subsurface sediment	LW3-RC01-G
Study Area	10.4	subsurface sediment	LW3-RC01-H
Study Area	10.4	subsurface sediment	LW3-RC01-I
Study Area	10.4	surface sediment	WLCAYH00SD03SD03S
Study Area	10.4	subsurface sediment	WLCDRD05VC05353
Study Area	10.5	surface sediment	LW2-G507
Study Area	10.5	surface sediment	LW2-G510
Study Area	10.5	subsurface sediment	LW3-C760-B
Study Area	10.5	subsurface sediment	LW3-C760-C
Study Area	10.5	subsurface sediment	LW3-C760-D
Study Area	10.5	subsurface sediment	LW3-C762-B
Study Area	10.5	subsurface sediment	LW3-C762-C
Study Area	10.5	subsurface sediment	LW3-C762-D
Study Area	10.5	subsurface sediment	LW3-C762-E
Study Area	10.5	surface sediment	LW3-G758
Study Area	10.5	surface sediment	LW3-G759-1
Study Area	10.5	surface sediment	LW3-G759-2
Study Area	10.5	surface sediment	LW3-G760
Study Area	10.5	surface sediment	LW3-G761
Study Area	10.5	surface sediment	LW3-G763
Study Area	10.5	surface sediment	WLCDRD05PG112112

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	10.5	surface sediment	WLCDRD05PG114114
Study Area	10.5	subsurface sediment	WLCDRD05VC05555
Study Area	10.5	subsurface sediment	WLCDRD05VC114114
Study Area	10.5	surface sediment	WLCT0I98GRAB11GRAB11
Study Area	10.5	surface sediment	WRD&M98DMCDMC
Study Area	10.6	surface sediment	LW2-G509
Study Area	10.6	surface sediment	LW2-G512
Study Area	10.6	surface sediment	LW2-G514
Study Area	10.6	subsurface sediment	LW3-C764-B1
Study Area	10.6	subsurface sediment	LW3-C764-B2
Study Area	10.6	subsurface sediment	LW3-C764-C1
Study Area	10.6	subsurface sediment	LW3-C764-C2
Study Area	10.6	subsurface sediment	LW3-C764-D1
Study Area	10.6	subsurface sediment	LW3-C764-D2
Study Area	10.6	surface sediment	LW3-G764
Study Area	10.6	surface sediment	LW3-G765
Study Area	10.6	surface sediment	LW3-G766
Study Area	10.6	surface sediment	LW3-G767
Study Area	10.6	surface sediment	WLCDRD05PG116116
Study Area	10.6	subsurface sediment	WLCDRD05VC05757
Study Area	10.6	subsurface sediment	WLCDRD05VC116116
Study Area	10.6	surface sediment	WRD&M98DMBDMB
Study Area	10.7	surface sediment	LW2-G511
Study Area	10.7	surface sediment	LW2-G515
Study Area	10.7	surface sediment	LW3-G768
Study Area	10.7	surface sediment	LW3-G769
Study Area	10.7	surface sediment	PSYSEA98PSY72PSY72S
Study Area	10.7	surface sediment	PSYSEA98PSY72PSY74S
Study Area	10.7	surface sediment	PSYSEA98PSY72PSY75S
Study Area	10.7	surface sediment	WLCDRD05PG118118
Study Area	10.7	subsurface sediment	WLCDRD05VC05959
Study Area	10.7	subsurface sediment	WLCDRD05VC118118
Study Area	10.7	surface sediment	WLCT1F00T1S02T1S02
Study Area	10.7	surface sediment	WRD&M98DMADMA
Study Area	10.8	surface sediment	LW2-G513
Study Area	10.8	surface sediment	LW2-G517
Study Area	10.8	surface sediment	LW3-G770
Study Area	10.8	subsurface sediment	WLCAYH00SD02SD02D
Study Area	10.8	surface sediment	WLCAYH00SD02SD02S
Study Area	10.8	surface sediment	WLCDRD05PG06161
Study Area	10.8	surface sediment	WLCDRD05PG120120
Study Area	10.8	subsurface sediment	WLCDRD05VC06161
Study Area	10.8	subsurface sediment	WLCDRD05VC120120
Study Area	10.8	surface sediment	WLCT1F00T1S03T1S03
Study Area	10.8	surface sediment	WLCT1F00T1S04T1S04
Study Area	10.9	surface sediment	LW2-G518
Study Area	10.9	surface sediment	LW3-G771
Study Area	10.9	surface sediment	LW3-RC02-001
Study Area	10.9	subsurface sediment	LW3-RC02-005
Study Area	10.9	subsurface sediment	LW3-RC02-009
Study Area	10.9	subsurface sediment	LW3-RC02-013
Study Area	10.9	subsurface sediment	LW3-RC02-017
Study Area	10.9	subsurface sediment	LW3-RC02-021
Study Area	10.9	subsurface sediment	LW3-RC02-025
Study Area	10.9	subsurface sediment	LW3-RC02-029
Study Area	10.9	subsurface sediment	LW3-RC02-033
Study Area	10.9	subsurface sediment	LW3-RC02-037
Study Area	10.9	subsurface sediment	LW3-RC02-041

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	10.9	subsurface sediment	LW3-RC02-045
Study Area	10.9	subsurface sediment	LW3-RC02-049
Study Area	10.9	subsurface sediment	LW3-RC02-053
Study Area	10.9	subsurface sediment	LW3-RC02-057
Study Area	10.9	subsurface sediment	LW3-RC02-061
Study Area	10.9	subsurface sediment	LW3-RC02-065
Study Area	10.9	subsurface sediment	LW3-RC02-069
Study Area	10.9	subsurface sediment	LW3-RC02-073
Study Area	10.9	subsurface sediment	LW3-RC02-077
Study Area	10.9	subsurface sediment	LW3-RC02-081
Study Area	10.9	subsurface sediment	LW3-RC02-085
Study Area	10.9	subsurface sediment	LW3-RC02-089
Study Area	10.9	subsurface sediment	LW3-RC02-093
Study Area	10.9	subsurface sediment	LW3-RC02-097
Study Area	10.9	subsurface sediment	LW3-RC02-101
Study Area	10.9	subsurface sediment	LW3-RC02-105
Study Area	10.9	subsurface sediment	LW3-RC02-109
Study Area	10.9	subsurface sediment	LW3-RC02-113
Study Area	10.9	subsurface sediment	LW3-RC02-117
Study Area	10.9	subsurface sediment	LW3-RC02-121
Study Area	10.9	subsurface sediment	LW3-RC02-125
Study Area	10.9	subsurface sediment	LW3-RC02-129
Study Area	10.9	subsurface sediment	LW3-RC02-133
Study Area	10.9	subsurface sediment	LW3-RC02-137
Study Area	10.9	subsurface sediment	LW3-RC02-141
Study Area	10.9	subsurface sediment	LW3-RC02-145
Study Area	10.9	subsurface sediment	LW3-RC02-149
Study Area	10.9	surface sediment	LW3-RC02-A
Study Area	10.9	subsurface sediment	LW3-RC02-B
Study Area	10.9	subsurface sediment	LW3-RC02-C
Study Area	10.9	subsurface sediment	LW3-RC02-D
Study Area	10.9	subsurface sediment	LW3-RC02-E
Study Area	10.9	subsurface sediment	LW3-RC02-F
Study Area	10.9	subsurface sediment	LW3-RC02-G
Study Area	10.9	subsurface sediment	LW3-RC02-H
Study Area	10.9	subsurface sediment	LW3-RC02-I
Study Area	10.9	subsurface sediment	LW3-RC02-J
Study Area	10.9	surface sediment	WLCDRD05PG06363
Study Area	10.9	surface sediment	WLCT0I98GRAB12GRAB12
Study Area	10.9	surface sediment	WLCT1F00T1S05T1S05
Study Area	10.9	surface sediment	WLCT1F00T1S06T1S06
Study Area	11	surface sediment	LW2-G516
Study Area	11	surface sediment	LW3-G772
Study Area	11	surface sediment	RM11E-G001
Study Area	11	surface sediment	RM11E-G002
Study Area	11	subsurface sediment	WLCAYH00SD01SD01D
Study Area	11	surface sediment	WLCAYH00SD01SD01S
Study Area	11	surface sediment	WLCDRD05PG122122
Study Area	11	subsurface sediment	WLCDRD05VC122122
Study Area	11	subsurface sediment	WLCDRD05VC124124
Study Area	11	surface sediment	WLCT1F00T1S07T1S07
Study Area	11	surface sediment	WLCT1F00T1S08T1S08
Study Area	11.1	subsurface sediment	LW3-C773-B1
Study Area	11.1	subsurface sediment	LW3-C773-B2
Study Area	11.1	subsurface sediment	LW3-C773-C1
Study Area	11.1	subsurface sediment	LW3-C773-C2
Study Area	11.1	subsurface sediment	LW3-C773-D1
Study Area	11.1	subsurface sediment	LW3-C773-D2

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	11.1	surface sediment	LW3-G774
Study Area	11.1	surface sediment	LW3-G775
Study Area	11.1	surface sediment	LW3-G776
Study Area	11.1	subsurface sediment	LW3-UC01-B
Study Area	11.1	surface sediment	LW3-UG01
Study Area	11.1	surface sediment	RM11E_BDSL001
Study Area	11.1	surface sediment	RM11E_BDSL002
Study Area	11.1	surface sediment	RM11E_BDSL003
Study Area	11.1	subsurface sediment	RM11E-C001-B
Study Area	11.1	subsurface sediment	RM11E-C001-C
Study Area	11.1	subsurface sediment	RM11E-C002-B
Study Area	11.1	subsurface sediment	RM11E-C002-C
Study Area	11.1	subsurface sediment	RM11E-C002-D
Study Area	11.1	subsurface sediment	RM11E-C003-B
Study Area	11.1	subsurface sediment	RM11E-C003-C
Study Area	11.1	subsurface sediment	RM11E-C003-D
Study Area	11.1	subsurface sediment	RM11E-C004-B
Study Area	11.1	subsurface sediment	RM11E-C004-C
Study Area	11.1	subsurface sediment	RM11E-C005-B
Study Area	11.1	subsurface sediment	RM11E-C005-C
Study Area	11.1	subsurface sediment	RM11E-C005-D
Study Area	11.1	subsurface sediment	RM11E-C006-B
Study Area	11.1	subsurface sediment	RM11E-C007-B
Study Area	11.1	subsurface sediment	RM11E-C007-C
Study Area	11.1	subsurface sediment	RM11E-C007-D
Study Area	11.1	subsurface sediment	RM11E-C008-B
Study Area	11.1	subsurface sediment	RM11E-C008-C
Study Area	11.1	subsurface sediment	RM11E-C008-D
Study Area	11.1	subsurface sediment	RM11E-C009-B
Study Area	11.1	subsurface sediment	RM11E-C009-C
Study Area	11.1	surface sediment	RM11E-C010-A (R2)
Study Area	11.1	subsurface sediment	RM11E-C010-B
Study Area	11.1	subsurface sediment	RM11E-C010-C
Study Area	11.1	subsurface sediment	RM11E-C010-D
Study Area	11.1	subsurface sediment	RM11E-C011-B
Study Area	11.1	subsurface sediment	RM11E-C011-C
Study Area	11.1	subsurface sediment	RM11E-C011-D
Study Area	11.1	surface sediment	RM11E-G003
Study Area	11.1	surface sediment	RM11E-G004
Study Area	11.1	surface sediment	RM11E-G005
Study Area	11.1	surface sediment	RM11E-G006
Study Area	11.1	surface sediment	RM11E-G007
Study Area	11.1	surface sediment	RM11E-G008
Study Area	11.1	surface sediment	RM11E-G009
Study Area	11.1	surface sediment	RM11E-G010
Study Area	11.1	surface sediment	RM11E-G011
Study Area	11.1	surface sediment	RM11E-G012
Study Area	11.1	surface sediment	RM11E-G013
Study Area	11.1	surface sediment	RM11E-G014
Study Area	11.1	surface sediment	WLCDRD05PG124124
Study Area	11.1	surface sediment	WLCDRD05PG126126
Study Area	11.1	subsurface sediment	WLCDRD05VC126126
Study Area	11.1	surface sediment	WLCGWI04GNVV04
Study Area	11.1	subsurface sediment	WLR0797WRGC37RGC37A
Study Area	11.1	subsurface sediment	WLR1199WRVC06C06ABC
Study Area	11.1	subsurface sediment	WLR1199WRVC06RVC06D
Study Area	11.2	subsurface sediment	LW3-C777-B
Study Area	11.2	subsurface sediment	LW3-C777-C

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	11.2	subsurface sediment	LW3-C777-D
Study Area	11.2	surface sediment	LW3-G777
Study Area	11.2	subsurface sediment	LW3-UC02-B
Study Area	11.2	subsurface sediment	LW3-UC02-C
Study Area	11.2	surface sediment	LW3-UG02
Study Area	11.2	surface sediment	RM11E_BDSL004
Study Area	11.2	surface sediment	RM11E_BDSL005
Study Area	11.2	surface sediment	RM11E_BDSL006
Study Area	11.2	surface sediment	RM11E-C012-A
Study Area	11.2	subsurface sediment	RM11E-C012-B
Study Area	11.2	subsurface sediment	RM11E-C012-C
Study Area	11.2	subsurface sediment	RM11E-C012-D
Study Area	11.2	subsurface sediment	RM11E-C012-E
Study Area	11.2	subsurface sediment	RM11E-C013-B
Study Area	11.2	subsurface sediment	RM11E-C013-C
Study Area	11.2	subsurface sediment	RM11E-C013-D
Study Area	11.2	subsurface sediment	RM11E-C014-B
Study Area	11.2	subsurface sediment	RM11E-C014-C
Study Area	11.2	subsurface sediment	RM11E-C014-D
Study Area	11.2	subsurface sediment	RM11E-C015-B
Study Area	11.2	subsurface sediment	RM11E-C015-C
Study Area	11.2	subsurface sediment	RM11E-C015-D
Study Area	11.2	subsurface sediment	RM11E-C016-B
Study Area	11.2	subsurface sediment	RM11E-C016-C
Study Area	11.2	subsurface sediment	RM11E-C016-D
Study Area	11.2	subsurface sediment	RM11E-C017-B
Study Area	11.2	subsurface sediment	RM11E-C017-C
Study Area	11.2	subsurface sediment	RM11E-C017-D
Study Area	11.2	subsurface sediment	RM11E-C018-B
Study Area	11.2	subsurface sediment	RM11E-C018-C
Study Area	11.2	subsurface sediment	RM11E-C048-B (R1)
Study Area	11.2	subsurface sediment	RM11E-C048-B (R2)
Study Area	11.2	subsurface sediment	RM11E-C048-C (R1)
Study Area	11.2	surface sediment	RM11E-G015
Study Area	11.2	surface sediment	RM11E-G016
Study Area	11.2	surface sediment	RM11E-G017
Study Area	11.2	surface sediment	RM11E-G018
Study Area	11.2	surface sediment	RM11E-G019
Study Area	11.2	surface sediment	RM11E-G020
Study Area	11.2	surface sediment	RM11E-G021
Study Area	11.2	surface sediment	RM11E-G063
Study Area	11.2	surface sediment	RM11E-G065
Study Area	11.2	surface sediment	WLCDRD05PG128128
Study Area	11.2	subsurface sediment	WLCDRD05VC128128
Study Area	11.2	subsurface sediment	WLCGWF03GNVC03Z1
Study Area	11.2	subsurface sediment	WLCGWF03GNZCOMP2003
Study Area	11.2	surface sediment	WLCGWI04GNVV02
Study Area	11.2	surface sediment	WLCGWI04GNVV03
Study Area	11.2	subsurface sediment	WLR0797WRGC38RGC38A
Study Area	11.2	subsurface sediment	WLR1199WRVC07C07ABC
Study Area	11.2	subsurface sediment	WLR1199WRVC07RVC07D
Study Area	11.3	subsurface sediment	LW3-C778-B
Study Area	11.3	subsurface sediment	LW3-C778-C
Study Area	11.3	subsurface sediment	LW3-C779-B
Study Area	11.3	subsurface sediment	LW3-C779-C
Study Area	11.3	subsurface sediment	LW3-C779-E
Study Area	11.3	surface sediment	LW3-G778
Study Area	11.3	surface sediment	LW3-G779

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	11.3	surface sediment	LW3-GCA11E-C00
Study Area	11.3	surface sediment	LW3-GCRSP11E
Study Area	11.3	subsurface sediment	LW3-UC03-B
Study Area	11.3	subsurface sediment	LW3-UC03-C
Study Area	11.3	subsurface sediment	LW3-UC03-D
Study Area	11.3	surface sediment	LW3-UG03
Study Area	11.3	surface sediment	RM11E_BDSL007
Study Area	11.3	surface sediment	RM11E_BDSL008
Study Area	11.3	surface sediment	RM11E_BDSL009
Study Area	11.3	surface sediment	RM11E_BDSL012
Study Area	11.3	surface sediment	RM11E_BDSL015
Study Area	11.3	surface sediment	RM11E_BDSL016
Study Area	11.3	surface sediment	RM11E_BDSL017
Study Area	11.3	surface sediment	RM11E_BDSL018
Study Area	11.3	surface sediment	RM11E_BDSL021
Study Area	11.3	surface sediment	RM11E_BDSL022
Study Area	11.3	surface sediment	RM11E_BDSL023
Study Area	11.3	subsurface sediment	RM11E-C019-B
Study Area	11.3	subsurface sediment	RM11E-C019-C
Study Area	11.3	subsurface sediment	RM11E-C019-D
Study Area	11.3	subsurface sediment	RM11E-C019-E
Study Area	11.3	subsurface sediment	RM11E-C020-B
Study Area	11.3	subsurface sediment	RM11E-C020-C
Study Area	11.3	subsurface sediment	RM11E-C021-B
Study Area	11.3	subsurface sediment	RM11E-C021-C
Study Area	11.3	subsurface sediment	RM11E-C021-D
Study Area	11.3	subsurface sediment	RM11E-C022-B
Study Area	11.3	subsurface sediment	RM11E-C022-C
Study Area	11.3	subsurface sediment	RM11E-C023-B
Study Area	11.3	subsurface sediment	RM11E-C023-C
Study Area	11.3	subsurface sediment	RM11E-C023-D
Study Area	11.3	subsurface sediment	RM11E-C023-E
Study Area	11.3	subsurface sediment	RM11E-C024-B
Study Area	11.3	subsurface sediment	RM11E-C024-C
Study Area	11.3	subsurface sediment	RM11E-C024-D
Study Area	11.3	subsurface sediment	RM11E-C025-B
Study Area	11.3	subsurface sediment	RM11E-C025-C
Study Area	11.3	subsurface sediment	RM11E-C025-D
Study Area	11.3	subsurface sediment	RM11E-C026-B
Study Area	11.3	subsurface sediment	RM11E-C026-C
Study Area	11.3	subsurface sediment	RM11E-C026-D
Study Area	11.3	subsurface sediment	RM11E-C026-E
Study Area	11.3	subsurface sediment	RM11E-C026-F
Study Area	11.3	subsurface sediment	RM11E-C027-B
Study Area	11.3	subsurface sediment	RM11E-C027-C
Study Area	11.3	subsurface sediment	RM11E-C027-D
Study Area	11.3	subsurface sediment	RM11E-C028-B
Study Area	11.3	subsurface sediment	RM11E-C028-C
Study Area	11.3	subsurface sediment	RM11E-C028-D
Study Area	11.3	subsurface sediment	RM11E-C031-B
Study Area	11.3	subsurface sediment	RM11E-C031-C
Study Area	11.3	subsurface sediment	RM11E-C031-D
Study Area	11.3	subsurface sediment	RM11E-C047-B
Study Area	11.3	subsurface sediment	RM11E-C047-C
Study Area	11.3	subsurface sediment	RM11E-C047-D
Study Area	11.3	subsurface sediment	RM11E-C047-E
Study Area	11.3	subsurface sediment	RM11E-C047-F
Study Area	11.3	surface sediment	RM11E-G022

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	11.3	surface sediment	RM11E-G023
Study Area	11.3	surface sediment	RM11E-G024
Study Area	11.3	surface sediment	RM11E-G025
Study Area	11.3	surface sediment	RM11E-G026
Study Area	11.3	surface sediment	RM11E-G027
Study Area	11.3	surface sediment	RM11E-G028
Study Area	11.3	surface sediment	RM11E-G029
Study Area	11.3	surface sediment	RM11E-G030
Study Area	11.3	surface sediment	RM11E-G031
Study Area	11.3	surface sediment	RM11E-G032
Study Area	11.3	surface sediment	RM11E-G035
Study Area	11.3	surface sediment	RM11E-G066
Study Area	11.3	surface sediment	RM11E-G067
Study Area	11.3	surface sediment	WLCDRD05PG130130
Study Area	11.3	subsurface sediment	WLCDRD05VC130130
Study Area	11.3	subsurface sediment	WLCGWF03GNVC01Z1
Study Area	11.3	surface sediment	WLCGWI04GNVV01
Study Area	11.3	surface sediment	WLCT1F00T1S09T1S09
Study Area	11.3	subsurface sediment	WLR0797WRCD40RCD40A
Study Area	11.3	subsurface sediment	WLR0797WRCD41RCD41A
Study Area	11.3	subsurface sediment	WLR0797WRCD41RCD41B
Study Area	11.4	surface sediment	RM11E_BDSL011
Study Area	11.4	surface sediment	RM11E_BDSL013
Study Area	11.4	surface sediment	RM11E_BDSL014
Study Area	11.4	surface sediment	RM11E_BDSL019
Study Area	11.4	surface sediment	RM11E_BDSL020
Study Area	11.4	subsurface sediment	RM11E-C029-B
Study Area	11.4	subsurface sediment	RM11E-C029-C
Study Area	11.4	subsurface sediment	RM11E-C029-D
Study Area	11.4	subsurface sediment	RM11E-C029-E
Study Area	11.4	subsurface sediment	RM11E-C029-F
Study Area	11.4	subsurface sediment	RM11E-C029-G
Study Area	11.4	subsurface sediment	RM11E-C032-B
Study Area	11.4	subsurface sediment	RM11E-C032-C
Study Area	11.4	subsurface sediment	RM11E-C032-D
Study Area	11.4	subsurface sediment	RM11E-C032-E
Study Area	11.4	subsurface sediment	RM11E-C032-F
Study Area	11.4	subsurface sediment	RM11E-C034-B
Study Area	11.4	subsurface sediment	RM11E-C034-C
Study Area	11.4	subsurface sediment	RM11E-C035-B
Study Area	11.4	subsurface sediment	RM11E-C035-C
Study Area	11.4	subsurface sediment	RM11E-C035-D
Study Area	11.4	subsurface sediment	RM11E-C036-B
Study Area	11.4	subsurface sediment	RM11E-C036-C
Study Area	11.4	subsurface sediment	RM11E-C036-D
Study Area	11.4	subsurface sediment	RM11E-C037-B
Study Area	11.4	subsurface sediment	RM11E-C037-C
Study Area	11.4	subsurface sediment	RM11E-C038-B
Study Area	11.4	subsurface sediment	RM11E-C038-C
Study Area	11.4	subsurface sediment	RM11E-C038-D
Study Area	11.4	subsurface sediment	RM11E-C040-B
Study Area	11.4	subsurface sediment	RM11E-C040-C
Study Area	11.4	subsurface sediment	RM11E-C040-D
Study Area	11.4	surface sediment	RM11E-G033
Study Area	11.4	surface sediment	RM11E-G036
Study Area	11.4	surface sediment	RM11E-G037
Study Area	11.4	surface sediment	RM11E-G038
Study Area	11.4	surface sediment	RM11E-G039

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Study Area	11.4	surface sediment	RM11E-G040
Study Area	11.4	surface sediment	RM11E-G041
Study Area	11.4	surface sediment	RM11E-G042
Study Area	11.4	surface sediment	RM11E-G045
Study Area	11.4	surface sediment	RM11E-G064
Study Area	11.4	surface sediment	WLCDRD05PG132132
Study Area	11.4	subsurface sediment	WLCDRD05VC132132
Study Area	11.4	subsurface sediment	WLR0797WRCD42RCD42A
Study Area	11.4	subsurface sediment	WLR0797WRCD42RCD42B
Study Area	11.4	subsurface sediment	WLR0797WRCD42RCD42C
Study Area	11.4	subsurface sediment	WLR0797WRCD42RCD42D
Study Area	11.5	surface sediment	RM11E_BDSL010
Study Area	11.5	subsurface sediment	RM11E-C039-B
Study Area	11.5	subsurface sediment	RM11E-C039-C
Study Area	11.5	subsurface sediment	RM11E-C039-D
Study Area	11.5	subsurface sediment	RM11E-C039-E
Study Area	11.5	surface sediment	RM11E-G044
Study Area	11.5	surface sediment	RM11E-G046
Study Area	11.5	surface sediment	RM11E-G047
Study Area	11.5	surface sediment	RM11E-G049
Study Area	11.5	surface sediment	WLCDRD05PG134134
Study Area	11.5	subsurface sediment	WLCDRD05VC134134
Study Area	11.5	surface sediment	WLCPGH02CLDP
Study Area	11.5	subsurface sediment	WLR0797WRCD43RCD43A
Study Area	11.5	subsurface sediment	WLR0797WRCD43RCD43B
Study Area	11.5	subsurface sediment	WLR0797WRCD43WRD
Study Area	11.5	surface sediment	WLR1199WRVC08WRVC08
Study Area	11.6	subsurface sediment	RM11E-C042-B (R2)
Study Area	11.6	subsurface sediment	RM11E-C042-C (R2)
Study Area	11.6	subsurface sediment	RM11E-C042-D (R2)
Study Area	11.6	surface sediment	RM11E-G050
Study Area	11.6	surface sediment	RM11E-G051
Study Area	11.6	subsurface sediment	WLR0797WRGC39RGC39A
Study Area	11.7	surface sediment	RM11E-C043-A
Study Area	11.7	subsurface sediment	RM11E-C043-B
Downtown (RM 11.8 - 12.2)	11.9	surface sediment	LW3-GCA12W-C00
Downtown (RM 11.8 - 12.2)	11.9	surface sediment	LW3-GSP12W-ALT
Downtown (RM 11.8 - 12.2)	11.9	subsurface sediment	LW3-UC04-B
Downtown (RM 11.8 - 12.2)	11.9	subsurface sediment	LW3-UC04-C
Downtown (RM 11.8 - 12.2)	11.9	subsurface sediment	LW3-UC04-D
Downtown (RM 11.8 - 12.2)	11.9	surface sediment	LW3-UG04-1
Downtown (RM 11.8 - 12.2)	11.9	surface sediment	LW3-UG04-2
Downtown (RM 11.8 - 12.2)	11.9	subsurface sediment	RM11E-C044-B
Downtown (RM 11.8 - 12.2)	11.9	subsurface sediment	RM11E-C045-B
Downtown (RM 11.8 - 12.2)	11.9	subsurface sediment	RM11E-C045-C
Downtown (RM 11.8 - 12.2)	11.9	surface sediment	RM11E-G059
Downtown (RM 11.8 - 12.2)	12	surface sediment	LW3-GCR12W
Downtown (RM 11.8 - 12.2)	12	subsurface sediment	LW3-UC05-B1
Downtown (RM 11.8 - 12.2)	12	subsurface sediment	LW3-UC05-B2
Downtown (RM 11.8 - 12.2)	12	subsurface sediment	LW3-UC05-C1
Downtown (RM 11.8 - 12.2)	12	subsurface sediment	LW3-UC05-C2
Downtown (RM 11.8 - 12.2)	12	subsurface sediment	LW3-UC05-D1
Downtown (RM 11.8 - 12.2)	12	subsurface sediment	LW3-UC05-D2
Downtown (RM 11.8 - 12.2)	12	subsurface sediment	LW3-UC06-B
Downtown (RM 11.8 - 12.2)	12	subsurface sediment	LW3-UC06-C
Downtown (RM 11.8 - 12.2)	12	subsurface sediment	LW3-UC06-D
Downtown (RM 11.8 - 12.2)	12	subsurface sediment	LW3-UC06-E
Downtown (RM 11.8 - 12.2)	12	surface sediment	LW3-UG05

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Downtown (RM 11.8 - 12.2)	12	surface sediment	LW3-UG06
Downtown (RM 11.8 - 12.2)	12	subsurface sediment	RM11E-C046-B
Downtown (RM 11.8 - 12.2)	12	subsurface sediment	RM11E-C046-C
Downtown (RM 11.8 - 12.2)	12	subsurface sediment	RM11E-C046-D
Downtown (RM 11.8 - 12.2)	12	surface sediment	RM11E-G061
Downtown (RM 11.8 - 12.2)	12	surface sediment	RM11E-G062
Downtown (RM 11.8 - 12.2)	12	surface sediment	WLLASE08DPSCG066
Downtown (RM 11.8 - 12.2)	12	surface sediment	WLLPGH09PG-010-SC030-N
Downtown (RM 11.8 - 12.2)	12	subsurface sediment	WLLPGH09PG-010-SC3090-N
Downtown (RM 11.8 - 12.2)	12	subsurface sediment	WLLPGH09PG-010-SC90150-N
Downtown (RM 11.8 - 12.2)	12	surface sediment	WLLPGH09PG-011-SC030-N
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	LW3-C782-A
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	LW3-C782-B
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	LW3-C782-C
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	LW3-G780
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	LW3-G781
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	LW3-GCA12E-C00-R
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	LW3-GCRSP12E
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	LW3-UC07-B
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	LW3-UC07-C
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	LW3-UC07-D
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	LW3-UC07-E
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	LW3-UC08-B
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	LW3-UC08-C
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	LW3-UC08-D
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	LW3-UG07
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	LW3-UG08
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLASB10DPSCC086B
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	WLLASB10DPSCC087A
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	WLLASB10DPSCG086
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	WLLASE08DPSCC031A
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLASE08DPSCC031B
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLASE08DPSCC031C
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	WLLASE08DPSCG063
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	WLLASE08DPSCG064
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	WLLASE08DPSCG065
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	WLLASE08DPSCG067
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	WLLPGH09PG005-SC030-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG005-SC150210-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG005-SC210270-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG005-SC270330-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG005-SC3090-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG005-SC330390-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG005-SC90150-N
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	WLLPGH09PG-006-SC030-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-006-SC150210-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-006-SC210270-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-006-SC270330-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-006-SC3090-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-006-SC330390-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-006-SC390450-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-006-SC90150-N
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	WLLPGH09PG-007-SC030-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-007-SC3090-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-007-SC90150-N
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	WLLPGH09PG-008-SC030-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-008-SC150210-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-008-SC210270-N

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-008-SC3090-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-008-SC90150-N
Downtown (RM 11.8 - 12.2)	12.1	surface sediment	WLLPGH09PG-009-SC030-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-009-SC150210-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-009-SC210270-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-009-SC270330-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-009-SC3090-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-009-SC330390-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-009-SC390450-N
Downtown (RM 11.8 - 12.2)	12.1	subsurface sediment	WLLPGH09PG-009-SC90150-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	LW3-C783-B
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	LW3-C783-C
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	LW3-C783-D
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	LW3-C783-E
Downtown (RM 11.8 - 12.2)	12.2	surface sediment	LW3-G783
Downtown (RM 11.8 - 12.2)	12.2	surface sediment	WLLPGH09PG-001-SC030-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG-001-SC150210-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG-001-SC210270-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG-001-SC270330-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG-001-SC3090-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG-001-SC90150-N
Downtown (RM 11.8 - 12.2)	12.2	surface sediment	WLLPGH09PG-002-SC030-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG-002-SC150210-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG-002-SC210270-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG-002-SC270330-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG-002-SC3090-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG-002-SC90150-N
Downtown (RM 11.8 - 12.2)	12.2	surface sediment	WLLPGH09PG-003-SC030-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG-003-SC150210-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG-003-SC210270-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG-003-SC270330-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG-003-SC3090-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG-003-SC330390-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG-003-SC90150-N
Downtown (RM 11.8 - 12.2)	12.2	surface sediment	WLLPGH09PG004-SC030-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG004-SC150210-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG004-SC210270-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG004-SC270330-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG004-SC3090-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG004-SC330390-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG004-SC390450-N
Downtown (RM 11.8 - 12.2)	12.2	subsurface sediment	WLLPGH09PG004-SC90150-N
Downtown (RM 12.3 - 15.3)	12.3	subsurface sediment	WLLASE08DPSCC001B
Downtown (RM 12.3 - 15.3)	12.3	subsurface sediment	WLLASE08DPSCC001C
Downtown (RM 12.3 - 15.3)	12.3	subsurface sediment	WLLASE08DPSCC001D
Downtown (RM 12.3 - 15.3)	12.3	surface sediment	WLLASE08DPSCG001
Downtown (RM 12.3 - 15.3)	12.3	surface sediment	WLLASE08DPSCG002
Downtown (RM 12.3 - 15.3)	12.3	surface sediment	WLLASE08DPSCG060
Downtown (RM 12.3 - 15.3)	12.3	surface sediment	WLLASE08DPSCG061
Downtown (RM 12.3 - 15.3)	12.3	surface sediment	WLLASE08DPSCG062
Downtown (RM 12.3 - 15.3)	12.3	surface sediment	WLLPGH09PG-012-SC030-N
Downtown (RM 12.3 - 15.3)	12.3	subsurface sediment	WLLPGH09PG-012-SC150210-N
Downtown (RM 12.3 - 15.3)	12.3	subsurface sediment	WLLPGH09PG-012-SC210270-N
Downtown (RM 12.3 - 15.3)	12.3	subsurface sediment	WLLPGH09PG-012-SC270330-N
Downtown (RM 12.3 - 15.3)	12.3	subsurface sediment	WLLPGH09PG-012-SC3090-N
Downtown (RM 12.3 - 15.3)	12.3	subsurface sediment	WLLPGH09PG-012-SC330390-N
Downtown (RM 12.3 - 15.3)	12.3	subsurface sediment	WLLPGH09PG-012-SC390450-N
Downtown (RM 12.3 - 15.3)	12.3	subsurface sediment	WLLPGH09PG-012-SC90150-N

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Downtown (RM 12.3 - 15.3)	12.4	surface sediment	WLLASB10DPSCC041A
Downtown (RM 12.3 - 15.3)	12.4	subsurface sediment	WLLASB10DPSCC041B
Downtown (RM 12.3 - 15.3)	12.4	subsurface sediment	WLLASB10DPSCC089B
Downtown (RM 12.3 - 15.3)	12.4	surface sediment	WLLASB10DPSCG089
Downtown (RM 12.3 - 15.3)	12.4	surface sediment	WLLASE08DPSCG059
Downtown (RM 12.3 - 15.3)	12.4	surface sediment	WLLASE08DPSCG068
Downtown (RM 12.3 - 15.3)	12.5	surface sediment	WLLASB10DPSCG088
Downtown (RM 12.3 - 15.3)	12.5	subsurface sediment	WLLASE08DPSCC030B
Downtown (RM 12.3 - 15.3)	12.5	surface sediment	WLLASE08DPSCG003
Downtown (RM 12.3 - 15.3)	12.5	surface sediment	WLLASE08DPSCG057
Downtown (RM 12.3 - 15.3)	12.5	surface sediment	WLLASE08DPSCG058
Downtown (RM 12.3 - 15.3)	12.6	surface sediment	WLLASE08DPSCC029A
Downtown (RM 12.3 - 15.3)	12.6	subsurface sediment	WLLASE08DPSCC029B
Downtown (RM 12.3 - 15.3)	12.6	subsurface sediment	WLLASE08DPSCC029C
Downtown (RM 12.3 - 15.3)	12.6	surface sediment	WLLASE08DPSCG055
Downtown (RM 12.3 - 15.3)	12.6	surface sediment	WLLASE08DPSCG056
Downtown (RM 12.3 - 15.3)	12.7	surface sediment	WLLASB10DPSCC090A
Downtown (RM 12.3 - 15.3)	12.7	subsurface sediment	WLLASB10DPSCC090B
Downtown (RM 12.3 - 15.3)	12.7	subsurface sediment	WLLASE08DPSCC028B
Downtown (RM 12.3 - 15.3)	12.7	surface sediment	WLLASE08DPSCG053
Downtown (RM 12.3 - 15.3)	12.7	surface sediment	WLLASE08DPSCG054
Downtown (RM 12.3 - 15.3)	12.8	surface sediment	WLLASB10DPSCG091
Downtown (RM 12.3 - 15.3)	12.8	surface sediment	WLLASB10DPSCG092
Downtown (RM 12.3 - 15.3)	12.8	subsurface sediment	WLLASE08DPSCC027B
Downtown (RM 12.3 - 15.3)	12.8	surface sediment	WLLASE08DPSCG005
Downtown (RM 12.3 - 15.3)	12.8	surface sediment	WLLASE08DPSCG051
Downtown (RM 12.3 - 15.3)	12.8	surface sediment	WLLASE08DPSCG052
Downtown (RM 12.3 - 15.3)	12.9	subsurface sediment	WLLASB10DPSCC095B
Downtown (RM 12.3 - 15.3)	12.9	surface sediment	WLLASB10DPSCG093
Downtown (RM 12.3 - 15.3)	12.9	surface sediment	WLLASB10DPSCG095
Downtown (RM 12.3 - 15.3)	12.9	surface sediment	WLLASE08DPSCG006
Downtown (RM 12.3 - 15.3)	13	surface sediment	WLLASB10DPSCG094
Downtown (RM 12.3 - 15.3)	13	subsurface sediment	WLLASE08DPSCC002B
Downtown (RM 12.3 - 15.3)	13	subsurface sediment	WLLASE08DPSCC026B
Downtown (RM 12.3 - 15.3)	13	surface sediment	WLLASE08DPSCG007
Downtown (RM 12.3 - 15.3)	13	surface sediment	WLLASE08DPSCG008
Downtown (RM 12.3 - 15.3)	13	surface sediment	WLLASE08DPSCG049
Downtown (RM 12.3 - 15.3)	13	surface sediment	WLLASE08DPSCG050
Downtown (RM 12.3 - 15.3)	13	surface sediment	WLLASE08DPSCG069
Downtown (RM 12.3 - 15.3)	13	surface sediment	WLLGEC10O33-S001
Downtown (RM 12.3 - 15.3)	13	surface sediment	WLLGEC10O33-S008
Downtown (RM 12.3 - 15.3)	13.1	surface sediment	WLLASE08DPSCC025A
Downtown (RM 12.3 - 15.3)	13.1	subsurface sediment	WLLASE08DPSCC025B
Downtown (RM 12.3 - 15.3)	13.1	subsurface sediment	WLLASE08DPSCC025D
Downtown (RM 12.3 - 15.3)	13.1	surface sediment	WLLASE08DPSCG047
Downtown (RM 12.3 - 15.3)	13.1	surface sediment	WLLASE08DPSCG048
Downtown (RM 12.3 - 15.3)	13.1	surface sediment	WLLGEC10O33-C002-A
Downtown (RM 12.3 - 15.3)	13.1	surface sediment	WLLGEC10O33-C003-A
Downtown (RM 12.3 - 15.3)	13.1	subsurface sediment	WLLGEC10O33-C004-B
Downtown (RM 12.3 - 15.3)	13.1	subsurface sediment	WLLGEC10O33-C005-B
Downtown (RM 12.3 - 15.3)	13.1	subsurface sediment	WLLGEC10O33-C007-B
Downtown (RM 12.3 - 15.3)	13.1	subsurface sediment	WLLGEC10O33-C008-B
Downtown (RM 12.3 - 15.3)	13.1	surface sediment	WLLGEC10O33-C009-A
Downtown (RM 12.3 - 15.3)	13.1	surface sediment	WLLGEC10O33-S002
Downtown (RM 12.3 - 15.3)	13.1	surface sediment	WLLGEC10O33-S003
Downtown (RM 12.3 - 15.3)	13.1	surface sediment	WLLGEC10O33-S004
Downtown (RM 12.3 - 15.3)	13.1	surface sediment	WLLGEC10O33-S005
Downtown (RM 12.3 - 15.3)	13.1	surface sediment	WLLGEC10O33-S006

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Downtown (RM 12.3 - 15.3)	13.1	surface sediment	WLLGEC10O33-S007
Downtown (RM 12.3 - 15.3)	13.1	surface sediment	WLLGEC10O33-S009
Downtown (RM 12.3 - 15.3)	13.1	surface sediment	WLLGEC10O33-S010
Downtown (RM 12.3 - 15.3)	13.1	surface sediment	WLLGEC10O33-S011
Downtown (RM 12.3 - 15.3)	13.2	subsurface sediment	WLLASE08DPSCC003E
Downtown (RM 12.3 - 15.3)	13.2	surface sediment	WLLASE08DPSCG009
Downtown (RM 12.3 - 15.3)	13.2	surface sediment	WLLASE08DPSCG046
Downtown (RM 12.3 - 15.3)	13.3	surface sediment	WLLASB10DPSCG096
Downtown (RM 12.3 - 15.3)	13.3	subsurface sediment	WLLASE08DPSCC004B
Downtown (RM 12.3 - 15.3)	13.3	subsurface sediment	WLLASE08DPSCC023B
Downtown (RM 12.3 - 15.3)	13.3	subsurface sediment	WLLASE08DPSCC024B
Downtown (RM 12.3 - 15.3)	13.3	subsurface sediment	WLLASE08DPSCC024C
Downtown (RM 12.3 - 15.3)	13.3	surface sediment	WLLASE08DPSCG010
Downtown (RM 12.3 - 15.3)	13.3	surface sediment	WLLASE08DPSCG011
Downtown (RM 12.3 - 15.3)	13.3	surface sediment	WLLASE08DPSCG043
Downtown (RM 12.3 - 15.3)	13.3	surface sediment	WLLASE08DPSCG044
Downtown (RM 12.3 - 15.3)	13.3	surface sediment	WLLASE08DPSCG045
Downtown (RM 12.3 - 15.3)	13.4	surface sediment	WLCZDI00WRS45WRS45-1
Downtown (RM 12.3 - 15.3)	13.4	surface sediment	WLCZDI00WRS47WRS47
Downtown (RM 12.3 - 15.3)	13.4	surface sediment	WLCZDI00WRS53WRS53
Downtown (RM 12.3 - 15.3)	13.4	subsurface sediment	WLLASE08DPSCC005D
Downtown (RM 12.3 - 15.3)	13.4	subsurface sediment	WLLASE08DPSCC006D
Downtown (RM 12.3 - 15.3)	13.4	subsurface sediment	WLLASE08DPSCC033B
Downtown (RM 12.3 - 15.3)	13.4	surface sediment	WLLASE08DPSCG012
Downtown (RM 12.3 - 15.3)	13.4	surface sediment	WLLASE08DPSCG013
Downtown (RM 12.3 - 15.3)	13.4	surface sediment	WLLASE08DPSCG014
Downtown (RM 12.3 - 15.3)	13.4	surface sediment	WLLASE08DPSCG015
Downtown (RM 12.3 - 15.3)	13.4	surface sediment	WLLASE08DPSCG042
Downtown (RM 12.3 - 15.3)	13.4	surface sediment	WLLASE08DPSCG085
Downtown (RM 12.3 - 15.3)	13.4	subsurface sediment	WLLGEC10IPC-C012-B
Downtown (RM 12.3 - 15.3)	13.4	subsurface sediment	WLLGEC10IPC-C012-C
Downtown (RM 12.3 - 15.3)	13.4	surface sediment	WLLGEC10IPC-S012
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDH04T202R05
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI00WRS11WRS11-1
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI00WRS38WRS38-1
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI00WRS39WRS39-1
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI00WRS40WRS40-1
Downtown (RM 12.3 - 15.3)	13.5	subsurface sediment	WLCZDI00WRS40WRS40-2
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI00WRS41WRS44-1
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI00WRS48WRS48
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI00WRS54WRS54
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS80
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS80
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS81
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS81
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS82
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS82
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS83
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS83
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS84
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS84
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS85
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS85
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS86
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS86
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS92
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS93
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS94

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLCZDI07WRS95
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLLASB10DPSCC099A
Downtown (RM 12.3 - 15.3)	13.5	subsurface sediment	WLLASB10DPSCC099D
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLLASB10DPSCG098
Downtown (RM 12.3 - 15.3)	13.5	subsurface sediment	WLLASE08DPSCC022B
Downtown (RM 12.3 - 15.3)	13.5	subsurface sediment	WLLASE08DPSCC022C
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLLASE08DPSCG039
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLLASE08DPSCG041
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLLASE08DPSCG070
Downtown (RM 12.3 - 15.3)	13.5	subsurface sediment	WLLGEC10IPC-C013-B
Downtown (RM 12.3 - 15.3)	13.5	subsurface sediment	WLLGEC10IPC-C014-B1
Downtown (RM 12.3 - 15.3)	13.5	subsurface sediment	WLLGEC10IPC-C014-C
Downtown (RM 12.3 - 15.3)	13.5	subsurface sediment	WLLGEC10IPC-C015-B
Downtown (RM 12.3 - 15.3)	13.5	subsurface sediment	WLLGEC10IPC-C017-B
Downtown (RM 12.3 - 15.3)	13.5	subsurface sediment	WLLGEC10IPC-C017-C
Downtown (RM 12.3 - 15.3)	13.5	subsurface sediment	WLLGEC10IPC-C018-B
Downtown (RM 12.3 - 15.3)	13.5	subsurface sediment	WLLGEC10IPC-C018-C
Downtown (RM 12.3 - 15.3)	13.5	subsurface sediment	WLLGEC10IPC-C019-B
Downtown (RM 12.3 - 15.3)	13.5	subsurface sediment	WLLGEC10IPC-C019-C1
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLLGEC10IPC-S013
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLLGEC10IPC-S014
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLLGEC10IPC-S015
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLLGEC10IPC-S016
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLLGEC10IPC-S017
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLLGEC10IPC-S018
Downtown (RM 12.3 - 15.3)	13.5	surface sediment	WLLGEC10IPC-S019
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDH04T204R09
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDH04T206R12
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDH04T207R14
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDH04T208R16
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI00WRS05WRS05-1
Downtown (RM 12.3 - 15.3)	13.6	subsurface sediment	WLCZDI00WRS05WRS05-2
Downtown (RM 12.3 - 15.3)	13.6	subsurface sediment	WLCZDI00WRS05WRS05-3
Downtown (RM 12.3 - 15.3)	13.6	subsurface sediment	WLCZDI00WRS05WRS05-4
Downtown (RM 12.3 - 15.3)	13.6	subsurface sediment	WLCZDI00WRS05WRS05-5
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI00WRS12WRS12-1
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI00WRS13WRS13-1
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI00WRS34WRS34-1
Downtown (RM 12.3 - 15.3)	13.6	subsurface sediment	WLCZDI00WRS34WRS34-2
Downtown (RM 12.3 - 15.3)	13.6	subsurface sediment	WLCZDI00WRS34WRS34-3
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI00WRS35WRS35-1
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI00WRS36WRS36-1
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI00WRS37WRS37-1
Downtown (RM 12.3 - 15.3)	13.6	subsurface sediment	WLCZDI00WRS37WRS37-2
Downtown (RM 12.3 - 15.3)	13.6	subsurface sediment	WLCZDI00WRS37WRS37-3
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI00WRS49WRS49
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI00WRS50WRS50
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS72
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS72
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS73
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS73
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS74
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS74
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS75
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS75
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS76
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS76
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS77

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS77
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS78
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS78
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS79
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS79
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLCZDI07WRS96
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLLASB10DPSCC100A
Downtown (RM 12.3 - 15.3)	13.6	subsurface sediment	WLLASB10DPSCC100F
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLLASB10DPSCG100
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLLASB10DPSCG101
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLLASB10DPSCG102
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLLASB10DPSCG1022
Downtown (RM 12.3 - 15.3)	13.6	subsurface sediment	WLLASE08DPSCC021C
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLLASE08DPSCG036
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLLASE08DPSCG037
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLLASE08DPSCG038
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLLASE08DPSCG040
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLLASE08DPSCG071
Downtown (RM 12.3 - 15.3)	13.6	surface sediment	WLLASE08DPSCG072
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDH04T210R50
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDH04T211R20
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDH04T212R22
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDH04T213R24
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDH04T214R26
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDH04T214R27
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI00WRS06WRS06-1
Downtown (RM 12.3 - 15.3)	13.7	subsurface sediment	WLCZDI00WRS06WRS06-2
Downtown (RM 12.3 - 15.3)	13.7	subsurface sediment	WLCZDI00WRS06WRS06-3
Downtown (RM 12.3 - 15.3)	13.7	subsurface sediment	WLCZDI00WRS06WRS06-4
Downtown (RM 12.3 - 15.3)	13.7	subsurface sediment	WLCZDI00WRS06WRS06-5
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI00WRS15WRS15-1
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI00WRS16WRS16-1
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI00WRS31WRS31-1
Downtown (RM 12.3 - 15.3)	13.7	subsurface sediment	WLCZDI00WRS31WRS31-2
Downtown (RM 12.3 - 15.3)	13.7	subsurface sediment	WLCZDI00WRS31WRS31-3
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI00WRS32WRS32-1
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI00WRS33WRS33-1
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI00WRS51WRS51
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI07WRS68
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI07WRS68
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI07WRS69
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI07WRS69
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI07WRS70
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI07WRS70
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI07WRS71
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI07WRS71
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI07WRS90
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI07WRS91
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLCZDI07WRS97
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLLASE08DPSCG073
Downtown (RM 12.3 - 15.3)	13.7	surface sediment	WLLASE08DPSCG074
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDH04T215R28
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDH04T216R30
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDH04T217R31
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDH04T218R32
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDH04T218R48
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDH04T219R47
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDI00WRS07WRS07-1

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Downtown (RM 12.3 - 15.3)	13.8	subsurface sediment	WLCZDI00WRS07WRS07-2
Downtown (RM 12.3 - 15.3)	13.8	subsurface sediment	WLCZDI00WRS07WRS07-3
Downtown (RM 12.3 - 15.3)	13.8	subsurface sediment	WLCZDI00WRS07WRS07-4
Downtown (RM 12.3 - 15.3)	13.8	subsurface sediment	WLCZDI00WRS07WRS07-5
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDI00WRS08WRS08-1
Downtown (RM 12.3 - 15.3)	13.8	subsurface sediment	WLCZDI00WRS08WRS08-2
Downtown (RM 12.3 - 15.3)	13.8	subsurface sediment	WLCZDI00WRS08WRS08-3
Downtown (RM 12.3 - 15.3)	13.8	subsurface sediment	WLCZDI00WRS08WRS08-4
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDI00WRS17WRS17-1
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDI00WRS28WRS28-1
Downtown (RM 12.3 - 15.3)	13.8	subsurface sediment	WLCZDI00WRS28WRS28-2
Downtown (RM 12.3 - 15.3)	13.8	subsurface sediment	WLCZDI00WRS28WRS28-3
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDI00WRS29WRS29-1
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDI00WRS30WRS30-1
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDI00WRS52WRS52
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDI07WRS65
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDI07WRS65
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDI07WRS66
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDI07WRS66
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDI07WRS67
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDI07WRS67
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLCZDI07WRS89
Downtown (RM 12.3 - 15.3)	13.8	subsurface sediment	WLLASE08DPSCC019C
Downtown (RM 12.3 - 15.3)	13.8	subsurface sediment	WLLASE08DPSCC020C
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLLASE08DPSCG033
Downtown (RM 12.3 - 15.3)	13.8	surface sediment	WLLASE08DPSCG035
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDH04T220R45
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDH04T220R46
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDH04T221R44
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDH04T222R42
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDH04T222R43
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDH04T223R40
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDH04T223R41
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDI00WRS18WRS18-1
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDI00WRS19WRS19-1
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDI00WRS25WRS25-1
Downtown (RM 12.3 - 15.3)	13.9	subsurface sediment	WLCZDI00WRS25WRS25-2
Downtown (RM 12.3 - 15.3)	13.9	subsurface sediment	WLCZDI00WRS25WRS25-3
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDI00WRS26WRS26-1
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDI00WRS27WRS27-1
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDI07WRS61
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDI07WRS61
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDI07WRS62
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDI07WRS62
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDI07WRS63
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDI07WRS63
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDI07WRS64
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDI07WRS64
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLCZDI07WRS88
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLLASE08DPSCG032
Downtown (RM 12.3 - 15.3)	13.9	surface sediment	WLLASE08DPSCG075
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDH04T224R39
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDH04T224R49
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDH04T225R37
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDH04T225R38
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDH04T226R35
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDH04T226R36
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDH04T227R33

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDH04T227R34
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI00WRS20WRS20-1
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI00WRS21WRS21-1
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI00WRS22WRS22-1
Downtown (RM 12.3 - 15.3)	14	subsurface sediment	WLCZDI00WRS22WRS22-2
Downtown (RM 12.3 - 15.3)	14	subsurface sediment	WLCZDI00WRS22WRS22-3
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI00WRS23WRS23-1
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI00WRS24WRS24-1
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI07WRS55
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI07WRS55
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI07WRS56
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI07WRS56
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI07WRS57
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI07WRS57
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI07WRS58
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI07WRS58
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI07WRS59
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI07WRS59
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI07WRS60
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI07WRS60
Downtown (RM 12.3 - 15.3)	14	surface sediment	WLCZDI07WRS87
Downtown (RM 12.3 - 15.3)	14	subsurface sediment	WLLASE08DPSCC034A
Downtown (RM 12.3 - 15.3)	14	subsurface sediment	WLLASE08DPSCC034B
Downtown (RM 12.3 - 15.3)	14.1	surface sediment	WLCZDI00WRS46WRS46-1
Downtown (RM 12.3 - 15.3)	14.1	subsurface sediment	WLCZDI00WRS46WRS46-2
Downtown (RM 12.3 - 15.3)	14.1	subsurface sediment	WLCZDI00WRS46WRS46-3
Downtown (RM 12.3 - 15.3)	14.1	surface sediment	WLLASB10DPSCG104
Downtown (RM 12.3 - 15.3)	14.1	surface sediment	WLLASB10DPSCG106
Downtown (RM 12.3 - 15.3)	14.1	surface sediment	WLLASB10DPSCG108
Downtown (RM 12.3 - 15.3)	14.1	surface sediment	WLLASB10DPSCG109
Downtown (RM 12.3 - 15.3)	14.1	surface sediment	WLLASE08DPSCC007A
Downtown (RM 12.3 - 15.3)	14.1	subsurface sediment	WLLASE08DPSCC007C
Downtown (RM 12.3 - 15.3)	14.1	subsurface sediment	WLLASE08DPSCC008B
Downtown (RM 12.3 - 15.3)	14.1	subsurface sediment	WLLASE08DPSCC008C
Downtown (RM 12.3 - 15.3)	14.1	subsurface sediment	WLLASE08DPSCC035A
Downtown (RM 12.3 - 15.3)	14.1	subsurface sediment	WLLASE08DPSCC035B
Downtown (RM 12.3 - 15.3)	14.1	subsurface sediment	WLLASE08DPSCC036A
Downtown (RM 12.3 - 15.3)	14.1	subsurface sediment	WLLASE08DPSCC036B
Downtown (RM 12.3 - 15.3)	14.1	surface sediment	WLLASE08DPSCG016
Downtown (RM 12.3 - 15.3)	14.1	surface sediment	WLLASE08DPSCG017
Downtown (RM 12.3 - 15.3)	14.1	surface sediment	WLLASE08DPSCG076
Downtown (RM 12.3 - 15.3)	14.2	subsurface sediment	WLLASB10DPSCC112B
Downtown (RM 12.3 - 15.3)	14.2	surface sediment	WLLASB10DPSCG112
Downtown (RM 12.3 - 15.3)	14.2	subsurface sediment	WLLASE08DPSCC009B
Downtown (RM 12.3 - 15.3)	14.2	subsurface sediment	WLLASE08DPSCC037A
Downtown (RM 12.3 - 15.3)	14.2	subsurface sediment	WLLASE08DPSCC037B
Downtown (RM 12.3 - 15.3)	14.2	subsurface sediment	WLLASE08DPSCC038A
Downtown (RM 12.3 - 15.3)	14.2	subsurface sediment	WLLASE08DPSCC038B
Downtown (RM 12.3 - 15.3)	14.2	subsurface sediment	WLLASE08DPSCC039A
Downtown (RM 12.3 - 15.3)	14.2	subsurface sediment	WLLASE08DPSCC039B
Downtown (RM 12.3 - 15.3)	14.2	surface sediment	WLLASE08DPSCG018
Downtown (RM 12.3 - 15.3)	14.3	surface sediment	WLLASE08DPSCG019
Downtown (RM 12.3 - 15.3)	14.4	subsurface sediment	WLLASE08DPSCC010B
Downtown (RM 12.3 - 15.3)	14.4	surface sediment	WLLASE08DPSCG020
Downtown (RM 12.3 - 15.3)	14.5	surface sediment	WLCRIL99HCSS02HCSS02
Downtown (RM 12.3 - 15.3)	14.5	subsurface sediment	WLLASE08DPSCC011B
Downtown (RM 12.3 - 15.3)	14.5	surface sediment	WLLASE08DPSCG021
Downtown (RM 12.3 - 15.3)	14.5	surface sediment	WLLASE08DPSCG022

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Downtown (RM 12.3 - 15.3)	14.5	surface sediment	WLLASE08DPSCG031
Downtown (RM 12.3 - 15.3)	14.5	surface sediment	WLLASE08DPSCG077
Downtown (RM 12.3 - 15.3)	14.6	surface sediment	WLCRIL99HCSS04HCSS04
Downtown (RM 12.3 - 15.3)	14.6	surface sediment	WLCRIV99PA03PA03
Downtown (RM 12.3 - 15.3)	14.6	surface sediment	WLCRIV99PA04PA04
Downtown (RM 12.3 - 15.3)	14.7	surface sediment	WLCRIL99HCSS03HCSS03
Downtown (RM 12.3 - 15.3)	14.7	surface sediment	WLLASE08DPSCG023
Downtown (RM 12.3 - 15.3)	14.8	surface sediment	WLLASE08DPSCG024
Downtown (RM 12.3 - 15.3)	15	surface sediment	WLLASE08DPSCC014B
Downtown (RM 12.3 - 15.3)	15	surface sediment	WLLASE08DPSCG025
Downtown (RM 12.3 - 15.3)	15	surface sediment	WLLASE08DPSCG078
Downtown (RM 12.3 - 15.3)	15.1	surface sediment	WLLASB10DPSCG113
Downtown (RM 12.3 - 15.3)	15.1	surface sediment	WLLASB10DPSCG114
Downtown (RM 12.3 - 15.3)	15.1	surface sediment	WLLASB10DPSCG115
Downtown (RM 12.3 - 15.3)	15.1	surface sediment	WLLASB10DPSCG116
Downtown (RM 12.3 - 15.3)	15.1	subsurface sediment	WLLASE08DPSCC018B
Downtown (RM 12.3 - 15.3)	15.1	surface sediment	WLLASE08DPSCG026
Downtown (RM 12.3 - 15.3)	15.1	surface sediment	WLLASE08DPSCG030
Downtown (RM 12.3 - 15.3)	15.3	surface sediment	WLCRIL99HCSS30HCSS30
Multnomah Channel	0	subsurface sediment	LW3-MC001-B1
Multnomah Channel	0	subsurface sediment	LW3-MC001-B2
Multnomah Channel	0	subsurface sediment	LW3-MC001-C1
Multnomah Channel	0	subsurface sediment	LW3-MC001-C2
Multnomah Channel	0	subsurface sediment	LW3-MC002-B
Multnomah Channel	0	subsurface sediment	LW3-MC002-C
Multnomah Channel	0	subsurface sediment	LW3-MC002-D
Multnomah Channel	2.9	surface sediment	LW2-G045
Multnomah Channel	2.9	surface sediment	LW2-G047
Multnomah Channel	2.9	surface sediment	LW2-G048
Multnomah Channel	2.9	surface sediment	LW2-GBT003
Multnomah Channel	2.9	subsurface sediment	LW3-MC006-B
Multnomah Channel	2.9	subsurface sediment	LW3-MC006-C
Multnomah Channel	2.9	subsurface sediment	LW3-MC006-D
Multnomah Channel	2.9	subsurface sediment	LW3-MC008-B
Multnomah Channel	2.9	subsurface sediment	LW3-MC008-C
Multnomah Channel	2.9	subsurface sediment	LW3-MC008-D
Multnomah Channel	2.9	subsurface sediment	LW3-MC009-B
Multnomah Channel	2.9	surface sediment	LW3-MG001
Multnomah Channel	2.9	surface sediment	LW3-MG002-1
Multnomah Channel	2.9	surface sediment	LW3-MG002-2
Multnomah Channel	2.9	surface sediment	LW3-MG003
Multnomah Channel	2.9	surface sediment	LW3-MG004
Multnomah Channel	2.9	surface sediment	LW3-MG006
Multnomah Channel	2.9	surface sediment	LW3-MG007
Multnomah Channel	2.9	surface sediment	LW3-MG008
Multnomah Channel	2.9	surface sediment	LW3-MG009
Multnomah Channel	2.9	surface sediment	LW3-MG010
Multnomah Channel	3	surface sediment	LW2-B007
Multnomah Channel	3	surface sediment	LW2-G049
Multnomah Channel	3.1	surface sediment	LW2-G054
Upriver	15.4	surface sediment	LW2-U1C-1
Upriver	15.4	surface sediment	LW2-U1C-2
Upriver	15.4	surface sediment	LW2-U1C-3
Upriver	15.4	surface sediment	WLCDRD05PGR01Ref01
Upriver	15.4	surface sediment	WLCDRI03CREF01CREF01
Upriver	15.4	surface sediment	WLLASE08DPSCG079
Upriver	15.4	surface sediment	WLLRSH01HC02HC02
Upriver	15.4	surface sediment	WLLRSI01HC02HC02

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Upriver	15.5	surface sediment	WLCRIL99HCSS29HCSS29
Upriver	15.5	subsurface sediment	WLLASE08DPSCC016B
Upriver	15.5	surface sediment	WLLASE08DPSCG027
Upriver	15.5	surface sediment	WLLASE08DPSCG029
Upriver	15.6	surface sediment	WLCRIL99HCSS31HCSS31
Upriver	15.6	subsurface sediment	WLLASE08DPSCC017D
Upriver	15.6	surface sediment	WLLASE08DPSCG028
Upriver	15.6	surface sediment	WLLRSH01HC01HC01
Upriver	15.8	subsurface sediment	WLLASE08DPSCC032B
Upriver	15.8	surface sediment	WLLASE08DPSCG080
Upriver	16	surface sediment	LW2-U2C-1
Upriver	16	surface sediment	LW2-U2C-2
Upriver	16	surface sediment	LW2-U2C-3
Upriver	16.6	surface sediment	LW3-UG02A
Upriver	16.6	surface sediment	WLCRIL99HCSS32CSS103
Upriver	16.6	surface sediment	WLCRIL99HCSS32HCSS32
Upriver	16.6	surface sediment	WLLRSH01HC03HC03
Upriver	16.7	surface sediment	LW3-UG02C
Upriver	16.7	surface sediment	LW3-UG02C-R
Upriver	16.8	surface sediment	LW3-UG02B
Upriver	16.9	surface sediment	LW3-UG02D
Upriver	17	surface sediment	LW3-UG02E-1
Upriver	17	surface sediment	LW3-UG02E-2
Upriver	17	surface sediment	LW3-UG02F
Upriver	17	surface sediment	WLLRSH01HC04HC04
Upriver	17.1	surface sediment	LW2-U3C-1
Upriver	17.1	surface sediment	LW2-U3C-2
Upriver	17.1	surface sediment	LW2-U3C-3
Upriver	17.1	surface sediment	LW3-G785
Upriver	17.1	surface sediment	LW3-UG03A-1
Upriver	17.1	surface sediment	LW3-UG03A-2
Upriver	17.1	surface sediment	LW3-UG03B
Upriver	17.1	surface sediment	LW3-UG03B-R
Upriver	17.1	surface sediment	LW3-UG03C
Upriver	17.7	surface sediment	WLLRSH01HC05HC05
Upriver	17.9	surface sediment	WLCMBJ99D09940D09940
Upriver	17.9	surface sediment	WLCMBJ99D09940D09954
Upriver	18.3	surface sediment	LW3-UG04A
Upriver	18.4	surface sediment	LW3-UG04B
Upriver	18.5	surface sediment	LW3-UG04C
Upriver	18.8	surface sediment	LW2-U4Q-1
Upriver	18.8	surface sediment	LW2-U4Q-2
Upriver	18.8	surface sediment	LW2-U4Q-3
Upriver	18.8	surface sediment	LW3-G786
Upriver	18.8	surface sediment	LW3-UG06A
Upriver	18.8	surface sediment	LW3-UG06B
Upriver	18.8	surface sediment	LW3-UG06B-R
Upriver	18.8	surface sediment	WLCDRD05PGR03Ref03
Upriver	18.8	surface sediment	WLLRSH01HC07HC07
Upriver	18.8	surface sediment	WLLRSH01HC08HC08
Upriver	18.8	surface sediment	WLLRSI01HC08HC08
Upriver	18.9	surface sediment	LW3-UG06C
Upriver	21.5	surface sediment	WLCMBJ99D09941D09941
Upriver	21.5	surface sediment	WLFLH07WR01SD
Upriver	22.6	surface sediment	WLFLH07WR02SD
Upriver	22.7	surface sediment	LW3-UG11A
Upriver	22.7	surface sediment	LW3-UG11B
Upriver	22.7	surface sediment	LW3-UG11C

Table D1.3-1. RI Data Set Sediment Sample Inventory by River Reach.

Reach	River Mile	Sediment	Sample ID
Upriver	22.7	surface sediment	WLCMBJ99D09942D09942
Upriver	22.9	surface sediment	WLLRSI01CD05CD05
Upriver	23	surface sediment	WLLRSH01HC09HC09
Upriver	23	surface sediment	WLLRSI01CD04CD04
Upriver	23.1	surface sediment	LW3-UG12A
Upriver	23.1	surface sediment	WLLRSI01CD03CD03
Upriver	23.2	surface sediment	LW2-U6TOC-1
Upriver	23.2	surface sediment	LW2-U6TOC-2
Upriver	23.2	surface sediment	LW2-U6TOC-3
Upriver	23.2	surface sediment	LW3-G787
Upriver	23.2	surface sediment	LW3-UG12B
Upriver	23.2	surface sediment	LW3-UG12B-R
Upriver	23.2	surface sediment	LW3-UG12C
Upriver	23.2	surface sediment	WLCDRD05PGR02Ref02
Upriver	23.2	surface sediment	WLCDRI03CREF02CREF02
Upriver	23.2	surface sediment	WLLRSH01HC10HC10
Upriver	23.2	surface sediment	WLLRSI01CD02CD02
Upriver	23.2	surface sediment	WLLRSI01HC10HC10
Upriver	23.3	surface sediment	WLLRSI01CD01CD01
Upriver	23.8	surface sediment	WLFLH07WR05SD
Upriver	23.9	surface sediment	WLCMBA01ED0130ED0130
Upriver	23.9	surface sediment	WLCMBJ99D09943D09943
Upriver	24.1	surface sediment	WLFLH07WR03SD
Upriver	24.4	surface sediment	WLFLH07WR04SD
Upriver	25.2	surface sediment	WLFLH07WR06SD
Upriver	25.4	surface sediment	WLFLH07WR07SD
Upriver	25.5	surface sediment	LW2-U5Q-1
Upriver	25.5	surface sediment	LW2-U5Q-2
Upriver	25.5	surface sediment	LW2-U5Q-3
Upriver	25.5	surface sediment	LW3-G788
Upriver	25.5	surface sediment	LW3-G788-R
Upriver	26	surface sediment	WLFLH07BH01SD
Upriver	26.1	surface sediment	WLFLH07BH03SD
Upriver	26.1	surface sediment	WLFLH07BH04SD

Notes:

RI - remedial investigation

RM - river mile

Table D1.3-2. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Grain Size																
< 0.075 mm	percent	50	50	100	2.13	95.7	T4-VC09	45	32.8	91.5	2.13	95.7	T4-VC09	45	32.8	91.5
> 0.075 mm	percent	8	8	100	6	46.4	T4-WB-02	20.6	16.1	43	6	46.4	T4-WB-02	20.6	16.1	43
>10 Phi clay	percent	136	136	100	0	11.4	LPSG-S-014-R-1	2.36	1.46	7.23	0	11.4	LPSG-S-014-R-1	2.36	1.46	7.23
>9 Phi clay	percent	868	868	100	0	20.9	CP07DPG	4.65	4.41	9.92	0	20.9	CP07DPG	4.65	4.41	9.92
8-9 Phi clay	percent	1005	1004	99.9	0	16.3	C397	2.953	2.8	6.496	0	16.3	C397	2.95	2.79 T	6.494
9-10 Phi clay	percent	136	134	98.5	0.02	12	S1	1.75	1.34	4.3	0.01 U	12	S1	1.73	1.33	4.3
Clay	percent	377	377	100	0	24.4	PSY04	8.935	8.96	18.8	0	24.4	PSY04	8.935	8.96	18.8
Coarse sand	percent	1135	1135	100	0.01	51.9	G660	5.89	1.77	23.6	0.01	51.9	G660	5.89	1.77	23.6
Coarse silt	percent	1005	1002	99.7	0	63.3	G613	18.9	18.1	42	0	63.3	G613	18.8	18	42
Fine gravel	percent	968	960	99.2	0 T	29.5	G508	1.439	0.5	7.081	0 T	29.5	G508	1.427	0.495	7.038
Fine sand	percent	1135	1135	100	0.29	57.1	WR-PG-126	10.20378941	7.9	25.93	0.29	57.1	WR-PG-126	10.20378941	7.9	25.93
Fine silt	percent	1005	1004	99.9	0	30.1	G693	7.45	7.17 J	16.3	0	30.1	G693	7.44	7.16 J	16.3
Fines	percent	1420	1420	100	0	105 T	DG01	53.75	61	92.1	0	105 T	DG01	53.75	61	92.1
Gravel	percent	383	381	99.5	0	84.6	RB05	3.651	0.37	14.4	0	84.6	RB05	3.632	0.355 T	14.38
Mean grain size	mm	1	1	100	1.41	1.41	WR-VC-08	1.41	1.41	1.41	1.41	1.41	WR-VC-08	1.41	1.41	1.41
Median grain size	mm	1	1	100	0.9	0.9	WR-VC-08	0.9	0.9	0.9	0.9	0.9	WR-VC-08	0.9	0.9	0.9
Medium gravel	percent	968	947	97.8	0 T	60	G025	1.9555	0.03	10.94	0 T	60	G025	1.9131	0.02335	10.73
Medium sand	percent	1135	1135	100	0.08	78.4	05B019	14.8	5.38 J	54.9	0.08	78.4	05B019	14.8	5.38 J	54.9
Medium silt	percent	1005	1004	99.9	0	48.2	G092	12.26	12.3	25.3 J	0	48.2	G092	12.25	12.3	25.3 J
Sand	percent	284	284	100	1.67 J	99	RB6	36.96	28.35	91.78 J	1.67 J	99	RB6	36.96	28.35	91.78 J
Sieve 10	percent	46	46	100	0	7.5	S1	0.55	0	2.1	0	7.5	S1	0.55	0	2.1
Sieve 140	percent	46	46	100	2	38.2 J	T4-UP08	9.46	8.3 J	16.39 J	2	38.2 J	T4-UP08	9.46	8.3 J	16.39 J
Sieve 20	percent	46	46	100	0	5.3	S1	1.2	0.5	4.5 J	0	5.3	S1	1.2	0.5	4.5 J
Sieve 200	percent	46	46	100	0.14	9.3 J	T4-VC18	3.1	2.6	6.7	0.14	9.3 J	T4-VC18	3.1	2.6	6.7
Sieve 230	percent	4	4	100	2.6	6.7	S4	5.1	5.6	6.6	2.6	6.7	S4	5.1	5.6	6.6
Sieve 4	percent	46	46	100	0	12.3	T4-UP13	0.987	0	5.58	0	12.3	T4-UP13	0.987	0	5.58
Sieve 40	percent	46	46	100	0.1	38.4	T4-VC22	12.4	7.2	35.4	0.1	38.4	T4-VC22	12.4	7.2	35.4
Sieve 60	percent	46	46	100	0.3	56	T4-VC28	20.08	14.6 J	52.15	0.3	56	T4-VC28	20.08	14.6 J	52.15
Silt	percent	383	383	100	0.02	95.7	DM-H	55.1	62.53	83.39	0.02	95.7	DM-H	55.1	62.53	83.39
Very coarse sand	percent	1133	1133	100	0 T	26.2	G508	1.8763	0.91	6.518	0 T	26.2	G508	1.8763	0.91	6.518
Very fine sand	percent	1133	1133	100	0.04	66.8	G218	12.14145633	10.4	29.24	0.04	66.8	G218	12.14145633	10.4	29.24
Very fine silt	percent	1005	1005	100	0	24.7	C397	4.67	4.33	10.3 J	0	24.7	C397	4.67	4.33	10.3 J
Conventionals																
Acid Volatile Sulfides	mg/kg	76	56	73.7	0.161 J	434 J	PSY23	22.8	6.13	64.8	0.161 J	434 J	PSY23	17	3.25	49.8
Ammonia	mg/kg	493	487	98.8	0.26 J	481	GN01EPG	99.1	88.1	218	0.07 U	481	GN01EPG	98.3	87.4	217
Bulk density	g/cm3	6	6	100	1.32	1.8	G021; G033	1.6	1.62	1.8	1.32	1.8	G021; G033	1.6	1.62	1.8
Cyanide	mg/kg	39	34	87.2	0.1 J	39.4 J	SDDC25SS	4.55	0.52 J	24.2 J	0.08 UJ	39.4 J	SDDC25SS	3.99	0.4 J	18.5 J
Gravimetric water content	percent	6	6	100	11.1	103	G012	51.5	50.8	96.5	11.1	103	G012	51.5	50.8	96.5
Oxidation-Reduction Potential	mv	2	2	100	-55.9	227	BT007	85.55	85.55	212.9	-55.9	227	BT007	85.55	85.55	212.9
Perchlorate	µg/kg	13	3	23.1	96200	274000	CP07B	213000	269000	274000	22 U	274000	CP07B	49200	11 U	271000
pH	pH units	2	2	100	6.79	7.03	BT030	6.91	6.91	7.02	6.79	7.03	BT030	6.91	6.91	7.02
Specific Gravity	NA	792	792	100	0.88	2.4	G621; G670	1.52	1.47	1.87	0.88	2.4	G621; G670	1.52	1.47	1.87
Sulfide	mg/kg	496	431	86.9	0.2 J	1830 J	HC-S-25	29.4	6.1 J	88.8 J	0.07 UJ	1830 J	HC-S-25	25.6	4.7 J	64.4 J
Total organic carbon	percent	1698	1694	99.8	0.00715 J	27	G006	1.7892	1.74	3.1535	0.00433 U	27	G006	1.7851	1.735	3.1515
Total solids	percent	1489	1489	100	10.9	98.8	T4-IM-01	55.98	52.5	82.98	10.9	98.8	T4-IM-01	55.98	52.5	82.98
Total volatile solids	percent	173	173	100	0.91	12.1	PSY10	7.101	7.29	9.794	0.91	12.1	PSY10	7.101	7.29	9.794
Metals																
Aluminum	mg/kg	1256	1256	100	1630	47400	RC483-2	23300	24000	39800	1630	47400	RC483-2	23300	24000	39800
Antimony	mg/kg	1372	1023	74.6	0.02 J	47.7	A2GS10	1.107	0.22 J	6 J	0.02 J	47.7	A2GS10	1.062	0.2 J	5.445 U
Arsenic	mg/kg	1551	1426	91.9	0.7	132	RB08	4.86	3.71 J	8.995	0.7	132	RB08	4.685	3.6	8.69 J
Arsenic pentavalent	mg/kg	7	7	100	3.69 JT	5.35	SS-01	4.249	3.992	5.117 J	3.69 JT	5.35	SS-01	4.249	3.992	5.117 J
Arsenic trivalent	mg/kg	7	7	100	0.105 J	0.509 JT	SS-41	0.202	0.163	0.413 J	0.105 J	0.509 JT	SS-41	0.202	0.163	0.413 J
Barium	mg/kg	239	239	100	58.9 J	5950	CP09APG	198	177	243	58.9 J	5950	CP09APG	198	177	243
Beryllium	mg/kg	240	205	85.4	0.217 J	1.19	A2GS12	0.595	0.6	0.7	0.217 J	1.31 U	SS-48	0.585	0.6	0.7
Cadmium	mg/kg	1551	1403	90.5	0.0156 J	10.1	T4-UP13	0.41256	0.25 J	1.26	0.00159 U	10.1	T4-UP13	0.3929	0.249	1.155
Calcium	mg/kg	145	145	100	4430 J	53800	SED01	8750	8280	9840	4430 J	53800	SED01	8750	8280	9840
Chromium	mg/kg	1536	1530	99.6	4.07 J	819 J	RB06	35.37	29.3	57.48	4.07 J	819 J	RB06	35.3	29.3	57.33
Chromium hexavalent	mg/kg	65	28	43.1	0.2 J	2.1 J	BT012	0.72	0.5 J	1.5 J	0.1 UJ	2.1 J	BT012	0.42	0.3 UJT	1.4 J

Table D1.3-2. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Cobalt	mg/kg	145	145	100	11.1 T	55.5	SED02	18.3	18.3	20.3	11.1 T	55.5	SED02	18.3	18.3	20.3
Copper	mg/kg	1552	1548	99.7	6.19 J	2830	UG01	60.8	38.8 J	171.3	6.19 J	2830	UG01	60.67	38.7	170.9
Iron	mg/kg	164	164	100	19100	84900	SED01	42000	42300	53100	19100	84900	SED01	42000	42300	53100
Lead	mg/kg	1575	1560	99	1.1 J	13400 T	GWC1	49.22	16 J	122.1 J	1.1 J	13400 T	GWC1	48.84	15.8	122 J
Magnesium	mg/kg	145	145	100	3710	14500	SED02	6710	6930	7720	3710	14500	SED02	6710	6930	7720
Manganese	mg/kg	286	286	100	236 T	2220	HA-43	667.7	652	1008	236 T	2220	HA-43	667.7	652	1008
Mercury	mg/kg	1527	1398	91.6	0.005	65.2 T	GWC1	0.14548	0.068	0.2683	0.00189 U	65.2 T	GWC1	0.13564	0.063 J	0.2507 J
Methylmercury	mg/kg	3	3	100	0.000016 J	0.000472	SS-19	0.000318333	0.000467 T	0.0004715	0.000016 J	0.000472	SS-19	0.000318333	0.000467 T	0.0004715
Nickel	mg/kg	1511	1494	98.9	6.22 J	594	PSY27	25.7	23.3 J	37 J	6.22 J	594	PSY27	25.5	23.2	37 J
Potassium	mg/kg	145	145	100	540	50000	SED02	1670	1280	1550	540	50000	SED02	1670	1280	1550
Selenium	mg/kg	1209	540	44.7	0.03 JT	20	SD139	2.827	0.17	14	0.03 JT	20	SD139	1.378	0.12 U	12
Silver	mg/kg	1513	1404	92.8	0.014 J	14.8	S0202	0.3443	0.2035	1	0.014 J	14.8	S0202	0.3457	0.206 J	1.062 U
Sodium	mg/kg	145	145	100	352	49000	SED02	1800	1100	2410	352	49000	SED02	1800	1100	2410
Thallium	mg/kg	258	187	72.5	0.026 J	27	SD043	7.468	7	22	0.026 J	27	SD043	5.783	2.5 U	21.15
Tin	mg/kg	16	16	100	0.891 J	14.2 J	DM-B	3.7	2.5 J	8.83 J	0.891 J	14.2 J	DM-B	3.7	2.5 J	8.83 J
Titanium	mg/kg	75	75	100	940	3680	DM-B	1980	1930	3140	940	3680	DM-B	1980	1930	3140
Vanadium	mg/kg	145	145	100	63	152	SD075	102	104	122	63	152	SD075	102	104	122
Zinc	mg/kg	1581	1581	100	3.68 J	4220	HA-43	154	106 J	375	3.68 J	4220	HA-43	154	106 J	375
Butyltins																
Butyltin ion	µg/kg	323	219	67.8	0.093 J	740 J	SD012	13.5	1.6 J	47.4	0.042 U	740 J	SD012	9.7	1.8 J	30.4
Dibutyltin dichloride	µg/kg	4	4	100	17 J	34 JT	03R004	29	33 J	34 J	17 J	34 JT	03R004	29	33 J	34 J
Dibutyltin ion	µg/kg	323	251	77.7	0.14 J	2700	G421	45.1	4.6	133	0.04 U	2700	G421	35.7	2.95 UJ	109
Monobutyltin trichloride	µg/kg	3	3	100	8.2 J	28 J	03R004	15	9.6 J	26 J	8.2 J	28 J	03R004	15	9.6 J	26 J
Tetrabutyltin	µg/kg	327	86	26.3	0.27 J	1000	G421	18.4	1.7 J	31.3	0.081 U	1000	G421	5.63	0.79 J	5.49
Tributyltin	µg/kg	8	4	50	3.3	146	A2BGS-7	49.3	24	130	2.79 U	146	A2BGS-7	25.4	2.44	109
Tributyltin chloride	µg/kg	4	4	100	25	64	03R005	40.9	37.3	60.9	25	64	03R005	40.9	37.3	60.9
Tributyltin ion	µg/kg	358	333	93	0.45 J	47000	SD012	466.2	22	753.6	0.079 U	47000	SD012	433.7	17.5	650.5
PCB Aroclors																
Aroclor 1016	µg/kg	1314	1	0.1	46	46	PP01M105	46	46	46	0.89 U	2000 U	SD090	8.68	1.6 U	18 U
Aroclor 1221	µg/kg	1313	13	1	10.7	109	G472	46.5	40.1	103	0.89 U	4000 U	SD090	15.5	2.05 U	33.5 U
Aroclor 1232	µg/kg	1313	0	0	--	--	--	--	--	--	0.89 U	2190 UJ	G453	10.1	1.95 U	24.2 U
Aroclor 1242	µg/kg	1314	54	4.1	2.1 J	1200	G111	92.7	28.4	265	0.89 U	2000 U	SD090	12.3	1.7 U	33.5 U
Aroclor 1248	µg/kg	1314	294	22.4	2.59 J	22300 J	G453	219	16 J	695	0.89 U	22300 J	G453	55.5	1.95 U	98
Aroclor 1254	µg/kg	1314	577	43.9	0.851 J	3000	SED01	80.4	18 NJ	332	0.64 U	3000	SED01	43.4	7.5	166
Aroclor 1260	µg/kg	1314	932	70.9	1.3 J	5070 J	G453	82.1	14	250	0.82 U	5070 J	G453	64.4	10	203
Aroclor 1262	µg/kg	1012	0	0	--	--	--	--	--	--	0.98 U	1220 UJ	G453	2.98	1.03 UJ	7 U
Aroclor 1268	µg/kg	1012	21	2.1	1.89 J	55	G112	14.9	11.9	44.7	0.84 U	1050 UJ	G453	3.03	0.953 U	8.7 U
Aroclors	µg/kg	1315	1020	77.6	0.851 JT	27400 JT	G453	189.4	27 J	795.7	0.851 JT	27400 JT	G453	156.1	19.5 UT	601.8 J
PCB Congeners																
PCB001	pg/g	252	214	84.9	1.95 T	217000	G453	1210	16.9 J	1140 J	1.68 U	217000	G453	1030	13.5 J	912
PCB002	pg/g	252	225	89.3	1.25 T	21200	G453	131	16.9	105	1.25 T	21200	G453	118	14.5	101
PCB003	pg/g	252	222	88.1	2.22 T	124000	G453	665	17.8	438	1.68 U	124000	G453	586	14.5 J	407
PCB004	pg/g	11	11	100	5.86 T	9070	03R004	1090	308	4930	5.86 T	9070	03R004	1090	308	4930
PCB004 & 010	pg/g	241	201	83.4	5.43	267000	G453	2450	67.2	4750	3.33 U	267000	G453	2040	49.9	3860
PCB005	pg/g	11	11	100	0.209 T	520	03R004	52.9	1.29	277	0.209 T	520	03R004	52.9	1.29	277
PCB005 & 008	pg/g	241	226	93.8	9.4	780000	G453	5080	102	5300	9.4	780000	G453	4760	90.2 T	5000
PCB006	pg/g	252	190	75.4	3.07 T	138000	G453	1200	35.8	2040	3.07 T	138000	G453	909	22	1620
PCB007	pg/g	11	10	90.9	0.963	1040	03R004	122	7.29	606	0.696 UT	1040	03R004	111	2.58	558
PCB007 & 009	pg/g	241	118	49	5.05	67000	G453	842	39.9 J	1090	2.48 U	67000	G453	416	9.97	369
PCB008	pg/g	89	29	32.6	12.8	22500	03R004	1850	658 T	7540 J	12.8	22500	03R004	727	185 UJ	1610 J
PCB009	pg/g	11	11	100	0.885 T	1830	03R004	186	4	977	0.885 T	1830	03R004	186	4	977
PCB010	pg/g	11	11	100	0.351 T	474	03R004	57.6	14.2	257	0.351 T	474	03R004	57.6	14.2	257
PCB011	pg/g	252	235	93.3	11.9	3360	G453	168	131 JT	372	9.87 UJ	3360	G453	158	121	362
PCB012 & 013	pg/g	252	153	60.7	1.86 JT	29800	G453	395	29.7	752	1.86 JT	29800	G453	243	12.6	391
PCB014	pg/g	252	5	2	0.198	5.44	07R006	1.31	0.284 T	4.43	0.161 U	242 U	G453	6.27	4.88 U	13 U
PCB015	pg/g	252	240	95.2	8.64	352000	G453	2440	107 J	3970	8.64	352000	G453	2320	101	3720
PCB016	pg/g	11	11	100	11.3 T	17100	03R004	1950	54.7	9430	11.3 T	17100	03R004	1950	54.7	9430
PCB016 & 032	pg/g	241	238	98.8	7.35 J	1100000	G453	6540	139	6970 J	2.53 UT	1100000	G453	6460	138	6960
PCB017	pg/g	252	245	97.2	5.88	744000	G453	4460	102 T	5200	2.53 UT	744000	G453	4340	99.4	4950

Table D1.3-2. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB018	pg/g	319	250	78.4	8.06 J	1920000	G453	10900	181 J	6860	8.06 J	1920000	G453	8550	170 U	5400
PCB018 & 030	pg/g	11	11	100	25.5 JT	35500 J	03R004	4190	139 J	19800 J	25.5 JT	35500 J	03R004	4190	139 J	19800 J
PCB019	pg/g	252	248	98.4	5.22	179000	G453	1830	62.9	3050	5.22	179000	G453	1800	60.4	2970
PCB020 & 021 & 033	pg/g	241	239	99.2	7.06 J	933000	G453	5800	147 J	3720	3.85 U	933000	G453	5750	146	3710
PCB020 & 028	pg/g	11	11	100	63.2 JT	38200 J	03R004	6670	559 J	26000 J	63.2 JT	38200 J	03R004	6670	559 J	26000 J
PCB021 & 033	pg/g	11	11	100	25.5 JT	24900 J	03R004	2940	105 J	14400 J	25.5 JT	24900 J	03R004	2940	105 J	14400 J
PCB022	pg/g	252	248	98.4	4.95 J	540000	G453	3470	104	4000	4.95 J	540000	G453	3420	103	3800
PCB023	pg/g	252	44	17.5	0.161	1460	G453	50.7	5.86	105	0.144 UT	1460	G453	11.3	2.47 U	17.8
PCB024	pg/g	11	9	81.8	0.458 T	599	03R004	83.7	15 T	392	0.144 UT	599	03R004	68.5	1.66	340
PCB024 & 027	pg/g	241	218	90.5	2.32	123000	G453	898	29.2	1260	2.32	123000	G453	813	24.3 J	1070
PCB025	pg/g	252	237	94	4.71	119000	G453	861	38.5 T	1510	4.71	119000	G453	810	33.8	1360
PCB026	pg/g	241	230	95.4	5.45	257000	G453	1720	60.1	2160	4.92 UJ	257000	G453	1640	53 J	2160
PCB026 & 029	pg/g	11	11	100	9.55 JT	8320 J	03R004	1130	50.8 J	5040 J	9.55 JT	8320 J	03R004	1130	50.8 J	5040 J
PCB027	pg/g	11	11	100	3.41 T	2880	03R004	423	121 T	1730	3.41 T	2880	03R004	423	121 T	1730
PCB028	pg/g	319	282	88.4	15.7 J	1750000	G453	9760	378	12500	11.6 UT	1750000	G453	8640	310	8900
PCB029	pg/g	241	77	32	1.93	8800	G453	165	10.2	371	1.24 U	8800	G453	54.9	2.5 UJ	29.1
PCB030	pg/g	241	13	5.4	1.04 J	215 JT	BT016	39.3	9.11 J	161 J	1.04 J	215 JT	BT016	5.28	2.46 UJ	12.4 U
PCB031	pg/g	252	251	99.6	11.5 J	1550000	G453	9800	261 T	11100	11.5 J	1550000	G453	9760	252 J	11100
PCB032	pg/g	11	11	100	11.6 T	10500	03R004	1630	117	6590	11.6 T	10500	03R004	1630	117	6590
PCB034	pg/g	252	119	47.2	0.283 T	8310	G453	117	12.3	250	0.283 T	8310	G453	56.7	3.37	95.1 J
PCB035	pg/g	252	189	75	1.08 T	14300	G453	131	11	235	1.08 T	14300	G453	99.3	7.16 J	199
PCB036	pg/g	252	25	9.9	0.412 T	286	G453	18.4	5.33	25.3	0.196 UT	286	G453	4.51	2.46 UJ	10.5
PCB037	pg/g	252	248	98.4	6.13 J	435000	G453	2700	113	4040	6.13 J	435000	G453	2660	111	3990
PCB038	pg/g	252	169	67.1	0.531	8790	G453	163	12	365	0.201 U	8790	G453	110	6.3 U	242
PCB039	pg/g	252	85	33.7	0.404 JT	1500	G453	39.2	8.84	100	0.404 JT	1500	G453	15.1	2.52 UJ	34.8 J
PCB040	pg/g	241	228	94.6	4.69	311000	G453	2450	79	3120	4.69	311000	G453	2320	69.7 T	2640
PCB040 & 041 & 071	pg/g	11	11	100	47.4 JT	19100 J	03R004	5870	284 J	18500 J	47.4 JT	19100 J	03R004	5870	284 J	18500 J
PCB041 & 064 & 071 & 072	pg/g	241	240	99.6	17.5	1410000	G453	12300	426	16600 J	11.6 UT	1410000	G453	12200	422 T	16600 J
PCB042	pg/g	11	11	100	22.6 T	8970	03R004	2870	149	8730	22.6 T	8970	03R004	2870	149	8730
PCB042 & 059	pg/g	241	238	98.8	5.57	548000	G453	4330	157 J	6400	5.57	548000	G453	4270	156	6300
PCB043	pg/g	11	11	100	3.51 T	1720	03R004	458	23.9	1520	3.51 T	1720	03R004	458	23.9	1520
PCB043 & 049	pg/g	241	241	100	19.7	1160000	G453	11200	510	31800	19.7	1160000	G453	11200	510	31800
PCB044	pg/g	319	268	84	17.3	1620000	G453	12800	589 J	16000	11.6 UT	1620000	G453	10800	367 J	13400
PCB044 & 047 & 065	pg/g	11	11	100	95.1 JT	45900 J	03R005	13400	2320 J	40400 J	95.1 JT	45900 J	03R005	13400	2320 J	40400 J
PCB045	pg/g	241	228	94.6	6.7	324000	G453	2490	61.6	2620	4.92 UJ	324000	G453	2350	55.7	2570
PCB045 & 051	pg/g	11	11	100	18 JT	7970 J	03R004	2160	884 JT	6710 J	18 JT	7970 J	03R004	2160	884 JT	6710 J
PCB046	pg/g	252	238	94.4	4.13	138000	G453	1080	37.3 J	1640	4.13	138000	G453	1020	30.9	1580 J
PCB047	pg/g	241	239	99.2	16.5	411000	G453	5560	294 J	13200	13.6 UJ	411000	G453	5510	293	13100
PCB048	pg/g	11	11	100	14.7 T	8570	03R004	1850	96.7	6610	14.7 T	8570	03R004	1850	96.7	6610
PCB048 & 075	pg/g	241	232	96.3	6.82	390000	G453	3090	91.3	3750	4.92 UJ	390000	G453	2980	87.6	3570
PCB049 & 069	pg/g	11	11	100	60.3 JT	28700 J	03R005	7970	710 J	24500 J	60.3 JT	28700 J	03R005	7970	710 J	24500 J
PCB050	pg/g	241	134	55.6	1.46 T	11300	GCA11E	231	10.6	350	1.46 T	11300	GCA11E	130	4.88 U	157
PCB050 & 053	pg/g	11	11	100	16.5 JT	5430 J	03R004	1840	583 J	5130 J	16.5 JT	5430 J	03R004	1840	583 J	5130 J
PCB051	pg/g	241	238	98.8	5.35	90900	G453	1640	64.6	3620	5 U	90900	G453	1620	63.9	3590
PCB052	pg/g	89	45	50.6	134 T	112000 J	03R005	7000	2070	30600	134 T	112000 J	03R005	3620	280 J	16200 J
PCB052 & 069	pg/g	241	241	100	22.2	1490000	G453	15400	803 JT	39100	22.2	1490000	G453	15400	803 JT	39100
PCB053	pg/g	241	238	98.8	5.54	283000	G453	3000	135	6530	5.54	283000	G453	2960	132	6360
PCB054	pg/g	252	210	83.3	1.24 T	23600 JT	BT016	343	12.8 J	572	1.24 T	23600 JT	BT016	286	9.98	540 J
PCB055	pg/g	252	185	73.4	1.38 T	19600	G453	236	18	717 J	0.496 U	19600	G453	174	9.67	450
PCB056	pg/g	11	11	100	30.8 T	16700	02R001	4130	337	14500	30.8 T	16700	02R001	4130	337	14500
PCB056 & 060	pg/g	241	240	99.6	9.38 J	902000	G453	7260	238	7710	9.38 J	902000	G453	7230	236	7650
PCB057	pg/g	252	136	54	1.28	7080	G453	124	13.2	321 J	0.717 UT	7080	G453	68	3.99	137
PCB058	pg/g	252	125	49.6	0.99	2860	G453	72.3	10.5	270 J	0.765 U	2860	G453	37.3	3.21	114
PCB059 & 062 & 075	pg/g	11	11	100	8.84 JT	3260 J	03R004	909	115 J	2970 J	8.84 JT	3260 J	03R004	909	115 J	2970 J
PCB060	pg/g	11	11	100	13.3 T	8380	02R001	2060	172	7400	13.3 T	8380	02R001	2060	172	7400
PCB061 & 070	pg/g	241	240	99.6	21.2 J	1530000	G453	12800	575	16700 J	11.6 UT	1530000	G453	12800	549	16700 J
PCB061 & 070 & 074 & 076	pg/g	11	11	100	152 JT	76900 J	03R005	18700	2200 J	66200 J	152 JT	76900 J	03R005	18700	2200 J	66200 J
PCB062	pg/g	241	14	5.8	3.13	677	G453	87.4	11.1	368	1.25 UT	677	G453	7.97	2.46 U	12.5 U
PCB063	pg/g	252	222	88.1	1.72	50900	G453	462	23.9	932	1.72	50900	G453	407	17.8	886

Table D1.3-2. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB064	pg/g	11	11	100	40.7 T	16500	02R001	5160	343	15100	40.7 T	16500	02R001	5160	343	15100
PCB065	pg/g	241	19	7.9	2.85	1810	G453	140	13.6	502	1.25 UT	1810	G453	13.9	2.46 U	13.6
PCB066	pg/g	89	61	68.5	78.8 T	39000 J	02R001	3540	930 J	22900	78.8 T	39000 J	02R001	2460	600 T	13600
PCB066 & 076	pg/g	241	240	99.6	19	1220000	G453	10100	434	12300	11.6 UT	1220000	G453	10100	430	12100
PCB067	pg/g	252	211	83.7	1.7	51100	G453	402	17.6	705	1.7	51100	G453	337	13.4 J	602
PCB068	pg/g	252	185	73.4	0.778 T	5120	G453	122	15.2	477	0.778 T	5120	G453	90.5	8.16	424
PCB072	pg/g	11	11	100	1.12 T	430	03R005	82.6	23.3 T	296	1.12 T	430	03R005	82.6	23.3 T	296
PCB073	pg/g	252	92	36.5	2.29	33300	G453	667	25.6	2220 J	0.598 U	33300	G453	245	2.62 U	348
PCB074	pg/g	241	239	99.2	8.2 J	672000	G453	5370	200 T	6240	8.2 J	672000	G453	5320	198	6200
PCB077	pg/g	264	252	95.5	1.85	99900	G453	843	48.1	1290	1.85	99900	G453	805	45.2	1260
PCB078	pg/g	252	24	9.5	2.91	252	G009	29.6	12	94.7	0.177 UT	252	G009	5.91	2.47 U	19.8
PCB079	pg/g	252	209	82.9	2.33 T	7490	G453	162	18.6	636	1.68 U	7490	G453	135	12.9	399 J
PCB080	pg/g	252	2	0.8	5.38	12.8	G218	9.09	9.09	12.4	0.521 UT	121 U	G453	3.38	2.46 U	6.89 U
PCB081	pg/g	264	221	83.7	0.245 J	3830	G453	49	3.65 J	137	0.245 J	3830	G453	41.2	2.41 J	103 J
PCB082	pg/g	252	245	97.2	5.35	125000	G453	1640	119	5950 J	4.93 U	125000	G453	1590	114	5800 J
PCB083	pg/g	241	22	9.1	3.34	1010	G453	121	28.4	459 J	1.25 UT	1010	G453	13.8	2.46 U	24.1 U
PCB083 & 099	pg/g	11	11	100	142 JT	130000 J	03R005	15900	2560 JT	72100 J	142 JT	130000 J	03R005	15900	2560 JT	72100 J
PCB084	pg/g	11	11	100	71.7 T	68600	03R005	8090	927 T	37700	71.7 T	68600	03R005	8090	927 T	37700
PCB084 & 092	pg/g	241	241	100	21.1	335000	G453	5420	485	21200	21.1	335000	G453	5420	485	21200
PCB085 & 116	pg/g	241	238	98.8	5.39 J	158000	G453	1970	158 J	7600 J	5.39 J	158000	G453	1940	157 T	7590 J
PCB085 & 116 & 117	pg/g	11	11	100	41.1 JT	29200 J	03R005	4140	605 J	17700 J	41.1 JT	29200 J	03R005	4140	605 J	17700 J
PCB086	pg/g	241	121	50.2	2.31	10600	G453	217	14.3	650	1.65 U	10600	G453	111	5.74	187
PCB086 & 087 & 097 & 108 & 119 & 125	pg/g	11	11	100	167 JT	159000 J	03R005	19100	2750 JT	88200 J	167 JT	159000 J	03R005	19100	2750 JT	88200 J
PCB087 & 117 & 125	pg/g	241	240	99.6	12.1	279000	G453	4430	368	16000 J	11.6 UT	279000	G453	4410	366	16000 JT
PCB088 & 091	pg/g	252	250	99.2	9.67	130000	G453	2490	220	8770 J	9.67	130000	G453	2470	216 J	8540 J
PCB089	pg/g	252	199	79	2.36 T	23000	G453	275	17.8	1020	1.68 U	23000	G453	218	11.4 J	688 J
PCB090 & 101	pg/g	241	241	100	56.3	713000	G453	14000	1270	48800	56.3	713000	G453	14000	1270	48800
PCB090 & 101 & 113	pg/g	11	11	100	312 JT	258000 J	03R005	29400	5540 J	138000 J	312 JT	258000 J	03R005	29400	5540 J	138000 J
PCB092	pg/g	11	11	100	58.9 T	43900	03R005	5100	1020 T	23700	58.9 T	43900	03R005	5100	1020 T	23700
PCB093	pg/g	241	1	0.4	13.1	13.1	G494	13.1	13.1	13.1	1.25 UT	121 U	G453	3.46	2.46 U	6.55 U
PCB093 & 095 & 098 & 100 & 102	pg/g	11	11	100	305 JT	235000 J	03R005	26600	3770 J	126000 J	305 JT	235000 J	03R005	26600	3770 J	126000 J
PCB094	pg/g	252	210	83.3	1.52 T	29100	GCA11E	377	17.5	690	1.52 T	29100	GCA11E	315	12.4	620
PCB095 & 098 & 102	pg/g	241	241	100	40.7	629000	G453	11300	1030	38900	40.7	629000	G453	11300	1030	38900
PCB096	pg/g	252	206	81.7	1.96 T	14100	G453	314	20.5 J	1090	1.96 T	14100	G453	257	13 J	815
PCB097	pg/g	241	239	99.2	13.1	240000	G453	3470	278 J	12500	9.31 UJ	240000	G453	3440	275	12500
PCB099	pg/g	241	241	100	25.1	324000	G453	5410	494	20200	25.1	324000	G453	5410	494	20200
PCB100	pg/g	241	227	94.2	2.94	33200	GCA11E	514	26 J	1020	2.94	33200	GCA11E	484	23.6 T	987
PCB101	pg/g	78	34	43.6	260 JT	8480	19A01	1660	1080	4730 J	180 UT	8480	19A01	802	175 U	3660
PCB103	pg/g	252	234	92.9	3.27 T	36100	GCA11E	439	32.3	1270	2.48 U	36100	GCA11E	408	27.8	1170
PCB104	pg/g	252	73	29	0.178 T	4530	GCA11E	150	10.3 T	378 J	0.178 T	4530	GCA11E	45.8	2.5 UJ	60.6
PCB105	pg/g	342	267	78.1	7.84	220000	G453	3450	297	13300	7.84	220000	G453	2710	200	8510
PCB106	pg/g	11	2	18.2	1.3 T	62.2	07R006	31.8	31.8	59.2	0.351 U	62.2	07R006	6.85	0.329 UT	35
PCB106 & 118	pg/g	253	253	100	16.9	529000	G453	8710	855	35600 J	16.9	529000	G453	8710	855	35600 J
PCB107 & 109	pg/g	241	234	97.1	5.04 J	40800	G453	735	77.4	2600	4.92 UJ	40800	G453	714	73.8	2520
PCB107 & 124	pg/g	11	11	100	8.93 JT	7110 J	03R005	884	153 JT	4010 J	8.93 JT	7110 J	03R005	884	153 JT	4010 J
PCB108 & 112	pg/g	241	231	95.9	4.74	39400	G453	660	55.4	2350	4.74	39400	G453	632	48.7	2310
PCB109	pg/g	11	11	100	14 T	8920	03R005	1230	283 T	5260	14 T	8920	03R005	1230	283 T	5260
PCB110	pg/g	241	241	100	33.6 T	718000	G453	12900	1220	47800	33.6 T	718000	G453	12900	1220	47800
PCB110 & 115	pg/g	11	11	100	378 JT	302000 J	03R005	34400	5170 JT	163000 J	378 JT	302000 J	03R005	34400	5170 JT	163000 J
PCB111	pg/g	11	6	54.5	1.67 T	15.6	03R005	7.18	6.34	14.4 J	0.329 UT	15.6	03R005	4.14	1.67 T	13.2 J
PCB111 & 115	pg/g	241	212	88	3.59	14700	G453	261	21.3 J	1140 J	1.68 U	14700	G453	230	17.5	992
PCB112	pg/g	11	1	9.1	34.7 T	34.7 T	06R002	34.7	34.7 T	34.7 T	0.218 UT	34.7 T	06R002	4.3	0.284 U	20.1
PCB113	pg/g	241	130	53.9	1.65 J	5180	G453	122	14.1	358 J	1.65 J	5180	G453	67.4	6.18	198
PCB114	pg/g	264	252	95.5	0.444	16900	G453	235	17.5	890	0.444	16900	G453	225	16.4	862
PCB118	pg/g	89	37	41.6	208 T	170000 J	03R005	7060	960 J	16100 J	130 UT	170000 J	03R005	2990	115 U	5730
PCB119	pg/g	241	231	95.9	4.94 T	18100	GCA11E	468	42.4	1640	4.92 UJ	18100	GCA11E	448	39.7	1630
PCB120	pg/g	252	136	54	0.973 T	2110	GCA11E	75.5	12.9 J	210	0.973 T	2110	GCA11E	42.2	5.67	153
PCB121	pg/g	252	29	11.5	0.759	4470	GCA11E	217	12	508 J	0.415 UT	4470	GCA11E	27.9	2.47 UJ	28 J
PCB122	pg/g	252	197	78.2	2.48	8270	G453	160	16.7	587	1.68 U	8270	G453	126	10.5 J	425 J

Table D1.3-2. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB123	pg/g	264	250	94.7	0.381	12500	G453	182	15.8	667	0.381	12500	G453	173	14.7	606 J
PCB124	pg/g	241	228	94.6	3.04	20600	G453	368	38.1 J	1190	3.04	20600	G453	349	36.2	1170
PCB126	pg/g	264	249	94.3	0.237	2020	G453	49.5	7.09	219	0.237	2020	G453	46.7	6.35 J	203
PCB127	pg/g	252	10	4	0.581 JT	632	03R005	91.8	8.9	446	0.581 JT	632	03R005	6.94	2.46 U	12.4 U
PCB128	pg/g	78	43	55.1	200 J	6680 J	1902	676	410 J	1190 J	110 UT	6680 J	1902	410	230 J	995 J
PCB128 & 162	pg/g	241	238	98.8	9.2	69300 J	G393	1850	207	6660	9.2	69300 J	G393	1820	198	6570
PCB128 & 166	pg/g	11	11	100	83.1 JT	42000 J	03R005	4800	1020 J	22300 J	83.1 JT	42000 J	03R005	4800	1020 J	22300 J
PCB129	pg/g	241	231	95.9	4.38	18900	G453	585	59.2	2380 J	4.38	18900	G453	561	57	2190
PCB129 & 138 & 160 & 163	pg/g	11	11	100	688 JT	342000 J	03R005	37800	7910 J	179000 J	688 JT	342000 J	03R005	37800	7910 J	179000 J
PCB130	pg/g	252	245	97.2	5 J	35500 J	G393	943	105	3390	5 J	35500 J	G393	917	102	3260
PCB131	pg/g	252	36	14.3	2.67	4280	03R005	242	24.5	872	1.25 UT	4280	03R005	37.4	2.47 UJ	55.8
PCB132	pg/g	11	11	100	230 T	85600	03R005	9810	2450	45300	230 T	85600	03R005	9810	2450	45300
PCB132 & 161	pg/g	241	240	99.6	20.3	254000 J	G393	4680	443	12700	15.1 UJ	254000 J	G393	4660	437	12600
PCB133	pg/g	11	11	100	10.6 T	2570	03R005	336	138	1410	10.6 T	2570	03R005	336	138	1410
PCB133 & 142	pg/g	241	233	96.7	5.01 J	38400	GCA11E	631	58.4	1590	4.93 U	38400	GCA11E	610	55.4	1500
PCB134 & 143	pg/g	252	248	98.4	5.27	41900 J	G393	941	90.4	2850	4.98 U	41900 J	G393	926	88.1	2770
PCB135	pg/g	241	239	99.2	13.2	163000 J	G393	3100	260 J	7130	11.3 U	163000 J	G393	3080	259	7030
PCB135 & 151 & 154	pg/g	11	10	90.9	310 JT	60100 J	03R005	8300	2490 J	35800 J	10.1 U	60100 J	03R005	7550	2320 J	33100 J
PCB136	pg/g	252	250	99.2	12.5	188000 J	G393	3120	265	7340	5 U	188000 J	G393	3090	257	7340
PCB137	pg/g	252	241	95.6	4.48	19600	G092	574	62.5	2350	4.48	19600	G092	549	57.7	2130
PCB138	pg/g	78	51	65.4	170 J	31900 J	1902	3340	1330 J	12000 J	120 UT	31900 J	1902	2210	585 J	8210 J
PCB138 & 163 & 164	pg/g	241	241	100	62.2	1040000 J	G393	18700	1650	43500	62.2	1040000 J	G393	18700	1650	43500
PCB139 & 140	pg/g	11	11	100	8.38 JT	5040 J	03R005	633	146 J	2980 J	8.38 JT	5040 J	03R005	633	146 J	2980 J
PCB139 & 149	pg/g	241	241	100	64.5	1230000 J	G393	18300	1490	39700	64.5	1230000 J	G393	18300	1490	39700
PCB140	pg/g	241	198	82.2	3.55	3380	G453	136	18.7	624 J	1.68 U	3380	G453	112	13.4	604
PCB141	pg/g	252	252	100	15.3	269000 J	G393	4280	318	9140	15.3	269000 J	G393	4280	318	9140
PCB142	pg/g	11	2	18.2	0.554	928	07R006	464	464	882	0.368 UT	928	07R006	85.4	0.424 UT	466
PCB144	pg/g	252	247	98	6.28	83900 J	G393	1130	84.1	2210	4.93 U	83900 J	G393	1110	82.2	2200
PCB145	pg/g	252	45	17.9	1.13	186	G453	32.9	8.71 J	140	0.354 UT	186	G453	8.1	2.47 U	38
PCB146	pg/g	11	11	100	132 T	25100	03R005	3270	1260	13800	132 T	25100	03R005	3270	1260	13800
PCB146 & 165	pg/g	241	238	98.8	12.9	159000	GCA11E	3250	311	8530	12.9	159000	GCA11E	3210	307	8370
PCB147	pg/g	241	231	95.9	5.57 T	89900	GCA11E	925	50	2450	4.93 U	89900	GCA11E	887	46.6	2290
PCB147 & 149	pg/g	11	11	100	646 JT	212000 J	03R005	24600	5550 J	112000 J	646 JT	212000 J	03R005	24600	5550 J	112000 J
PCB148	pg/g	252	168	66.7	1.16 T	23400	GCA11E	211	11.3	271	1.16 T	23400	GCA11E	142	6.35 U	201
PCB150	pg/g	252	163	64.7	0.872 T	12000	GCA11E	164	12.1 T	406	0.872 T	12000	GCA11E	107	6.35 U	291
PCB151	pg/g	241	240	99.6	19.8	403000 J	G393	6510	404	11800	19.8	403000 J	G393	6480	393	11700
PCB152	pg/g	252	118	46.8	0.545 T	8920	GCA11E	158	9.84	314	0.545 T	8920	GCA11E	75.7	3.34	135
PCB153	pg/g	319	291	91.2	76.7	1220000 J	G393	16900	1690 T	37200	76.7	1220000 J	G393	15400	1380 J	34500
PCB153 & 168	pg/g	11	11	100	644 JT	208000 J	03R005	24800	6880 J	111000 J	644 JT	208000 J	03R005	24800	6880 J	111000 J
PCB154	pg/g	241	229	95	5.14	12400	GCA11E	380	43.2	1710	4.87 UT	12400	GCA11E	362	38.7 T	1610
PCB155	pg/g	251	32	12.7	0.263 J	1490	GCA11E	77.1	12.5 J	252 J	0.122 UT	1490	GCA11E	12.7	2.46 U	19.6 J
PCB156	pg/g	264	263	99.6	2.21	77700 J	G393	1430	136 J	4020	2.21	77700 J	G393	1430	136 J	4010
PCB157	pg/g	264	257	97.3	0.708	7770	G092	238	28.2	888	0.708	7770	G092	232	27.2 J	839
PCB158	pg/g	11	11	100	66 T	25600	03R005	3030	752	13600	66 T	25600	03R005	3030	752	13600
PCB158 & 160	pg/g	241	238	98.8	8.69	109000 J	G393	1870	156	5050	8.69	109000 J	G393	1850	151	4890
PCB159	pg/g	252	159	63.1	2.31	10000	G453	233	34.9	764	0.591 U	10000	G453	149	14.9	374
PCB161	pg/g	11	0	0	--	--	--	--	--	--	0.394 UT	18 U	07R006	1.73	0.307 U	7.05 U
PCB162	pg/g	11	10	90.9	1.37 JT	789	03R005	102	25.8	468	1.37 JT	789	03R005	92.8	24.1	432
PCB164	pg/g	11	11	100	53.8 T	14700	03R005	1800	579	7920	53.8 T	14700	03R005	1800	579	7920
PCB165	pg/g	11	7	63.6	1.65	27.2	03R005	7.24	2.51 T	22.4	0.524 UT	27.2	03R005	5.82	2.51 T	19.3
PCB166	pg/g	241	126	52.3	1.94	3370	G355	92.1	12.5	402 J	1.65 U	3370	G355	49.7	5.09	114
PCB167	pg/g	264	262	99.2	1.15	29800 J	G393	579	59.8	1640	1.15	29800 J	G393	574	58.9	1640
PCB168	pg/g	241	119	49.4	1.7	1110	G453	66	10.7	295 J	1.65 U	1110	G453	34.1	3.65	116
PCB169	pg/g	264	48	18.2	0.151	95.1	G355	6.762	1.155 J	14.68	0.0981 U	95.1	G355	2.083	0.6525 U	8.153 J
PCB170	pg/g	330	290	87.9	1.43	477000 J	G393	6160	504 J	11900	1.43	477000 J	G393	5430	393	9460
PCB171	pg/g	241	239	99.2	7.08	132000 J	G393	1890	137	3830	7.08	132000 J	G393	1870	134	3800
PCB171 & 173	pg/g	11	11	100	79.5 JT	9230 J	03R005	1620	674 J	5610 J	79.5 JT	9230 J	03R005	1620	674 J	5610 J
PCB172	pg/g	252	248	98.4	5.88	69900 J	G393	1120	98.1	2720	4.98 U	69900 J	G393	1100	95.8	2690
PCB173	pg/g	241	191	79.3	2.69	12300 J	G393	222	19.9 J	488	1.68 U	12300 J	G393	177	11.1	346

Table D1.3-2. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB174	pg/g	252	252	100	28.4	499000 J	G393	7670	595	17100	28.4	499000 J	G393	7670	595	17100
PCB175	pg/g	252	232	92.1	2.43	25700 J	G393	385	31.5	838	2.43	25700 J	G393	355	27.5	828
PCB176	pg/g	252	250	99.2	5.2	75100 J	G393	1060	81.4	2310	5.2	75100 J	G393	1050	80.8	2280
PCB177	pg/g	252	252	100	17.6	276000 J	G393	4410	349	10300	17.6	276000 J	G393	4410	349	10300
PCB178	pg/g	252	250	99.2	8.8	129000	GCA11E	1900	141	3640	8.8	129000	GCA11E	1880	141	3610
PCB179	pg/g	252	251	99.6	14.2	226000 J	G393	3890	303	8470	14.2	226000 J	G393	3880	299	8440
PCB180	pg/g	319	292	91.5	59	1130000 J	G393	15000	1190	27000	59	1130000 J	G393	13800	996	22800
PCB180 & 193	pg/g	11	11	100	539 JT	50300 J	03R005	9460	4770 JT	32000 J	539 JT	50300 J	03R005	9460	4770 JT	32000 J
PCB181	pg/g	252	126	50	1.53 T	17300	G355	302	19.8	642	1.25 UT	17300	G355	153	6.2 U	339
PCB182	pg/g	11	11	100	1.27 T	187	03R005	35.1	13.5	138	1.27 T	187	03R005	35.1	13.5	138
PCB182 & 187	pg/g	241	241	100	38.2	617000 J	G393	11200	813	21400	38.2	617000 J	G393	11200	813	21400
PCB183	pg/g	241	240	99.6	19.5	338000 J	G393	4840	345	11400	16.6 UJ	338000 J	G393	4820	344	11400
PCB183 & 185	pg/g	11	11	100	188 JT	16200 J	03R005	3280	1310 JT	10200 J	188 JT	16200 J	03R005	3280	1310 JT	10200 J
PCB184	pg/g	252	49	19.4	0.747 T	234	G355	27.3	7.26	139 J	0.32 UT	234	G355	7.85	2.48 U	23.3
PCB185	pg/g	241	233	96.7	5.91	54500 J	G393	899	70.4 T	2000	4.93 U	54500 J	G393	869	64.5	1920
PCB186	pg/g	252	17	6.7	0.326 T	597	G355	66	12.8	351	0.304 U	597	G355	7.48	2.46 U	12.8
PCB187	pg/g	89	54	60.7	200 J	22900	03R005	2180	1340 J	5150	130 UT	22900	03R005	1360	490 J	4460 J
PCB188	pg/g	252	79	31.3	0.474	4680	GCA11E	99.5	10.8	257 J	0.322 UT	4680	GCA11E	33.4	2.51 U	62.9
PCB189	pg/g	264	255	96.6	0.371	18200 J	G393	263	21.9	595	0.371	18200 J	G393	255	20.6	535
PCB190	pg/g	252	249	98.8	6.53	107000 J	G393	1500	109	3520	6.53	107000 J	G393	1490	106	3420
PCB191	pg/g	252	227	90.1	1.81	21000 J	G393	316	26.7	758	1.81	21000 J	G393	285	20.2	636
PCB192	pg/g	252	6	2.4	12.1	127	G355	55.8	52.5 J	110	0.245 UT	127	G355	4.5	2.45 U	12.4 UJ
PCB193	pg/g	241	234	97.1	5.86	50500 J	G393	865	63.7	1830	4.98 U	50500 J	G393	840	58	1830
PCB194	pg/g	252	252	100	14.9	195000 J	G393	3810	328	7000	14.9	195000 J	G393	3810	328	7000
PCB195	pg/g	252	248	98.4	6.31	93900 J	G393	1740	133	4210	6.23 UJ	93900 J	G393	1710	131	4210
PCB196	pg/g	11	11	100	64.5 T	3370	03R005	1090	738	2790	64.5 T	3370	03R005	1090	738	2790
PCB196 & 203	pg/g	241	241	100	16.7	277000 J	G393	5160	393	10800	16.7	277000 J	G393	5160	393	10800
PCB197	pg/g	241	188	78	2.77	8670 J	G393	206	19.6	510	1.68 U	8670 J	G393	162	11.9	388
PCB197 & 200	pg/g	11	11	100	24.3 JT	2430 J	07R006	504	219 J	1770 J	24.3 JT	2430 J	07R006	504	219 J	1770 J
PCB198	pg/g	241	212	88	2.72	11600 J	G393	278	27.5	770	1.68 U	11600 J	G393	245	19.5	531
PCB198 & 199	pg/g	11	11	100	129 JT	7190 J	03R005	2140	1320 J	5290 J	129 JT	7190 J	03R005	2140	1320 J	5290 J
PCB199	pg/g	241	240	99.6	15.4	211000 J	G393	4500	359	8420	15.4	211000 J	G393	4480	357	8420
PCB200	pg/g	241	229	95	3.82	31100 J	G393	610	47.2 JT	1310	3.82	31100 J	G393	580	44.2	1310
PCB201	pg/g	252	242	96	3.74	25100 J	G393	541	53.9	1250	3.74	25100 J	G393	520	47.5 J	1130
PCB202	pg/g	252	246	97.6	5.84	33900	GCA11E	779	79.9	1790	4.98 U	33900	GCA11E	760	75.3	1740
PCB203	pg/g	11	11	100	81.3 T	5450	07R006	1650	870	5010	81.3 T	5450	07R006	1650	870	5010
PCB204	pg/g	252	21	8.3	0.318 T	961	G355	84.3	7.3	364	0.276 U	961	G355	10.1	2.46 U	17.7 UJ
PCB205	pg/g	252	214	84.9	2.76	9500 J	G393	213	20.5 J	574	1.68 U	9500 J	G393	182	13.8	415
PCB206	pg/g	252	249	98.8	8.01	165000	G453	1920	195	5270 J	8.01	165000	G453	1900	191	4980 J
PCB207	pg/g	252	223	88.5	3.45	13200	G453	273	26.2	731 J	1.68 U	13200	G453	242	21.3	492
PCB208	pg/g	252	244	96.8	4.03	59400	G453	545	55.7	1310 J	4.03	59400	G453	528	53.3	1220 J
PCB209	pg/g	252	249	98.8	8.34	327000	G453	1960	124	1850	8.34	327000	G453	1940	124	1840
Total PCB Congeners	pg/g	252	252	100	1050 JT	35400000 T	G453	453000	36200 J	1570000 J	1050 JT	35400000 T	G453	453000	36200 J	1570000 J
PCBs[c]																
Total PCBs	µg/kg	1318	1052	79.8	0.851 JT	35400 T	--	220.2	26.85 J	736.2	0.851 JT	35400 T	--	183.4	19.65 J	600.9
PCB Homologs																
Dichlorobiphenyl homologs	pg/g	252	247	98	15.4 JT	1640000 T	G453	10900	466 JT	17000	10.6 UT	1640000 T	G453	10700	454	16800
Heptachlorobiphenyl homologs	pg/g	252	252	100	183 T	4220000 JT	G393	66300	5080	155000	183 T	4220000 JT	G393	66300	5080	155000
Hexachlorobiphenyl homologs	pg/g	252	252	100	276 JT	5440000 JT	G393	95900	8750 J	222000	276 JT	5440000 JT	G393	95900	8750 J	222000
Monochlorobiphenyl homologs	pg/g	252	233	92.5	5.03 T	362000 T	G453	1870	49.2 T	1420	1.68 UT	362000 T	G453	1730	42.6	1290
Nonachlorobiphenyl homologs	pg/g	252	249	98.8	8.01 T	238000 T	G453	2700	267 T	7050 J	8.01 T	238000 T	G453	2670	264	6640 J
Octachlorobiphenyl homologs	pg/g	252	252	100	36.4 T	891000 JT	G393	17400	1510	35500	36.4 T	891000 JT	G393	17400	1510	35500
Pentachlorobiphenyl homologs	pg/g	252	252	100	267 T	4640000 T	G453	84300	7390	296000	267 T	4640000 T	G453	84300	7390	296000
Tetrachlorobiphenyl homologs	pg/g	252	252	100	172 T	12800000 T	G453	113000	5150 J	298000 J	172 T	12800000 T	G453	113000	5150 J	298000 J
Trichlorobiphenyl homologs	pg/g	252	252	100	51.4 T	9690000 T	G453	59300	1730	80100	51.4 T	9690000 T	G453	59300	1730	80100
PCDD/Fs Homologs																
Heptachlorodibenzofuran homologs	pg/g	237	235	99.2	0.337	39100	07R006	228.128	17.069	317.6 J	0.119 U	39100	07R006	226.203	17	314.4 J
Heptachlorodibenzo-p-dioxin homologs	pg/g	237	237	100	1.324	7095.84	G426	209.2969	65.2	944.524 J	1.324	7095.84	G426	209.2969	65.2	944.524 J
Hexachlorodibenzofuran homologs	pg/g	237	235	99.2	0.168 J	100000	07R006	499.4072	10.175	330.6265	0.095 UT	100000	07R006	495.1932	10.161	329.751

Table D1.3-2. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Hexachlorodibenzo-p-dioxin homologs	pg/g	237	233	98.3	0.222	596.039	G426	29.7432	8.632 T	123.4 J	0.02 U	596.039	G426	29.242	8.487	123.2 J
Octachlorodibenzofuran	pg/g	238	227	95.4	0.579 J	20800	07R006	142.977	16.4	235.5 J	0.137 U	20800	07R006	137.354	15.082	232.75 J
Octachlorodibenzo-p-dioxin	pg/g	238	234	98.3	6.462 JT	19201.141 J	G426	798.75639	262.5125	2881.5939 J	5.93 U	19201.141 J	G426	785.61063	255.824	2811.3151 J
Pentachlorodibenzofuran homologs	pg/g	237	233	98.3	0.083	64700	07R006	350.30698	6.26	324.144	0.01 U	64700	07R006	344.39524	6.16	323.072
Pentachlorodibenzo-p-dioxin homologs	pg/g	237	188	79.3	0.0281 J	141 NJ	06R002	6.11654	0.9105 J	21.2107 J	0.011 U	141 NJ	06R002	4.86364	0.513	17.719
Tetrachlorodibenzofuran homologs	pg/g	237	220	92.8	0.05	35800	07R006	207.3885	2.4305	183.1685	0.01 U	35800	07R006	192.515	2.05	146.793
Tetrachlorodibenzo-p-dioxin homologs	pg/g	236	199	84.3	0.017	416.466	G332	8.30712	0.62	33.3707 J	0.006 U	416.466	G332	7.01072	0.497 J	23.5195
Total PCDD/F	pg/g	237	237	100	2.48 T	264000 T	07R006	2407	412 T	5580 J	2.48 T	264000 T	07R006	2407	412 T	5580 J
PCDD/Fs																
1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/g	238	227	95.4	0.163 J	24800	07R006	130.693	5.515	111.5 J	0.061 U	24800	07R006	124.664	5.0305 J	103.25 J
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/g	238	234	98.3	0.863 JT	2410.3	G426	90.2574	27.15	384.55 J	0.734 U	2410.3	G426	88.7759	26.65	381.95 J
1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/g	238	184	77.3	0.034 J	8240	07R006	49.5624	0.7265 J	21.253	0.01 U	8240	07R006	38.3417	0.402 J	14.6753 J
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	238	215	90.3	0.043 J	66000	07R006	327.9714	1.27 NJ	54.2106	0.0164 U	66000	07R006	298.0575	1.038 J	53.0613
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/g	238	149	62.6	0.026 J	13	SD086	0.8243	0.237 JT	4.158 J	0.007 U	13	SD086	0.574	0.1395 J	2.553
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	238	207	87	0.021 J	17800	07R006	92.6732	0.609 J	26.3903 J	0.016 U	17800	07R006	81.1046	0.45525 J	16.6558 J
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/g	238	217	91.2	0.074 J	83	SD086	4.4207	1.25 J	18.251 J	0.007 U	83	SD086	4.0546	1.07 J	17.01 J
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	238	60	25.2	0.019 J	906	07R006	16.774	0.304 J	7.8611	0.006 U	906	07R006	4.2701	0.036 J	2.7717 J
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/g	238	207	87	0.058 J	28.4	G033	2.2556	0.682 J	12.677 J	0.006 U	28.4	G033	1.9722	0.5575 J	10.644 J
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	238	180	75.6	0.022 J	29400	07R006	176.647	0.5455 J	85.7589	0.006 U	29400	07R006	134.628	0.299 J	29.0024
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/g	238	142	59.7	0.02 JT	20.536	G332	1.0135	0.2185 J	5.1535 J	0.008 U	20.536	G332	0.63314	0.1035 J	2.5085 J
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	238	192	80.7	0.043 J	2020	07R006	13.454	0.5225 J	17.766	0.007 U	2020	07R006	10.875	0.3715 J	12.218
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	238	186	78.2	0.026 J	9360	07R006	57.2702	0.564 J	39.5318 J	0.006 U	9360	07R006	44.7973	0.3125 J	23.5452 J
2,3,7,8-Tetrachlorodibenzofuran	pg/g	238	150	63	0.058 J	14000	07R006	105.417	0.8975	60.4138	0.011 U	14000	07R006	66.4806	0.3065 J	22.7758
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	238	51	21.4	0.04 J	111.091	G332	3.14862	0.372 J	6.3335 J	0.00405 U	111.091	G332	0.697629	0.02335 U	1.127 J
TCDD TEQ (ND = 0)	pg/g	238	238	100	0.00803 JT	14100 JT	07R006	67.938	1.395 J	40.49 J	0.00803 JT	14100 JT	07R006	67.938	1.395 J	40.49 J
Total TCDD TEQ (ND = 0)	pg/g	383	383	100	0.00197 JA	14100 JT	07R006	45.826	1.4 JA	46.31 J	0.00197 JA	14100 JT	07R006	45.826	1.4 JA	46.31 J
PCB TEQ																
Total PCB TEQ (ND=0)	pg/g	264	264	100	0.00104 JT	239 T	G453	5.2641	0.6795 J	22.46 J	0.00104 JT	239 T	G453	5.2641	0.6795 J	22.46 J
PBDE Congeners																
PBDE028	µg/kg	86	7	8.1	0.06 J	0.49 J	G106	0.2	0.15 J	0.42 J	0.06 J	1.4 U	G046	0.49	0.5 U	0.6 U
PBDE047	µg/kg	86	83	96.5	0.11 J	5.2	G106	1.4	1.4	3.6	0.11 J	5.2	G106	1.4	1.4	3.5
PBDE099	µg/kg	86	82	95.3	0.12 J	8.2	G085	1.6	1.4	4.4	0.12 J	8.2	G085	1.6	1.4	4.2
PBDE100	µg/kg	86	75	87.2	0.02 J	4.6	G380	0.49	0.41 J	1.4	0.02 J	4.6	G380	0.49	0.44 J	1.4
PBDE153	µg/kg	86	55	64	0.18 JT	1.5	G085	0.42	0.32 J	1.1	0.18 JT	1.5	G085	0.45	0.42 U	0.96 J
PBDE154	µg/kg	86	59	68.6	0.13 J	1.1 J	G106	0.34	0.29 J	0.89 J	0.13 J	1.2 U	G273	0.39	0.37 J	0.79 J
PBDE183	µg/kg	86	13	15.1	0.09 J	1.8	G617	0.73	0.53 J	1.6	0.09 J	1.8	G617	0.55	0.5 U	0.87 J
PBDE209	µg/kg	86	67	77.9	2 J	440 JT	G431	23	6.3 J	58 J	2 J	440 JT	G431	19	5.7 J	57 J
Pesticides																
2,4'-DDD	µg/kg	1108	716	64.6	0.0322 J	710	07R006	11.8	1.2 J	55.28 J	0.0272 U	710	07R006	8.007	0.926 J	25.71
2,4'-DDE	µg/kg	1107	266	24	0.00495 J	1000	07R006	9.8069	0.835 J	24.325 J	0.00495 J	1000	07R006	2.9659	0.2 U	6.322 J
2,4'-DDT	µg/kg	1108	571	51.5	0.0157 J	2000	AP02APG	18.21	0.73 J	33.25	0.0157 J	2000	AP02APG	9.846	0.4425	12 J
4,4'-DDD	µg/kg	1249	1034	82.8	0.051 NJ	11000	OSS004	43.71	2.215	110	0.041 U	11000	OSS004	36.42	1.9	82.22 J
4,4'-DDE	µg/kg	1246	1021	81.9	0.052 J	2240 J	G453	15.93	2.2 J	33.2 NJ	0.027 U	2240 J	G453	13.74	2	31.98 J
4,4'-DDT	µg/kg	1234	846	68.6	0.0613 J	81000	OSS002	259.8	2.21 J	295 J	0.0478 U	81000	OSS002	178.6	1.365 J	141.1 J
Aldrin	µg/kg	1146	268	23.4	0.00333 J	691 J	G355	4.8871	0.503 J	10.156 J	0.00333 J	691 J	G355	1.9569	0.17 U	5 U
alpha-Endosulfan	µg/kg	1184	154	13	0.0183 JT	21.1 NJ	G269	0.6649	0.19 J	1.705 J	0.0125 U	99 U	SD090; SD097	0.8262	0.095 U	1.893 J
alpha-Hexachlorocyclohexane	µg/kg	1164	205	17.6	0.00238 J	10 J	G453	0.57274	0.253 NJ	2.214 J	0.00139 U	99 U	SD090; SD097	0.73457	0.10475 J	1.675 U
beta-Endosulfan	µg/kg	1184	177	14.9	0.0303 J	235 NJ	G334	2.298	0.373 NJ	2.192 J	0.015 U	235 NJ	G334	1.448	0.115 U	2.848 U
beta-Hexachlorocyclohexane	µg/kg	1184	442	37.3	0.00138 J	20.3 J	G274	2.5702	1.795 J	7.1575 J	0.00112 U	99 U	SD090; SD097	1.7732	0.55 U	6.6285 J
Chlordane (cis & trans)	µg/kg	189	1	0.5	26	26	WR-PG-16	26	26	26	1.6 U	150 U	GATX-SD4; GATX-SD5	6.5	2.65 UJ	23
Chlordane (technical)	µg/kg	10	0	0	--	--	--	--	--	--	8.8 U	919 U	S3	109	40.5 U	388 U
cis-Chlordane	µg/kg	1170	395	33.8	0.00955 J	203 J	G453	1.953	0.269 J	6.982 J	0.00955 J	203 J	G453	1.3908	0.165 J	4.7122 U
cis-Nonachlor	µg/kg	1056	257	24.3	0.00457 J	378 NJ	G355	3.1549	0.387 J	8.016 J	0.00457 J	700 U	G778	2.111	0.205 U	3.715 J
delta-Hexachlorocyclohexane (Lindane)	µg/kg	1181	150	12.7	0.0018 JT	5.33	22B04	0.54638	0.3355 J	2.1775 J	0.00116 U	99 U	SD090; SD097	0.84161	0.115 U	1.95 U
Dieldrin	µg/kg	1190	252	21.2	0.00834 J	356 J	G453	2.5619	0.28 J	6.0135 J	0.00834 J	356 J	G453	1.9188	0.19 U	4.092 J
Endosulfan sulfate	µg/kg	1180	65	5.5	0.00837 J	240 T	SD092	5.9397	0.183 J	10.982 J	0.00837 J	240 T	SD092	1.4699	0.115 U	2.905 UJ
Endrin	µg/kg	937	83	8.9	0.00984 J	32 J	AP04CPG	4.1196	0.82 NJ	20.79 J	0.00984 J	200 U	SD090; SD097	1.7946	0.155 U	7.338 J
Endrin aldehyde	µg/kg	1184	53	4.5	0.1 NJ	215	OSS004	5.866	0.47 J	9.554 J	0.0368 U	215	OSS004	1.43	0.105 U	3.243 UJ

Table D1.3-2. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Endrin ketone	µg/kg	1170	199	17	0.00547 J	90.1 NJ	G453	1.908	0.6 NJ	6.41 J	0.00208 UT	200 U	SD090; SD097	1.5771	0.19 U	4.744 J
gamma-Hexachlorocyclohexane	µg/kg	1195	206	17.2	0.0031 J	430	07R006	4.4154	1.195 J	7.9075 J	0.0031 J	430	07R006	1.5344	0.21 U	5.416 J
Heptachlor	µg/kg	1195	72	6	0.00264 J	6	PSY01	0.67449	0.285 J	3.55 J	0.00141 U	99 U	SD090; SD097	0.7825	0.095 U	2.004
Heptachlor epoxide	µg/kg	1183	92	7.8	0.00161 JT	17 J	AP04CPG	1.4002	0.33 J	6.975 J	0.00161 JT	360 U	OSS004	1.0286	0.11 U	2.675 J
Hexachlorocyclohexanes	µg/kg	9	0	0	--	--	--	--	--	--	10 U	40 U	OSS001; OSS002; OSS004; OSS006	10	5 U	20 U
Methoxychlor	µg/kg	1184	118	10	0.048 J	33.6 NJ	G333	3.993	1.735 J	19.29 J	0.0226 U	990 U	SD090; SD097	4.662	0.225 U	9.102 J
Mirex	µg/kg	963	36	3.7	0.095 J	50 NJ	C525	4.132	0.45 J	20.25 J	0.0303 U	130 U	07R003	0.4608	0.065 U	0.6963 J
Oxychlordane	µg/kg	1056	93	8.8	0.00484 JT	24.4 NJ	G390	2.6759	1.03 J	10.82 J	0.00195 UT	130 U	07R003	0.67444	0.08 U	2.5638 U
Total chlordanes	µg/kg	1193	761	63.8	0.031 JT	669 NJT	G355	5.035	0.84 NJT	12.4 NJT	0.031 JT	700 UT	G778	4.771	0.85 UA	13.64 J
Total endosulfan	µg/kg	1184	340	28.7	0.00837 JT	240 T	SD092	2.633	0.3085 J	5.8825	0.00837 JT	240 T	SD092	1.9258	0.2435 J	5 U
Total DDD	µg/kg	1249	1060	84.9	0.051 NJT	11000 A	OSS004	50.6	3.29 J	122.3 J	0.041 UT	11000 A	OSS004	43.25	2.6 A	109.2 J
Total DDx	µg/kg	1249	1130	90.5	0.051 NJT	84909 A	OSS002	267.96	7.495 J	459.55 J	0.051 NJT	84909 A	OSS002	242.76	6.69 NJT	371.08 J
Total DDE	µg/kg	1246	1025	82.3	0.052 JT	2530 NJT	G453	18.42	2.3 T	38.74 J	0.0384 UT	2530 NJT	G453	16.03	2.15 J	37.93 J
Total DDT	µg/kg	1248	936	75	0.077 JT	81000 A	OSS002	245.9	2.55 J	277 J	0.0441 UJT	81000 A	OSS002	185	1.745 J	153.3 J
Total 4,4'-DDx	µg/kg	995	874	87.8	0.051 JT	84909 T	OSS002	317.42	6.6 J	512.3 J	0.051 JT	84909 T	OSS002	279.19	5.31 JT	405.74 J
Toxaphene	µg/kg	1174	2	0.2	48 NJ	470	C299	259	259 J	449 J	3.4 U	9900 U	SD090; SD097	75.4	10 U	150 UJ
trans-Chlordane	µg/kg	1172	568	48.5	0.0105 J	445 NJ	G453	2.273	0.3805 J	5 J	0.0105 J	445 NJ	G453	1.956	0.35 J	5.5 J
trans-Nonachlor	µg/kg	1055	382	36.2	0.0103 J	226 NJ	G355	1.855	0.25 J	4.169 J	0.0103 J	226 NJ	G355	1.059	0.18 J	2.38 J
PAHs																
1,6,7-Trimethylnaphthalene	µg/kg	64	46	71.9	0.24 J	220	T4-UP14	24.2	12	91.8	0.24 J	276 UJ	T4-IM-09	28.4	12.4	117 UJ
1-Methylnaphthalene	µg/kg	289	272	94.1	0.24 J	13000 J	SL004	91.4	3.6 J	122 J	0.24 J	13000 J	SL004	87.3	3.7	120 J
1-Methylphenanthrene	µg/kg	51	48	94.1	0.38 J	1800	T4-UP13	99	24	210	0.38 J	1800	T4-UP13	94	22	210
2,6-Dimethylnaphthalene	µg/kg	64	53	82.8	0.2 J	250	T4-UP13	31.7	12	129 J	0.2 J	250	T4-UP13	30.1	12.4	109 J
2-Methylnaphthalene	µg/kg	1508	1202	79.7	0.37 J	53000	GS04APG2	301	8.3	280	0.37 J	53000	GS04APG2	254	9.5 U	254 J
Acenaphthene	µg/kg	1661	1381	83.1	0.21 J	430000	G225	1365	19	1800	0.18 U	430000	G225	1138.3	12	1358
Acenaphthylene	µg/kg	1661	1263	76	0.27 J	54000	G225	182	10	300	0.27 J	54000	G225	146	9.5 UT	226 T
Anthracene	µg/kg	1661	1446	87.1	0.35 J	390000	G225	1191	28 J	1675 J	0.24 U	390000	G225	1040	21.2 JT	1400 J
Benzo(a)anthracene	µg/kg	1661	1585	95.4	0.5 J	320000	G225	1584.2	82	4080	0.5 J	320000	G225	1513.9	73	4000
Benzo(a)pyrene	µg/kg	1661	1581	95.2	0.86 J	340000	G225	1931.1	93	5000	0.24 U	340000	G225	1840.4	85	4900
Benzo(b)fluoranthene	µg/kg	1553	1500	96.6	0.87 J	300000	G225	1595	99.5	4105	0.72 U	300000	G225	1543	94	4100 J
Benzo(b+k)fluoranthene	µg/kg	607	547	90.1	3.7 J	108000 T	AN-1-3	2430	195 T	11200	3.26 U	108000 T	AN-1-3	2190	175 T	9930
Benzo(e)pyrene	µg/kg	320	318	99.4	1.6 J	32000	T4-UP13	962.8	68.5	4130	0.9 U	32000	T4-UP13	956.8	64	4110
Benzo(g,h,i)perylene	µg/kg	1661	1554	93.6	0.5 J	180000	G225	1383.4	73.7	3935 J	0.5 J	180000	G225	1296.3	64	3600
Benzo(j+k)fluoranthene	µg/kg	32	32	100	25	8273	LPSG-S-021-R-1	476.9	123	982.8	25	8273	LPSG-S-021-R-1	476.9	123	982.8
Benzo(k)fluoranthene	µg/kg	1519	1449	95.4	0.77 J	100000	G225	885	48	3060	0.36 U	100000	G225	847	43	2810
Benzofluoranthenes	µg/kg	32	32	100	53	15730	LPSG-S-021-R-1	929.1	248.5	1896	53	15730	LPSG-S-021-R-1	929.1	248.5	1896
C1-Chrysene	µg/kg	274	270	98.5	2.1	23000 J	SL004	481.2	64.5	1188	2.1	23000 J	SL004	474.2	61	1156
C1-Dibenzothiophene	µg/kg	274	242	88.3	0.54 J	25000 J	SL004	169.5	7.25	331.4	0.21 U	25000 J	SL004	150.3	6.7	307
C1-Fluoranthene/pyrene	µg/kg	274	272	99.3	3.6	27000 J	G639; SL004	806.02	85.5	2239.5	3.6	27000 J	G639; SL004	800.17	83	2228.5
C1-Fluorene	µg/kg	274	258	94.2	0.6 J	15000 J	SL004	196.5	8.9	372.4	0.5 U	15000 J	SL004	185.3	8.2	350.8
C1-Naphthalene	µg/kg	50	33	66	4	3478	LPSG-S-021-R-1	136.5	18	160.6	4	3478	LPSG-S-021-R-1	93.86	13	112.1
C1-Phenanthrene/anthracene	µg/kg	274	271	98.9	1.3 J	70000 J	G609	915.51	45	1785.5	1.3 J	70000 J	G609	905.52	43.5	1768.9
C2-Chrysene	µg/kg	274	265	96.7	1.4 J	30000 J	SL004	323.1	39	608	0.25 U	30000 J	SL004	312.7	37	603.5
C2-Dibenzothiophene	µg/kg	274	259	94.5	0.78 J	22000 J	SL004	257.7	16	534.6	0.21 U	22000 J	SL004	243.8	14	512.5
C2-Fluoranthene/pyrene	µg/kg	256	252	98.4	2.1 J	37000 J	SL004	436.6	46	863.5	0.61 U	37000 J	SL004	429.8	45.5	817.5
C2-Fluorene	µg/kg	274	261	95.3	0.69 J	36000 J	SL004	287.5	14	590	0.69 J	36000 J	SL004	274.2	12.5	560.1
C2-Naphthalene	µg/kg	274	258	94.2	0.54 J	72000 J	SL004	569.9	15	606.8	0.54 J	72000 J	SL004	536.9	12.5	587.3
C2-Phenanthrene/anthracene	µg/kg	274	270	98.5	1.7 J	67000 J	SL004	762.2	53.85	1455	1.7 J	67000 J	SL004	753.2	53.35	1435
C3-Chrysene	µg/kg	274	247	90.1	2.6	25000 J	SL004	223	28	505	0.25 U	25000 J	SL004	208	29	424
C3-Dibenzothiophene	µg/kg	274	249	90.9	0.78 J	21000 J	SL004	211.7	18	476	0.21 U	21000 J	SL004	196.1	15	461
C3-Fluoranthene/pyrene	µg/kg	256	250	97.7	1.5 J	39000 J	SL004	327.7	30	558	0.61 U	39000 J	SL004	320	29	510
C3-Fluorene	µg/kg	274	254	92.7	2 J	51000 J	SL004	373.6	21	735.2	0.5 U	51000 J	SL004	346.7	19	615.7
C3-Naphthalene	µg/kg	274	259	94.5	0.47 J	91000 J	SL004	633.8	11	1100	0.47 J	91000 J	SL004	599.4	10	911.5
C3-Phenanthrene/anthracene	µg/kg	274	269	98.2	1.7 J	66000 J	SL004	551.3	44	1100	0.75 U	66000 J	SL004	544.5	43.5	1100
C4-Chrysene	µg/kg	274	161	58.8	2.5	20000 J	SL004	180	18	219	0.25 U	20000 J	SL004	114	10	174
C4-Dibenzothiophene	µg/kg	32	32	100	12	604	LPSG-S-021-R-1	65.6	33.5	194	12	604	LPSG-S-021-R-1	65.6	33.5	194
C4-Naphthalene	µg/kg	274	256	93.4	0.75 J	63000 J	SL004	411.6	14	758.5	0.37 U	63000 J	SL004	384.8	12	720.3
C4-Phenanthrene/anthracene	µg/kg	274	261	95.3	1.9 J	48000 J	SL004	322	22	570	0.75 U	48000 J	SL004	307	20	564

Table D1.3-2. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Chrysene	µg/kg	1661	1604	96.6	1.4 J	370000	G225	1856.2	110	4900	0.45 U	370000	G225	1794.6	102	4500
Dibenzo(a,h)anthracene	µg/kg	1661	1357	81.7	0.22 J	25000	G225	242.3	19	862 J	0.22 J	25000	G225	204.7	12	660
Dibenzothiophene	µg/kg	274	260	94.9	0.28 J	11000	G609	202.4	7.35	648.2	0.21 U	11000	G609	192.2	6	622.9
Fluoranthene	µg/kg	1669	1632	97.8	0.8 J	1200000	G225	4228.7	180	10670	0.8 J	1200000	G225	4136.4	171	10000
Fluorene	µg/kg	1661	1382	83.2	0.28 J	220000	G225	757.4	17	1097	0.21 U	220000	G225	633.6	11	850
Total HPAHs	µg/kg	1661	1640	98.7	2.16 JT	4350000 T	G225	19383	984.5	49635 J	2.16 JT	4350000 T	G225	19139	948 JT	48400 T
Indeno(1,2,3-cd)pyrene	µg/kg	1661	1547	93.1	0.9 J	210000	G225	1446	73	4340	0.26 U	210000	G225	1349	62	3800
Total LPAHs	µg/kg	1661	1582	95.2	0.65 JT	2910000 T	G225	8062	190 J	11095	0.65 JT	2910000 T	G225	7682.6	175 T	10300 JA
Naphthalene	µg/kg	1666	1125	67.5	0.27 J	73000 J	AN-1-3; G225; G294-1	484	27	587	0.27 J	73000 J	AN-1-3; G225; G294-1	334	14	368
Perylene	µg/kg	320	318	99.4	0.95 J	13000	T4-UP13	422	58.5	1700	0.32 U	13000	T4-UP13	419.4	58	1700
Phenanthrene	µg/kg	1661	1576	94.9	0.53 J	1700000	G225	4417.1	96	6250	0.53 J	1700000	G225	4192.7	84	5600
Pyrene	µg/kg	1661	1629	98.1	0.57 J	1300000	G225	4756.3	183	10480 J	0.54 U	1300000	G225	4665.1	178 J	10000
Total BaPEq	µg/kg	1661	1613	97.1	0.00314 JT	449000 T	G225	2565.552	130 T	7070	0.00314 JT	449000 T	G225	2493.463	122 T	6740 T
Total cPAHs	µg/kg	1661	1613	97.1	0.5 JT	1700000 T	G225	9356	530 T	25000	0.5 JT	1700000 T	G225	9087.7	490 T	25000 T
Total PAHs	µg/kg	1661	1640	98.7	3.3 JT	7260000 T	G225	27166.6	1180	66630 J	3.3 JT	7260000 T	G225	26824.3	1150 JT	66100 T
Phthalates																
Bis(2-ethylhexyl) phthalate	µg/kg	1513	932	61.6	7 J	440000 J	G367	1050	140	2200	2 U	440000 J	G367	751	94 J	1720
Butylbenzyl phthalate	µg/kg	1504	470	31.3	2.2 J	2800	G111	60.1	18 J	200 J	1.6 U	10000 U	GRAB-05	46.2	9.5 U	160
Dibutyl phthalate	µg/kg	1503	493	32.8	3.5 J	1800	G093	41	14	118	2.9 U	20000 U	A2GS12; HA-43	69.2	10 U	139 UJ
Diethyl phthalate	µg/kg	1500	167	11.1	1.6 J	370	G093	9.47	3.8 J	18 J	1.3 U	10000 U	GRAB-05	31	5 U	103 U
Dimethyl phthalate	µg/kg	1505	77	5.1	0.6 J	171	PSY03	23.8	13	75.6 J	0.6 J	10000 U	GRAB-05	29.8	4.5 J	95.8 U
Di-n-octyl phthalate	µg/kg	1500	129	8.6	3.4 J	15400 JT	PP01M101	511	46 T	2170 J	1.3 U	15400 JT	PP01M101	73.4	4.68 U	138 UJ
Semivolatile Organic Compounds																
1,2,4-Trichlorobenzene	µg/kg	1336	18	1.3	3.1 J	310 J	G355	45.2	8.8 J	208 J	0.44 U	2640 U	SED03	16.8	2.7 U	89.3 UJ
1,2-Dichlorobenzene	µg/kg	1386	18	1.3	0.16 J	610 J	BT017	49.7	4.7 J	227 J	0.092 U	8000 U	SED03	20	2.5 U	89.8 U
1,3-Dichlorobenzene	µg/kg	1383	4	0.3	3.6 J	98	RP03CPG	36.2	21.7 J	89 J	0.14 U	8000 U	SED03	20.3	2.95 U	89.9 U
1,4-Dichlorobenzene	µg/kg	1392	36	2.6	0.38 J	730 J	G505	59.6	7.45 J	360 J	0.14 U	8000 U	SED03	19.7	2.5 U	83.2 UJ
2,4-Dinitrotoluene	µg/kg	1306	0	0	--	--	--	--	--	--	1.5 U	20400 U	S3	49.5	3.85 U	112 UJ
2,6-Dinitrotoluene	µg/kg	1307	0	0	--	--	--	--	--	--	2 U	10000 U	A2GS12	38.4	4.75 U	114 U
2-Chloronaphthalene	µg/kg	1307	1	0.1	83	83	G7321	83	83	83	1.24 UT	6600 U	A2GS12	23.7	4.35 U	60 UJ
2-Nitroaniline	µg/kg	1307	0	0	--	--	--	--	--	--	2.9 U	6600 U	A2GS12	34.9	4.55 UJ	115 U
3,3'-Dichlorobenzidine	µg/kg	1278	1	0.1	77 J	77 J	G067	77	77 J	77 J	3.7 UJ	20000 U	A2GS12	67.4	7 UJ	145 U
3-Nitroaniline	µg/kg	1303	1	0.1	475 J	475 J	PP01M103	475	475 J	475 J	2.5 U	20000 U	A2GS12	62.6	4.4 U	134 UJ
4-Bromophenyl phenyl ether	µg/kg	1308	0	0	--	--	--	--	--	--	1.5 U	6600 U	A2GS12	21.8	2.4 U	82.3 UJ
4-Chloroaniline	µg/kg	1301	4	0.3	10 J	14 J	G629	12.3	12.5 J	13.9 J	1.9 U	40000 U	A2GS12	77.6	3.6 U	95 U
4-Chlorophenyl phenyl ether	µg/kg	1308	0	0	--	--	--	--	--	--	1.4 U	6600 U	A2GS12	23.4	3.4 UJ	89.6 U
4-Nitroaniline	µg/kg	1304	2	0.2	39 J	96	G099	67.5	67.5 J	93.2 J	1.8 U	6600 U	A2GS12	38.9	4.63 U	128 UJ
Aniline	µg/kg	1071	18	1.7	6.6 J	670	G401	54.2	15 J	181 J	1.5 UJ	1600 UJT	52C05	15.8	1.9 UJ	78.5 U
Azobenzene	µg/kg	994	0	0	--	--	--	--	--	--	1.1 UJ	1400 U	G264	9.5	2.8 U	29 U
Benzoic acid	µg/kg	1290	93	7.2	40 J	4110 J	PP01M106	332	164 J	544 J	40 J	53000 U	G264	387	110 UJ	1050 UJ
Benzyl alcohol	µg/kg	1359	176	13	2.2 J	244 J	52A05	12.7	9.05 J	22.5	2.1 U	6600 U	A2GS12	34	7.5 U	112 UJ
Bis(2-chloro-1-methylethyl) ether	µg/kg	221	0	0	--	--	--	--	--	--	10 UJ	1200 UJ	TOS-SD3	24	9.5 UT	100 U
Bis(2-chloroethoxy) methane	µg/kg	1307	2	0.2	29	30	SD04	29.5	29.5	30	1.4 U	6600 U	A2GS12	21.8	2.2 U	82.4 UJ
Bis(2-chloroethyl) ether	µg/kg	1307	4	0.3	4.4 J	14 J	G232; G375	9.93	10.7 J	14 J	1.9 U	6600 U	A2GS12	26.7	4.1 U	95.7 U
Bis(2-chloroisopropyl) ether	µg/kg	1086	1	0.1	3.2 J	3.2 J	G483	3.2	3.2 J	3.2 J	1.3 U	6600 U	A2GS12	21.7	1.53 UJ	83.6 UJ
Carbazole	µg/kg	1289	761	59	1.4 J	32000 J	G225	260	13	590 J	1.3 U	32000 J	G225	160	8.2 J	290
Dibenzofuran	µg/kg	1494	1151	77	0.25 J	31000	G225	120	6.1	253	0.19 U	31000	G225	110	7.55	250 UJ
Diphenyl	µg/kg	96	76	79.2	0.44 J	446	LPSG-S-021-R-1	27.9	8	128	0.44 J	446	LPSG-S-021-R-1	24.6	7.8	107 J
Hexachlorobenzene	µg/kg	1387	432	31.1	0.0122 J	340	OSS004	4.14	0.66 J	6.504 J	0.0122 J	10000 U	GRAB-05	18.98	1.17	12.35 J
Hexachlorobutadiene	µg/kg	1414	83	5.9	0.065 J	230 T	SD092	8.8909	0.545 J	34.2 J	0.00175 UJ	10200 U	S3	27.159	0.175 U	15.35 U
Hexachlorocyclopentadiene	µg/kg	1301	0	0	--	--	--	--	--	--	12.4 UT	20000 U	A2GS12	104	20 U	295 U
Hexachloroethane	µg/kg	1350	119	8.8	0.11 J	1600	OSS004	37.27	1.45 J	75.1	0.037 U	20000 U	A2GS12	35.87	0.25 UJ	20 U
Isophorone	µg/kg	1307	0	0	--	--	--	--	--	--	1 U	6600 U	A2GS12	22.1	2.5 U	85 U
Nitrobenzene	µg/kg	1307	0	0	--	--	--	--	--	--	2.2 U	6600 U	A2GS12	23.5	3.4 U	89.7 U
N-Nitrosodimethylamine	µg/kg	1123	0	0	--	--	--	--	--	--	6.1 UJ	8020 UJT	52C05	52.7	7.5 UJ	243 U
N-Nitrosodiphenylamine	µg/kg	1362	19	1.4	2 J	360 J	SDUD1SS	56.4	9.9 J	315 J	1.6 U	60000 U	GRAB-05	45.9	4 U	91 UJ
N-Nitrosodipropylamine	µg/kg	1307	1	0.1	3 J	3 J	SD02	3	3 J	3 J	2.4 U	6600 U	A2GS12	28.5	4.95 U	99.4 UJ
Pyridine	µg/kg	1	0	0	--	--	--	--	--	--	382 UJ	382 UJ	PP01M101	191	191 UJ	191 UJ

Table D1.3-2. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Phenols																
2,3,4,5-Tetrachlorophenol	µg/kg	1018	25	2.5	0.62 J	180 J	G355	15	2.9 J	50 J	0.25 U	1600 U	CP09DPG	7.9	2.4 U	48 U
2,3,4,6;2,3,5,6-Tetrachlorophenol coelution	µg/kg	548	12	2.2	1 J	120 J	B010	18	2.2 J	81 J	0.39 U	370 U	G339	2.4	1.8 U	2.5 U
2,3,4,6-Tetrachlorophenol	µg/kg	146	0	0	--	--	--	--	--	--	9.63 U	1600 UJT	52C05	67.2	48.5 U	185 U
2,3,5,6-Tetrachlorophenol	µg/kg	548	22	4	0.38 NJ	28	4806	4.93	1.7 J	14.9 J	0.2 U	1600 UJT	52C05	18.7	0.468 U	94.7 U
2,4,5-Trichlorophenol	µg/kg	1364	12	0.9	0.78 J	48 J	G302	11.6	5.7 J	42.5 J	0.31 U	6600 U	A2GS12	27.6	1.6 U	60 U
2,4,6-Trichlorophenol	µg/kg	1364	39	2.9	0.21 NJ	220	CP07DPG	16	1.6 NJ	71.1 J	0.13 U	6600 U	A2GS12	27.1	1.8 U	71.8 J
2,4-Dichlorophenol	µg/kg	1377	7	0.5	4.7 J	120	G332	41.8	36 J	102	1 U	6600 U	A2GS12	30.6	2.95 U	91.3 UJ
2,4-Dimethylphenol	µg/kg	1357	6	0.4	7	300	09R002	122	59.2 J	298	5.5 UJ	20000 U	A2GS12	59.9	9.4 U	120 U
2,4-Dinitrophenol	µg/kg	1337	0	0	--	--	--	--	--	--	17 U	40000 U	A2GS12	211	46 U	600 UJ
2-Chlorophenol	µg/kg	1360	2	0.1	9.8 J	54	G334	31.9	31.9 J	51.8 J	1.9 U	6600 U	A2GS12	24.3	3.53 U	85 UJ
2-Methylphenol	µg/kg	1415	6	0.4	2.6 J	290	G415	93.5	43	262 J	1.5 U	12000 U	SD05	34.6	4.65 U	103 U
2-Nitrophenol	µg/kg	1351	0	0	--	--	--	--	--	--	1.5 U	6600 U	A2GS12	33.8	3.95 U	110 U
3- and 4-Methylphenol Coelution	µg/kg	40	0	0	--	--	--	--	--	--	90 U	12000 U	SD05	473	100 U	1770 U
3,4-Dichlorophenol	µg/kg	7	0	0	--	--	--	--	--	--	0.8 U	1.3 U	GCA03W	0.56	0.55 UJT	0.64 U
3,5-Dichlorophenol	µg/kg	7	0	0	--	--	--	--	--	--	2.4 U	3.8 U	GCA03W	1.6	1.6 U	1.8 U
4,6-Dinitro-2-methylphenol	µg/kg	1358	0	0	--	--	--	--	--	--	1.4 U	20000 U	A2GS12	88.7	3.45 U	383 UJ
4-Chloro-3-methylphenol	µg/kg	1360	18	1.3	2.4 J	306	PP011805	28.6	5.7 J	104 J	1.4 U	6600 U	A2GS12	27.2	3.65 UJ	92.6 UJ
4-Methylphenol	µg/kg	1381	674	48.8	2 J	2500	G418	122	20 J	630	1.5 U	10000 U	GRAB-05	82.6	14	440
4-Nitrophenol	µg/kg	1356	0	0	--	--	--	--	--	--	0.0895 U	20000 U	A2GS12	136.4	38.83 UJ	500 UJ
Cresol	µg/kg	1	0	0	--	--	--	--	--	--	2640 U	2640 U	SED03	1320	1320 U	1320 U
Pentachlorophenol	µg/kg	1454	266	18.3	0.27 J	8410 J	52C01	59.2	5.91 J	140 J	0.167 U	30500 U	GRAB-05	72.1	2.5 U	145 U
Phenol	µg/kg	1415	413	29.2	2.2 J	680	G092	18	10.4 JT	37.8 J	2 U	10000 U	GRAB-05	35.5	10 U	100 U
Tetrachlorophenol	µg/kg	17	0	0	--	--	--	--	--	--	28.9 U	391 UJ	PP01M103	54.1	16.7 U	184 UJ
Petroleum																
C10-C12 Aliphatics	mg/kg	5	0	0	--	--	--	--	--	--	3 U	3.5 UJ	C096; C106; C312	1.7	1.8 UJ	1.8 U
C10-C12 Aromatics	mg/kg	5	0	0	--	--	--	--	--	--	3 U	3.5 UJ	C096; C106; C312	1.7	1.8 UJ	1.8 U
C12-C16 Aliphatics	mg/kg	5	3	60	7	19 J	C312	13	14	19 J	3.3 U	19 J	C312	8.7	7	18 J
C12-C16 Aromatics	mg/kg	5	2	40	3.4	16 J	C312	9.7	9.7 J	15 J	3.3 U	16 J	C312	4.9	1.8 U	13 J
C16-C21 Aliphatics	mg/kg	5	5	100	17	49 J	C312	28	18	46 J	17	49 J	C312	28	18	46 J
C16-C21 Aromatics	mg/kg	5	3	60	27	100 J	C312	55	37	94 J	3.3 U	100 J	C312	33	27	87 J
C21-C34 Aliphatics	mg/kg	5	5	100	100	180 J	C312	120	110	170 J	100	180 J	C312	120	110	170 J
C21-C34 Aromatics	mg/kg	5	5	100	8.2	92 J	C312	50	54	91 J	8.2	92 J	C312	50	54	91 J
C8-C10 Aliphatics	mg/kg	5	0	0	--	--	--	--	--	--	3 U	3.5 UJ	C096; C106; C312	1.7	1.8 UJ	1.8 U
C8-C10 Aromatics	mg/kg	5	0	0	--	--	--	--	--	--	3 U	3.5 UJ	C096; C106; C312	1.7	1.8 UJ	1.8 U
Diesel fuels	mg/kg	22	22	100	30	450	SDDC25SS	130	54	430	30	450	SDDC25SS	130	54	430
Total Petroleum Hydrocarbons (Diesel)	mg/kg	803	745	92.8	0.046 J	20000 J	G294-1	275	84 J	678 J	0.046 J	20000 J	G294-1	257	80	639 J
Total Petroleum Hydrocarbons (Diesel)(silica gel treated)	mg/kg	221	186	84.2	6.2 JT	8100 J	SL004	144	46 J	292 J	3.3 U	8100 J	SL004	123	43 J	260 J
Fuel oil no. 2	mg/kg	1	1	100	401	401	SED03	401	401	401	401	401	SED03	401	401	401
Total Petroleum Hydrocarbons (Gasoline)	mg/kg	454	64	14.1	1.2 J	260 J	GS04APG2	21.9	7.23 J	102 J	0.02 U	260 J	GS04APG2	4.92	1.2 U	20 U
Total Petroleum Hydrocarbons (Heavy Oil)	mg/kg	26	20	76.9	26.7	1450	A2GS12	336	207	1230	25 U	1450	A2GS12	263	143	1090
Jet fuel A	mg/kg	1	0	0	--	--	--	--	--	--	10 U	10 U	RB13	5	5 U	5 U
JP-4 jet fuel	mg/kg	1	0	0	--	--	--	--	--	--	10 U	10 U	RB13	5	5 U	5 U
Kerosene	mg/kg	1	0	0	--	--	--	--	--	--	10 U	10 U	RB13	5	5 U	5 U
Lube Oil	mg/kg	127	99	78	7.96	3310 T	PP01M101	303	160 J	1060 J	1.03 U	3310 T	PP01M101	246	95.8	907
Mineral spirits	mg/kg	1	0	0	--	--	--	--	--	--	10 U	10 U	RB13	5	5 U	5 U
Motor oil	mg/kg	11	11	100	75 T	300	T4-S3-06	152	130	260	75 T	300	T4-S3-06	152	130	260
Naphtha distillate	mg/kg	1	0	0	--	--	--	--	--	--	10 U	10 U	RB13	5	5 U	5 U
Pencil pitch	mg/kg	31	26	83.9	310	3700	HC-S-20	1400	1300 J	2400	100 U	3700	HC-S-20	1200	1100	2300
Phytane	mg/kg	31	9	29	0.5	6.1	HC-S-25	1.5	0.9	4.6	0.5	6.1	HC-S-25	0.62	0.25 U	1.7
Pristane	mg/kg	31	11	35.5	0.5	7	HC-S-25	1.6	0.8	4.8	0.5	7	HC-S-25	0.72	0.25 U	2.1
Total Petroleum Hydrocarbons (Residual)	mg/kg	661	638	96.5	0.29	18000 J	G453	672	410 J	1560 J	0.29	18000 J	G453	651	400 J	1500 J
Total Petroleum Hydrocarbons (Residual) (silica gel	mg/kg	221	205	92.8	7.1 J	9400 J	SL015	291	160 J	514 J	7.1 J	9400 J	SL015	272	160 J	490 J
Total Petroleum Hydrocarbons	mg/kg	825	789	95.6	0.34 JT	33100 JT	G294-1	818.9	455 JA	1886 J	0.34 JT	33100 JT	G294-1	785.3	441 JT	1848 J
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	221	211	95.5	7.1 JA	17400 JA	SL004	410	205 JA	785 J	7.1 JA	17400 JA	SL004	392	199 JA	740 JT

Table D1.3-2. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Herbicides																
2,4,5-T	µg/kg	217	1	0.5	15.8	15.8	M0201	15.8	15.8	15.8	0.11 U	190 U	05R041	2.22	0.75 UT	4.7 UJ
2,4-D	µg/kg	218	11	5	9	3250 J	G334	326	28.5	1672 J	0.0753 U	3250 J	G334	18.21	0.5975 U	11.04
2,4-DB	µg/kg	218	7	3.2	13	344 J	G334	89.1	23	280 J	0.111 U	344 J	G334	11.4	0.835 U	44 U
Dalapon	µg/kg	217	0	0	--	--	--	--	--	--	0.0662 U	450 U	03R005	8.202	0.489 U	35.8 U
Dicamba	µg/kg	218	0	0	--	--	--	--	--	--	0.135 UT	61 U	GWC1	1.41	1.49 U	2.15 U
Dichloroprop	µg/kg	218	1	0.5	9.4 NJ	9.4 NJ	RP07BPG	9.4	9.4 NJ	9.4 NJ	0.12 U	130 UJ	07R006	2.29	0.888 U	5.37 U
Dinoseb	µg/kg	218	0	0	--	--	--	--	--	--	0.152 U	230 U	GWC1	1.68	1.04 U	2.51 UJ
MCPA	µg/kg	218	2	0.9	4.14	356 J	G334	180	180 J	338 J	0.16 U	67000 U	03R003	1070	1.2 U	1650 U
MCPP	µg/kg	218	2	0.9	193 J	4200 NJ	WR-PG-58	2200	2200 J	4000 J	0.115 UT	91000 U	03R040	929	0.953 U	2070 U
Silvex	µg/kg	218	1	0.5	5.4 J	5.4 J	RP03CPG	5.4	5.4 J	5.4 J	0.11 U	44 U	GWC1	1.12	0.773 U	2.19 U
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	µg/kg	306	1	0.3	0.29 J	0.29 J	BT018	0.29	0.29 J	0.29 J	0.038 U	322 U	SS-48	9.98	0.0315 U	109 U
1,1,1-Trichloroethane	µg/kg	306	1	0.3	0.91 J	0.91 J	SDBH6SS	0.91	0.91 J	0.91 J	0.072 U	322 U	SS-48	9.99	0.06 U	109 U
1,1,2,2-Tetrachloroethane	µg/kg	306	1	0.3	3.4	3.4	G326	3.4	3.4	3.4	0.12 U	322 U	SS-48	10.1	0.1 U	109 U
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	1	0	0	--	--	--	--	--	--	2 UJ	2 UJ	08R001	1	1 UJ	1 UJ
1,1,2-Trichloroethane	µg/kg	306	0	0	--	--	--	--	--	--	0.072 U	322 U	SS-48	10	0.06 U	109 U
1,1-Dichloroethane	µg/kg	306	3	1	0.25 J	0.31 J	CP07APG; CP07DPG	0.29	0.31 J	0.31 J	0.07 U	322 U	SS-48	10	0.06 U	109 U
1,1-Dichloroethene	µg/kg	306	0	0	--	--	--	--	--	--	0.08 U	322 U	SS-48	10	0.085 U	109 U
1,1-Dichloropropene	µg/kg	45	0	0	--	--	--	--	--	--	2 UJ	322 U	SS-48	66.1	50 U	147 U
1,2,3-Trichlorobenzene	µg/kg	45	0	0	--	--	--	--	--	--	10 UJ	322 U	SS-48	70.7	50 U	147 U
1,2,3-Trichloropropane	µg/kg	306	2	0.7	0.5 J	0.86 J	WR-PG-42	0.68	0.68 J	0.842 J	0.14 U	322 U	SS-48	11	0.115 U	125 U
1,2,4-Trimethylbenzene	µg/kg	48	1	2.1	142	142	A2BGS-5	142	142	142	2 UJ	322 U	SS-48	71.3	50 U	147 U
1,2-Dibromo-3-chloropropane	µg/kg	45	0	0	--	--	--	--	--	--	10 UJ	1610 U	SS-48	306	250 U	734 U
1,2-Dichloroethane	µg/kg	306	4	1.3	0.11 J	0.36 J	G299	0.265	0.295 J	0.359 J	0.038 U	322 U	SS-48	9.99	0.0318 U	109 U
1,2-Dichloroethene	µg/kg	8	0	0	--	--	--	--	--	--	5 U	50 U	DM-1; DM-16; DM-9	14	13 U	25 U
1,2-Dichloropropane	µg/kg	306	0	0	--	--	--	--	--	--	0.043 U	322 U	SS-48	9.99	0.0355 U	109 U
1,3,5-Trimethylbenzene	µg/kg	48	0	0	--	--	--	--	--	--	2 UJ	322 U	SS-48	69.3	50 U	147 U
1,3-Dichloropropane	µg/kg	45	0	0	--	--	--	--	--	--	2 UJ	322 U	SS-48	66.1	50 U	147 U
1,3-Dichloropropene	µg/kg	8	0	0	--	--	--	--	--	--	5 U	50 U	DM-1; DM-16; DM-9	14	13 U	25 U
1,4-Dichloro-trans-2-butene	µg/kg	262	0	0	--	--	--	--	--	--	0.42 U	120 U	SDUD27SS	1.6	0.49 U	1.9 U
1-Methyl-4-isopropylbenzene	µg/kg	28	0	0	--	--	--	--	--	--	2 UJ	643 U	SS-48	193	247 U	297 U
2,2-Dichloropropane	µg/kg	45	0	0	--	--	--	--	--	--	2 UJ	322 U	SS-48	66.1	50 U	147 U
2-Chloroethyl vinyl ether	µg/kg	261	0	0	--	--	--	--	--	--	0.19 U	56 U	SDUD27SS	0.72	0.15 U	0.55 U
2-Chlorotoluene	µg/kg	45	0	0	--	--	--	--	--	--	2 UJ	322 U	SS-48	70.6	50 U	147 U
4-Chlorotoluene	µg/kg	45	0	0	--	--	--	--	--	--	2 UJ	322 U	SS-48	70.6	50 U	147 U
Acetone	µg/kg	300	31	10.3	3.4 J	2600	SDBH5SS	106	23	70 J	2 U	8040 U	SS-48	265	6 U	2800 U
Acrolein	µg/kg	41	0	0	--	--	--	--	--	--	0.7 U	560 U	SDUD27SS	37	0.6 U	130 U
Acrylonitrile	µg/kg	262	0	0	--	--	--	--	--	--	0.28 U	120 U	SDUD27SS	1.4	0.23 U	0.85 U
Benzene	µg/kg	364	46	12.6	0.074 J	720 J	AP04D	20.5	0.205 J	52	0.01 U	720 J	AP04D	13	0.0468 U	85.2
Bromobenzene	µg/kg	45	0	0	--	--	--	--	--	--	2 UJ	322 U	SS-48	66	50 U	147 U
Bromochloromethane	µg/kg	306	0	0	--	--	--	--	--	--	0.073 U	322 U	SS-48	10.3	0.065 U	109 U
Bromodichloromethane	µg/kg	306	0	0	--	--	--	--	--	--	0.051 U	322 U	SS-48	10	0.07 U	109 U
Bromoethane	µg/kg	1	0	0	--	--	--	--	--	--	4 UJ	4 UJ	08R001	2	2 UJ	2 UJ
Bromoform	µg/kg	306	0	0	--	--	--	--	--	--	0.056 U	322 U	SS-48	10.2	0.0468 U	109 U
Bromomethane	µg/kg	306	0	0	--	--	--	--	--	--	0.36 U	2040 U	S3	53.5	0.37 U	598 U
BTEX	µg/kg	381	86	22.6	0.074 JT	3800 T	RC483-2	115.9	0.7 J	665.5 J	0.02 UT	3800 T	RC483-2	43.88	0.205 UT	249 UT
Butylbenzene	µg/kg	8	0	0	--	--	--	--	--	--	20 U	100 U	PSY17; PSY29	30	30 U	50 U
Carbon disulfide	µg/kg	303	27	8.9	0.11 J	4.5	G092	0.645	0.3 J	2.24 J	0.085 U	3220 U	SS-48	93.8	0.135 U	1110 U
Carbon tetrachloride	µg/kg	306	0	0	--	--	--	--	--	--	0.063 U	408 U	S3	10.9	0.1 U	119 U
Chlorobenzene	µg/kg	315	51	16.2	0.14 JT	35000	AP04D	1690	0.99	8360	0.072 U	35000	AP04D	283	0.075 U	134 U
Chlorodibromomethane	µg/kg	306	0	0	--	--	--	--	--	--	0.083 U	322 U	SS-48	10	0.07 U	109 U
Chloroethane	µg/kg	309	2	0.6	7.7	32	GN05APG	19.9	19.9	30.8	0.26 U	500 U	DM-1; DM-16; DM-9	13.7	0.28 U	133 U
Chloroform	µg/kg	306	13	4.2	0.087 J	98	CP07DPG	12.3	0.13 J	75.2	0.068 U	322 U	SS-48	10.5	0.06 U	109 U
Chloromethane	µg/kg	306	0	0	--	--	--	--	--	--	0.095 U	1610 U	SS-48	49.3	0.19 U	548 U
cis-1,2-Dichloroethene	µg/kg	128	2	1.6	0.21 J	0.27 J	RP03CPG	0.24	0.24 J	0.267 J	0.076 U	322 U	SS-48	23	0.0825 U	141 U
cis-1,3-Dichloropropene	µg/kg	298	0	0	--	--	--	--	--	--	0.038 U	322 U	SS-48	9.88	0.031 U	113 U
Dichlorodifluoromethane	µg/kg	306	37	12.1	0.2 J	29	BT004	5.11	2.5	17.6	0.075 U	1610 U	SS-48	49.8	0.12 U	548 U
Ethylbenzene	µg/kg	381	34	8.9	0.11 J	710	GS04APG2	28.5	0.295 J	83.4	0.009 U	710	GS04APG2	12.6	0.085 U	62 UJ

Table D1.3-2. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Ethylene dibromide	µg/kg	306	0	0	--	--	--	--	--	--	0.062 U	322 U	SS-48	10.7	0.055 U	109 U
Isopropylbenzene	µg/kg	309	45	14.6	0.073 J	520	GS04APG2	21.4	0.61 J	29.8	0.054 U	643 U	SS-48	23.2	0.055 U	247 U
m,p-Xylene	µg/kg	354	28	7.9	0.08 J	170	GS04APG2	10.6	0.995 J	60	0.02 U	643 U	SS-48	17.7	0.145 U	140 J
Methyl iodide	µg/kg	262	0	0	--	--	--	--	--	--	0.42 U	120 UJ	SDUD27SS	1.8	0.65 U	2.3 U
Methyl isobutyl ketone	µg/kg	297	1	0.3	0.33 J	0.33 J	EM03APG	0.33	0.33 J	0.33 J	0.3 U	1610 U	SS-48	50.5	0.24 U	570 U
Methyl n-butyl ketone	µg/kg	300	1	0.3	1.8 J	1.8 J	GN02EPG	1.8	1.8 J	1.8 J	0.78 U	3220 U	SS-48	98	0.7 U	1120 U
Methyl tert-butyl ether	µg/kg	285	11	3.9	0.07 J	0.84 J	G061	0.309	0.26 J	0.765 J	0.048 U	322 U	SS-48	9.31	0.0395 U	120 U
Methylene bromide	µg/kg	306	0	0	--	--	--	--	--	--	0.089 U	322 U	SS-48	10	0.085 U	109 U
Methylene chloride	µg/kg	306	2	0.7	0.88 J	1.3 J	BT004	1.09	1.09 J	1.28 J	0.37 U	1610 U	SS-48	48.9	0.865 J	548 U
Methylethyl ketone	µg/kg	100	53	53	2.1 J	16 J	SDUD27SS	4.47	4 J	7.6 J	2.1 J	5100 U	S3	345	6.95 J	1450 U
Methylisopropylbenzene	µg/kg	17	0	0	--	--	--	--	--	--	20 U	100 U	PSY17; PSY29	21	19 U	50 U
n-Butylbenzene	µg/kg	37	0	0	--	--	--	--	--	--	4 UJ	1610 UJ	SS-48	354	250 U	737 UJ
n-Propylbenzene	µg/kg	48	0	0	--	--	--	--	--	--	2 UJ	534 U	SGP-23	73.8	50 U	148 U
o-Xylene	µg/kg	354	44	12.4	0.13 J	500	GS04APG2	16.5	0.515 J	15.5	0.008 U	500	GS04APG2	10.9	0.09 UJ	105 U
Sec-butylbenzene	µg/kg	45	0	0	--	--	--	--	--	--	2 UJ	322 U	SS-48	75.6	53.5 U	147 U
Styrene	µg/kg	306	1	0.3	1.1	1.1	G283	1.1	1.1	1.1	0.09 U	322 U	SS-48	10	0.08 U	109 U
tert-Butylbenzene	µg/kg	42	0	0	--	--	--	--	--	--	2 UJ	322 U	SS-48	73.9	50 U	147 U
Tetrachloroethene	µg/kg	354	4	1.1	0.22 J	2.4 J	SDBH6SS	0.95	0.59 J	2.18 J	0.11 U	322 U	SS-48	9.13	0.105 U	58.4 UJ
Toluene	µg/kg	355	19	5.4	0.08 J	3800	RC483-2	367	4.1	2360	0.02 U	3800	RC483-2	30.1	0.165 U	115 U
trans-1,2-Dichloroethene	µg/kg	303	1	0.3	0.48 J	0.48 J	RP03CPG	0.48	0.48 J	0.48 J	0.075 U	322 U	SS-48	9.96	0.19 U	111 U
trans-1,3-Dichloropropene	µg/kg	303	0	0	--	--	--	--	--	--	0.054 U	322 U	SS-48	9.85	0.044 U	111 U
Trichloroethene	µg/kg	354	6	1.7	0.11 J	2.3 J	SDBH6SS	0.677	0.295 J	1.95 J	0.076 U	322 U	SS-48	9.12	0.07 U	58.4 UJ
Trichlorofluoromethane	µg/kg	306	0	0	--	--	--	--	--	--	0.099 U	500 U	DM-1; DM-16; DM-9	12.2	0.085 U	131 U
Vinyl acetate	µg/kg	20	0	0	--	--	--	--	--	--	0.49 UJ	120 U	SDUD27SS	15	19 U	28 U
Vinyl chloride	µg/kg	306	2	0.7	0.34 J	0.57 J	C312	0.455	0.455 J	0.559 J	0.11 U	500 U	DM-1; DM-16; DM-9	12.2	0.09 UJ	131 U
Xylene	µg/kg	381	45	11.8	0.14 JT	670 T	GS04APG2	23.9	1.01 JT	45.4 J	0.02 UT	670 T	GS04APG2	20.6	0.16 UT	124 UJT
Atterberg Limits																
Liquid Limit	percent	29	29	100	24.2	59.1	G349	38	37.6	43.1	24.2	59.1	G349	38	37.6	43.1
Plastic Limit	percent	29	29	100	17.8	37.6	G012	29.8	29.7	34.8	17.8	37.6	G012	29.8	29.7	34.8
Plasticity Index	percent	29	29	100	4	30.7	G349	8.2	7.5	10	4	30.7	G349	8.2	7.5	10

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

[c] Total PCBs are total PCB congeners whenever available and total Aroclors if not.

-- data not available.

BaPEq - benzo(a)pyrene equivalent

BTEX - benzene, toluene, ethylbenzene, and total xylene

cPAH - carcinogenic polycyclic aromatic hydrocarbon

DL - detection limit

HPAH - high molecular weight polycyclic aromatic hydrocarbon

LPAH - low molecular weight polycyclic aromatic hydrocarbon

ND - non-detect

PAH - polycyclic aromatic hydrocarbon

PBDE - polybrominated diphenyl ether

PCB - polychlorinated biphenyl

PCDD/F - dioxin/furan

RM - river mile

TEQ - toxic equivalent concentration

Reason codes for qualifiers:

J - The associated numerical value is an estimated quantity.

N - Presumptive evidence of presence of material; identification of the compound is not definitive.

U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:

A - Total value based on limited number of analytes.

T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-3. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Grainsize																
< 0.001 mm	percent	8	8	100	0	8.1	GP29	4	4.1	7.5	0	8.1	GP29	4	4.1	7.5
< 0.075 mm	percent	207	207	100	1.1	97.4	T4-VC16	38.9	21.3	92.4	1.1	97.4	T4-VC16	38.9	21.3	92.4
> 0.075 mm	percent	58	58	100	0.8	60.2 T	T4-S3-02	26.9	20.9	57.8	0.8	60.2 T	T4-S3-02	26.9	20.9	57.8
>= 0.001 to <0.005 mm	percent	8	8	100	0	12.2	GP31	6.3	6.65	12	0	12.2	GP31	6.3	6.65	12
>10 Phi clay	percent	52	52	100	0	11.2	SDDB20SB	4.3	3.93	9.46	0	11.2	SDDB20SB	4.3	3.93	9.46
>9 Phi clay	percent	948	948	100	0	21.8 T	C366-1	6.71	6.65	14.6	0	21.8 T	C366-1	6.71	6.65	14.6
8-9 Phi clay	percent	1000	1000	100	0 T	16.4	C022	3.747	3.8	8.071 J	0 T	16.4	C022	3.747	3.8	8.071 J
9-10 Phi clay	percent	52	52	100	0	8.1	S3	1.79	1.57	4.05	0	8.1	S3	1.79	1.57	4.05
Clay	percent	565	565	100	0.04	68.2 T	DMMU1	11.98	10.6	28	0.04	68.2 T	DMMU1	11.98	10.6	28
Coarse sand	percent	1209	1209	100	0.03	58.2	GS-D2	4.978	1.63	22.8	0.03	58.2	GS-D2	4.978	1.63	22.8
Coarse silt	percent	1000	1000	100	0	54.4	C717	12.65	12.55 J	28.11	0	54.4	C717	12.65	12.55 J	28.11
Fine gravel	percent	1062	1012	95.3	0 T	34	C015	1.253	0.38	5.383	0 T	34	C015	1.194	0.33 J	5.22
Fine sand	percent	1209	1209	100	0.09	63.4	C351	12.8	8.7	37.18	0.09	63.4	C351	12.8	8.7	37.18
Fine silt	percent	1000	1000	100	0 T	30.5 J	C425-1	9.247	9.66	19.01	0 T	30.5 J	C425-1	9.247	9.66	19.01
Fines	percent	1588	1588	100	0.12 T	101 T	C380	52.2	59.61	91	0.12 T	101 T	C380	52.2	59.61	91
Granule	percent	24	24	100	0	4.1	GS-C7	0.705	0.25	3.08	0	4.1	GS-C7	0.705	0.25	3.08
Gravel	percent	206	206	100	0 T	45.2	GS-05	1.78	0.24	8.98	0 T	45.2	GS-05	1.78	0.24	8.98
Mean grain size	mm	17	17	100	0.0351	0.269	WR-VC-05	0.1259	0.0978	0.2306	0.0351	0.269	WR-VC-05	0.1259	0.0978	0.2306
Median grain size	mm	17	17	100	0.02	0.25	WR-VC-07	0.0524	0.042	0.098	0.02	0.25	WR-VC-07	0.0524	0.042	0.098
Medium gravel	percent	1083	998	92.2	0 T	65.8	C006	1.432	0	6.703	0 T	65.8	C006	1.319	0	6.08 J
Medium sand	percent	1209	1209	100	0.13	87.2	C648	17.04	5.99	63.46	0.13	87.2	C648	17.04	5.99	63.46
Medium silt	percent	1000	1000	100	0	41.9	C690	12.98	14	25.51	0	41.9	C690	12.98	14	25.51
Medium-fine gravel	percent	24	24	100	0	21.9	GS-B7	1.53	0.1	5.2	0	21.9	GS-B7	1.53	0.1	5.2
Sand	percent	146	146	100	3.4	100.16	PSY39C	38.415	31.695	94.478	3.4	100.16	PSY39C	38.415	31.695	94.478
Sieve 1 inch	percent	233	0	0	--	--	--	--	--	--	0 U	0 U	WB-30; WB-31; WB-31b; WB-32; WB-34; WB-35; WB-36; WB-37; WB-39; WB-40; WB-41; WB-42; WB-43; WB-45; WB-46; WB-47; WB-48; WB-49; WB-50; WB-53; WB-56; WB-56b; WB-57; WB-58; WB-60; WB-63; WB-65; WB-66	0	0 U	0 U
Sieve 1.5 inch	percent	233	0	0	--	--	--	--	--	--	0 U	0 U	WB-30; WB-31; WB-31b; WB-32; WB-34; WB-35; WB-36; WB-37; WB-39; WB-40; WB-41; WB-42; WB-43; WB-45; WB-46; WB-47; WB-48; WB-49; WB-50; WB-53; WB-56; WB-56b; WB-57; WB-58; WB-60; WB-63; WB-65; WB-66	0	0 U	0 U
Sieve 10	percent	395	263	66.6	0	27.3	GP26	0.657	0.1	2.1	0	27.3	GP26	0.437	0	1.53
Sieve 100	percent	11	11	100	0.3	44.9	GP25; GP28	14.5	9.6	44.9	0.3	44.9	GP25; GP28	14.5	9.6	44.9
Sieve 140	percent	384	384	100	0.2	66	WB-65	12.54	9.23	37	0.2	66	WB-65	12.54	9.23	37

Table D1.3-3. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Sieve 2 inch	percent	233	0	0	--	--	--	--	--	--	0 U	0 U	WB-30; WB-31; WB-31b; WB-32; WB-34; WB-35; WB-36; WB-37; WB-39; WB-40; WB-41; WB-42; WB-43; WB-45; WB-46; WB-47; WB-48; WB-49; WB-50; WB-53; WB-56; WB-56b; WB-57; WB-58; WB-60; WB-63; WB-65; WB-66	0	0 U	0 U
Sieve 20	percent	387	337	87.1	0	7.8	T4-VC28	0.75	0.4	2.6	0	7.8	T4-VC28	0.66	0.3	2.5
Sieve 200	percent	395	395	100	-2.36	32	WB-30	5.844	4	18.93	-2.36	32	WB-30	5.844	4	18.93
Sieve 200 silt	percent	8	8	100	3.2	74.5	GP31	46.5	57.1	72.4	3.2	74.5	GP31	46.5	57.1	72.4
Sieve 230	percent	238	238	100	0.07	21.9	S4	4.58	3.4	12.2	0.07	21.9	S4	4.58	3.4	12.2
Sieve 3 inch	percent	233	0	0	--	--	--	--	--	--	0 U	0 U	WB-30; WB-31; WB-31b; WB-32; WB-34; WB-35; WB-36; WB-37; WB-39; WB-40; WB-41; WB-42; WB-43; WB-45; WB-46; WB-47; WB-48; WB-49; WB-50; WB-53; WB-56; WB-56b; WB-57; WB-58; WB-60; WB-63; WB-65; WB-66	0	0 U	0 U
Sieve 3/4 inch	percent	233	2	0.9	8.7	17	WB-47	13	13	17	0 U	17	WB-47	0.11	0 U	0 U
Sieve 3/8 inch	percent	233	26	11.2	0.3	13	WB-57	3.6	1.8	12	0 U	13	WB-57	0.4	0 U	2
Sieve 30	percent	8	8	100	0	11.1	GP28	2.65	0	10.1	0	11.1	GP28	2.65	0	10.1
Sieve 4	percent	387	220	56.8	0	16	WB-57	0.641	0	3.01	0	16	WB-57	0.364	0	1.9
Sieve 40	percent	387	383	99	0	52.2	T4-VC28	9.8	2.6	38	0	52.2	T4-VC28	9.7	2.5	37.9
Sieve 60	percent	387	386	99.7	0.1	66	T4-VC01	19.5	8.45 J	54.98	0 U	66	T4-VC01	19.45	8.4 J	54.97
Silt	percent	565	560	99.1	0	88.9 T	URB-D	43.08	46.74	76.31	-1.9 U	88.9 T	URB-D	42.69	46.12	76.2
Very coarse sand	percent	1206	1202	99.7	0 T	26.4	C266	1.484	0.6585	5.86	0 T	26.4	C266	1.48	0.65	5.858
Very fine sand	percent	1206	1206	100	0.07	46.1	C144	10	9.13	23.2	0.07	46.1	C144	10	9.13	23.2
Very fine silt	percent	1000	1000	100	0	17.5	C528	5.994	6.435	12.6	0	17.5	C528	5.994	6.435	12.6
Conventionals																
Acid Volatile Sulfides	mg/kg	23	19	82.6	0.6	46 J	WR-GC-33	19.3	17.9	42.4 J	0.6	46 J	WR-GC-33	16	13 J	42
Ammonia	mg/kg	221	221	100	1.4	775	WR-VC-106	206	201	455	1.4	775	WR-VC-106	206	201	455
Bulk density	g/cm3	10	10	100	1.21	1.74	C026	1.54	1.58	1.72	1.21	1.74	C026	1.54	1.58	1.72
Chloride	mg/kg	10	4	40	17.9 J	355 J	DMMU-1-C	106	24.6 J	306 J	11.7 UJ	355 J	DMMU-1-C	47	9.1 UJ	207 J
Cyanide	mg/kg	126	92	73	0.03 J	1410	SDDC24SB	26.8	0.5	37.4	0.03 J	1410	SDDC24SB	20.6	0.25 UJ	23.6
Gravimetric water content	percent	10	10	100	14	73.1	C019	34.9	31.1	64	14	73.1	C019	34.9	31.1	64
Moisture	percent	148	148	100	11.3	105	C45-47	38.73	31.15	90.95	11.3	105	C45-47	38.73	31.15	90.95
Nitrate	mg/kg	12	2	16.7	0.37 J	0.5	GS-09	0.435	0.435 J	0.494 J	0.37 J	3.82 UJ	DMMU-3-A	1.48	1.75 UJ	1.9 UJ
Nitrite	mg/kg	10	0	0	--	--	--	--	--	--	2.35 UJ	3.82 UJ	DMMU-3-A	1.69	1.76 UJ	1.9 UJ
pH	pH units	24	24	100	6.55	7.19	GS-05	6.88	6.91	7.17	6.55	7.19	GS-05	6.88	6.91	7.17
Specific Gravity	NA	995	995	100	1.03	3.39	C724	1.74	1.67	2.18	1.03	3.39	C724	1.74	1.67	2.18
Sulfate	mg/kg	36	26	72.2	2.34 T	18 J	GS-05	7.45	6.5	15.9 J	2.34 T	38.2 UJ	DMMU-3-A	10.1	9.15 J	18.6 UJ
Sulfide	mg/kg	211	179	84.8	0.43 J	796 J	HC-S-07	28.9	8.8 J	133 J	0.4 UJ	796 J	HC-S-07	24.8	6.2 J	107 J
Total organic carbon	percent	2036	1923	94.4	0.02 J	35.5	C302	1.551	1.46	3.467	0.02 J	35.5	C302	1.466	1.3	3.4 J
Total solids	percent	2248	2248	100	32	95	WB-47	65.9	66.3	83.2	32	95	WB-47	65.9	66.3	83.2
Total volatile solids	percent	143	143	100	1.73	10.5	HC-S-11	6.57	7.13	8.53	1.73	10.5	HC-S-11	6.57	7.13	8.53
Metals																
Aluminum	mg/kg	1092	1092	100	5730	45900	SD151	22800	23400	35900	5730	45900	SD151	22800	23400	35900

Table D1.3-3. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Antimony	mg/kg	1248	890	71.3	0.02 J	55.1	HA-43	0.837	0.21 J	3.01 J	0.02 J	55.1	HA-43	0.677	0.17 J	2.5 UJ
Arsenic	mg/kg	1553	1489	95.9	0.5 J	51.4	C708	4.08	3.56	7.33 J	0.5 J	51.4	C708	4	3.51	7.16
Arsenic pentavalent	mg/kg	2	2	100	3.444	6.151	SGP-06	4.798	4.798	6.016	3.444	6.151	SGP-06	4.798	4.798	6.016
Arsenic trivalent	mg/kg	2	2	100	0.281	0.822	SGP-06	0.552	0.552	0.795	0.281	0.822	SGP-06	0.552	0.552	0.795
Barium	mg/kg	131	131	100	45.3	637	HA-42	170	164	249	45.3	637	HA-42	170	164	249
Beryllium	mg/kg	90	81	90	0.279	0.782	GS-B2	0.521	0.532	0.7	0.279	1.05 U	RB13	0.511	0.515	0.7
Cadmium	mg/kg	1530	1435	93.8	0.011 J	43.7	C752	0.4149	0.27	0.863	0.008 UJ	43.7	C752	0.3991	0.26	0.8369 J
Calcium	mg/kg	78	78	100	2810	16000	SD133	6740	6260	9460	2810	16000	SD133	6740	6260	9460
Chromium	mg/kg	1530	1524	99.6	6.41 J	464	HA-42	28.8	27 J	46.7	6.41 J	464	HA-42	28.8	26.9	46.7
Chromium hexavalent	mg/kg	45	6	13.3	0.11 JT	0.3 J	C349; C362	0.22	0.2 J	0.3 J	0.11 JT	0.3 J	C349; C362	0.12	0.1 UT	0.2 J
Cobalt	mg/kg	37	37	100	16.2	24.6	SD072	18.4	18.2 T	20.6	16.2	24.6	SD072	18.4	18.2 T	20.6
Copper	mg/kg	1541	1541	100	9.42 J	3290	C384	55.2	35.9	107	9.42 J	3290	C384	55.2	35.9	107
Iron	mg/kg	81	81	100	18900	53900	SD072	35900	36300	45700	18900	53900	SD072	35900	36300	45700
Lead	mg/kg	1597	1589	99.5	1.54	3330 J	C326	46.6	20	131 J	1.54	3330 J	C326	46.4	20	131 J
Magnesium	mg/kg	88	88	100	2280 J	8510	SD133	5460	5810	7570	2280 J	8510	SD133	5460	5810	7570
Manganese	mg/kg	136	136	100	206	2330	HA-43	566	531 J	876 J	206	2330	HA-43	566	531 J	876 J
Mercury	mg/kg	1454	1373	94.4	0.004 J	16.8	C708	0.19	0.089 J	0.55	0.004 J	16.8	C708	0.1806	0.083	0.5188 J
Nickel	mg/kg	1521	1521	100	5.99 J	716	C356	25.5	23.5 T	33.3	5.99 J	716	C356	25.5	23.5 T	33.3
Potassium	mg/kg	88	82	93.2	321 J	1550	SD138	943	881	1420	321 J	1550	SD138	894	842	1420
Selenium	mg/kg	1101	424	38.5	0.02 J	14	SD072; SD133	0.977	0.12 J	9	0.02 J	14	SD072; SD133	0.463	0.06 J	1 U
Silver	mg/kg	1517	1407	92.7	0.013 J	4.32 J	WR-VC-110	0.329258	0.269	0.8855	0.000058 U	4.32 J	WR-VC-110	0.317865	0.251 J	0.8748
Sodium	mg/kg	88	88	100	167 J	57800 J	SD100	1430	613 J	1290 J	167 J	57800 J	SD100	1430	613 J	1290 J
Thallium	mg/kg	90	61	67.8	0.041	12	SD090	1.98	0.09	9	0.041	12	SD090	2.01	0.346 U	8.1
Tin	mg/kg	3	3	100	2.28 J	4.46 J	DM-24	3.72	4.42 J	4.46 J	2.28 J	4.46 J	DM-24	3.72	4.42 J	4.46 J
Titanium	mg/kg	27	27	100	1790	3490	DM-20	2050	1950	2770	1790	3490	DM-20	2050	1950	2770
Vanadium	mg/kg	37	37	100	89.9	136	SD072	103	103	111	89.9	136	SD072	103	103	111
Zinc	mg/kg	1581	1581	100	24	9000	HA-42	147	105 J	333	24	9000	HA-42	147	105 J	333
Butyltins																
Butyltin ion	µg/kg	365	184	50.4	0.081 J	540 J	C392	12.3	0.923 J	47.6	0.034 U	540 J	C392	7.27	0.63 J	15.4 J
Dibutyltin ion	µg/kg	369	220	59.6	0.059 J	6000 J	C392	68.8	2.2	131	0.037 U	6000 J	C392	42	1.1 U	70.6
Tetrabutyltin	µg/kg	369	69	18.7	0.22 J	510 J	C392	24.6	1.8	118	0.079 U	510 J	C392	5.76	0.185 U	9.14 J
Tributyltin	µg/kg	6	1	16.7	15.7	15.7	HA-43	15.7	15.7	15.7	2.63 U	15.7	HA-43	3.82	1.45 U	12.2
Tributyltin ion	µg/kg	433	223	51.5	0.32 J	90000	PSY30C	1410	29	4040	0 U	90000	PSY30C	729	2.1	1120
PCB Aroclors																
Aroclor 1016	µg/kg	1542	0	0	--	--	--	--	--	--	0.73 U	75000 U	SD092	37.9	1.04 U	10.5 UJ
Aroclor 1221	µg/kg	1542	0	0	--	--	--	--	--	--	0.73 U	150000 U	SD092	65.5	1.52 U	19.5 UJ
Aroclor 1232	µg/kg	1542	1	0.1	10	10	PSY36C	10	10	10	0.73 U	75000 U	SD092	37.7	1.39 U	13 U
Aroclor 1242	µg/kg	1542	124	8	2 J	16400	C455	232	20 J	643 J	0.73 U	75000 U	SD092	55.4	1.25 U	37.5 U
Aroclor 1248	µg/kg	1542	310	20.1	1.73 J	1850 J	C025-1	81.7	27.9 J	306	0.73 U	75000 U	SD092	54.3	1.75 U	92.2 J
Aroclor 1254	µg/kg	1542	679	44	0.82 J	26000	C092	243	42 J	571 J	0.662 U	75000 U	SD092	151	9	268 J
Aroclor 1260	µg/kg	1542	832	54	0.88 J	6200 T	C019	87.1	31	220	0.73 U	75000 U	SD092	82.5	9.27	170 J
Aroclor 1262	µg/kg	1309	1	0.1	95	95	C760	95	95	95	0.73 U	2000 U	C356	9.57	0.865 U	8.34 UJ
Aroclor 1268	µg/kg	1309	44	3.4	1.6 NJ	474 J	C207-1	47.5	20 J	190 J	0.73 U	2000 U	C356	10.8	0.845 U	15
Aroclors	µg/kg	1541	910	59.1	0.82 JT	26000 T	C092	323	70 J	1000 J	0.73 UT	150000 UT	SD092	260	22 JT	650 UT
PCB Congeners																
PCB001	pg/g	161	126	78.3	5.28	65100	C455	1310	71.5	3240 J	4.75 UT	65100	C455	1020	45.5 J	1720 J
PCB002	pg/g	161	124	77	5.01	7660	C455	193	29.3	586	4.32 U	7660	C455	149	23 J	504
PCB003	pg/g	161	131	81.4	5.02	38400	C455	859	65.4	2610 J	4.75 UT	38400	C455	699	45	2540
PCB004 & 010	pg/g	161	116	72	10.1	353000	C455	4700	158	11500 J	9.51 UT	353000	C455	3390	81.1	7750
PCB005 & 008	pg/g	161	129	80.1	13.8	1240000	C455	14500	474 J	33600 J	9.51 UT	1240000	C455	11600	283	16900
PCB006	pg/g	161	111	68.9	10.3	202000	C455	3040	162	7950	9.51 UT	202000	C455	2110	67.8	6040 J
PCB007 & 009	pg/g	161	90	55.9	9.93 J	71300	C455	1360	98.3 J	3560 J	8.64 U	71300	C455	768	25.9 T	1570
PCB011	pg/g	161	93	57.8	10.1 J	3990	C455	203	103	454 J	8.64 U	3990	C455	128	39.8	382
PCB012 & 013	pg/g	161	101	62.7	11.1 J	32300	C455	816	93.3	2480 J	8.64 U	32300	C455	519	39.9 J	1700
PCB014	pg/g	161	1	0.6	16.2 JT	16.2 JT	C384	16.2	16.2 JT	16.2 JT	3.31 U	1290 U	C455	18.3	4.99 U	51.5 U
PCB015	pg/g	161	124	77	10.5	334000	C455	5450	368	16500 J	9.51 UT	334000	C455	4210	217	14900
PCB016 & 032	pg/g	161	139	86.3	5.06	1300000	C455	14600	642	27700 J	4.75 UT	1300000	C455	12600	485	25400
PCB017	pg/g	161	132	82	6.54	858000	C455	10600	541 J	23700 J	4.75 UT	858000	C455	8670	358	18800

Table D1.3-3. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB018	pg/g	161	140	87	5.18	2330000	C455	25500	807 J	50300 J	4.75 UT	2330000	C455	22200	628	50000 J
PCB019	pg/g	161	122	75.8	5.6	215000	C455	2670	101	4830 J	4.75 UT	215000	C455	2030	66.4	3910
PCB020 & 021 & 033	pg/g	161	141	87.6	5.23	1650000	C455	18300	673	29900 T	4.75 UT	1650000	C455	16100	475 J	21900 J
PCB022	pg/g	161	132	82	5.62	884000	C455	10600	460	17300	4.75 UT	884000	C455	8720	294	13400 J
PCB023	pg/g	161	35	21.7	2.64	2480	C455	108	16	223	2.54 U	2480	C455	29	2.51 U	62.4
PCB024 & 027	pg/g	161	122	75.8	4.97	142000	C455	1800	89.4 J	3250 J	4.75 UT	142000	C455	1370	54.7	2590
PCB025	pg/g	161	129	80.1	7.41	187000	C455	2820	190	8520 J	4.75 UT	187000	C455	2270	115 J	6470 J
PCB026	pg/g	161	132	82	5.79 J	354000	C455	5430	273	15400 J	4.75 UT	354000	C455	4450	194	12800 J
PCB028	pg/g	161	143	88.8	6.32 J	2160000	C455	24700	1780	56200	4.75 UT	2160000	C455	21900	1260 J	51900
PCB029	pg/g	161	69	42.9	1.87	15200	C455	315	17.2	825	1.87	15200	C455	140	5.22 J	173 JT
PCB030	pg/g	161	9	5.6	4.87 J	63.8	LWMC19	19.7	14.9 J	48.6 J	1.66 U	644 U	C455	9.78	2.5 U	25.8 J
PCB031	pg/g	161	140	87	5.44	2060000	C455	27300	1270	55400 J	4.75 UT	2060000	C455	23700	915	53400 J
PCB034	pg/g	161	106	65.8	5.18	10600	C455	248	41.2 J	748 J	4.66 UJ	10600	C455	167	16.7	655
PCB035	pg/g	161	118	73.3	4.82 J	21000	C455	293	35.3	434 J	4.75 UT	21000	C455	217	23.4 J	389 J
PCB036	pg/g	161	24	14.9	2.22 J	36.6	C600	14.3	10.7 J	28.5 J	2.22 J	644 U	C455	10.5	2.5 U	31 U
PCB037	pg/g	161	133	82.6	6.7	510000	C455	6150	483	11600 J	4.75 UT	510000	C455	5090	322 J	10200
PCB038	pg/g	161	112	69.6	4.66 JT	7450	C455	192	39.7	657	4.66 JT	7450	C455	137	21.3	544 J
PCB039	pg/g	161	101	62.7	4.71 JT	1410	C455	57.1	23.7	176	4.66 UJ	1410	C455	39.3	12.7 J	155 J
PCB040	pg/g	161	131	81.4	5.29	345000	C455	4330	391	8930 J	4.75 UT	345000	C455	3520	246 J	8120
PCB041 & 064 & 071 & 072	pg/g	161	143	88.8	6.18	1650000	C455	21100	1830	50400 J	4.75 UT	1650000	C455	18800	1470 J	48800 J
PCB042 & 059	pg/g	161	137	85.1	5.08 J	624000	C455	7880	790	16600 J	4.75 UT	624000	C455	6710	539 T	15800
PCB043 & 049	pg/g	161	143	88.8	5.23	1320000	C455	21200	2800 J	70800	4.75 UT	1320000	C455	18800	1860	66900
PCB044	pg/g	161	144	89.4	4.98	1810000	C455	25700	2360 J	85300	4.75 UT	1810000	C455	22900	1770	59500
PCB045	pg/g	161	130	80.7	7	363000	C455	4520	299	8980 J	4.75 UT	363000	C455	3650	189	8610
PCB046	pg/g	161	128	79.5	5.48	149000	C455	2100	160 J	5770	4.75 UT	149000	C455	1670	99.1	5240 T
PCB047	pg/g	161	139	86.3	4.82 T	453000	C455	7640	1130	23800	4.76 UJ	453000	C455	6600	726	23300
PCB048 & 075	pg/g	161	132	82	8.2	464000	C455	5720	489 J	11900 J	4.75 UT	464000	C455	4690	320	11000 J
PCB050	pg/g	161	87	54	4.82 JT	5860	C455	135	20	365	4.32 U	5860	C455	76.7	8.99 J	260
PCB051	pg/g	161	128	79.5	6.52 J	101000	C455	1700	180 J	4960 J	4.75 UT	101000	C455	1350	121	4420 T
PCB052 & 069	pg/g	161	145	90.1	5.4	1680000	C455	30400	3240 J	92600	4.75 UT	1680000	C455	27400	2350 J	86400
PCB053	pg/g	161	133	82.6	5.79	314000	C455	4570	442	13900 J	4.75 UT	314000	C455	3780	277 J	12400
PCB054	pg/g	161	97	60.2	2.76 JT	5090	C455	111	13.7 J	246 J	2.76 JT	5090	C455	70.7	8.46	189
PCB055	pg/g	161	120	74.5	5.64	27100	C455	448	45.8 J	1510	4.75 UT	27100	C455	337	32.4	749
PCB056 & 060	pg/g	161	139	86.3	5.38 J	1030000	C455	13500	1190	33000	4.75 UT	1030000	C455	11700	915 J	30000
PCB057	pg/g	161	108	67.1	5.05	8230	C455	186	28	490	4.66 UJ	8230	C455	127	15.8	385 J
PCB058	pg/g	161	111	68.9	5.2	5900	C453	155	35.7	331 J	4.75 UT	5900	C453	110	20.3	219
PCB061 & 070	pg/g	161	146	90.7	4.9	1570000	C455	26300	3250 J	89900	4.75 UT	1570000	C455	23800	2450	75600
PCB062	pg/g	161	7	4.3	8.83	810	C455	129	12.4 J	578	1.66 U	810	C455	12.5	2.5 U	31 U
PCB063	pg/g	161	128	79.5	5.19	56400	C455	978	146	3340	4.75 UT	56400	C455	780	84.5 J	2830 J
PCB065	pg/g	161	11	6.8	2.59	1490	C455	165	22.9	823	2.54 U	1490	C455	18.1	2.5 U	31.3 U
PCB066 & 076	pg/g	161	143	88.8	4.99	1280000	C455	19200	2750	55500	4.75 UT	1280000	C455	17100	1820	42800
PCB067	pg/g	161	126	78.3	5	58900	C455	802	78.8	1710	4.75 UT	58900	C455	630	49	1430
PCB068	pg/g	161	122	75.8	5.15	4300	C455	215	74.3	768 J	4.75 UT	4300	C455	166	41.1 J	527 J
PCB073	pg/g	161	7	4.3	7.02	713	LWMC24	246	173	610	2.47 U	713	LWMC24	19.3	2.5 U	49.8 U
PCB074	pg/g	161	138	85.7	5.3 J	739000	C455	10900	1060 J	41300	4.75 UT	739000	C455	9300	802 JT	24500
PCB077	pg/g	161	135	83.9	1.21 JT	120000	C455	1710	219	4970 J	0.839 U	120000	C455	1440	170	4050 J
PCB078	pg/g	161	9	5.6	6.87 J	1020	LWMC3	149	31.8	665	1.66 U	1020	LWMC3	16.9	2.5 U	35.9
PCB079	pg/g	161	127	78.9	6.7 J	7670 JT	C384	352	88.7	796	4.75 UT	7670 JT	C384	280	67 J	532
PCB080	pg/g	161	1	0.6	13.7	13.7	C382	13.7	13.7	13.7	1.66 U	644 U	C455	9.16	2.5 U	25.8 U
PCB081	pg/g	161	116	72	0.896 J	5010	C455	128	14.3	422 J	0.336 UT	5010	C455	93.3	7.83 T	313
PCB082	pg/g	161	133	82.6	7.67	129000	C455	3830	527	10600	4.75 UT	129000	C455	3170	328 T	7860
PCB083	pg/g	161	13	8.1	4.56	1450	C455	153	32.6 J	701 J	2.47 U	1450	C455	18.7	2.5 U	40.8
PCB084 & 092	pg/g	161	142	88.2	5.91	350000 JT	C384	13600	2180	24500	4.75 UT	350000 JT	C384	12000	1760	21600
PCB085 & 116	pg/g	161	135	83.9	5.84	165000	C455	4880	765	12100	4.75 UT	165000	C455	4100	449	9790
PCB086	pg/g	161	96	59.6	4.05 JT	13300	C455	313	31	997	4.05 JT	13300	C455	191	11.2	674 J
PCB087 & 117 & 125	pg/g	161	140	87	6.17 J	321000 JT	C384	11000	1240	21500	4.75 UT	321000 JT	C384	9580	956	18100
PCB088 & 091	pg/g	161	139	86.3	6.84	130000	C455	4740	930	15500	4.75 UT	130000	C455	4090	696	9570
PCB089	pg/g	161	121	75.2	5.14	23700	C455	493	69	1470	4.75 UT	23700	C455	374	41.7	1130

Table D1.3-3. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB090 & 101	pg/g	161	150	93.2	5.06 T	822000 JT	C384	29200	4490	49200	4.76 UJ	822000 JT	C384	27200	4090	46700
PCB093	pg/g	161	2	1.2	7.06 J	685	C302	346	346 J	651 J	1.66 U	685	C302	12.6	2.5 U	25.8 U
PCB094	pg/g	161	116	72	5.79 J	6570	C455	233	43.7	928 J	4.75 UT	6570	C455	171	24.5	535 J
PCB095 & 098 & 102	pg/g	161	146	90.7	6.05	679000 JT	C384	24300	3780	41200	4.75 UT	679000 JT	C384	22000	3250	39400
PCB096	pg/g	161	123	76.4	5.38	14700	C455	374	62.8	1300 J	4.75 UT	14700	C455	289	40.1	931
PCB097	pg/g	161	139	86.3	5.78 J	243000	C455	9240	1300	19700	4.75 UT	243000	C455	7980	931 J	16100
PCB099	pg/g	161	143	88.8	5.76	307000	C455	13200	2380	25000	4.75 UT	307000	C455	11700	2180	23200
PCB100	pg/g	161	125	77.6	4.92	6370	LWMC24	248	71.3	1170	4.75 UT	6370	LWMC24	195	51.6	633 J
PCB103	pg/g	161	131	81.4	5.11	8040 T	C708	430	147	1440	4.75 UT	8040 T	C708	352	118	1340
PCB104	pg/g	161	26	16.1	2.09 J	191	LWMC24	30	11 J	120 J	2.09 J	312 U	LWMC11	11.3	2.5 U	46 U
PCB105	pg/g	161	150	93.2	0.865 J	237000	C455	7460	829	16700	0.865 J	237000	C455	6950	751	15400
PCB106 & 118	pg/g	161	154	95.7	1.65 J	636000 JT	C384	21600	2930	41600	1.45 U	636000 JT	C384	20600	2690	40400
PCB107 & 109	pg/g	161	136	84.5	8.16	44700 JT	C384	1970	385	3780	4.75 UT	44700 JT	C384	1660	306	3100
PCB108 & 112	pg/g	161	132	82	5.67	40300	C455	1580	286 J	3840	4.75 UT	40300	C455	1290	175	2600
PCB110	pg/g	161	148	91.9	4.88 T	946000 JT	C384	32500	4800	55400	4.76 UJ	946000 JT	C384	29800	3880	50800
PCB111 & 115	pg/g	161	127	78.9	5.2	20600	C455	602	66.4	2520	4.75 UT	20600	C455	477	44.2	1270
PCB113	pg/g	161	97	60.2	5.08	1100 T	C708	80.3	34.7 J	258	2.47 U	1100 T	C708	54.4	14.6 J	156 U
PCB114	pg/g	161	129	80.1	1.43 J	19100	C455	585	72.8 J	1820	0.566 UT	19100	C455	470	44.3	1050
PCB119	pg/g	161	135	83.9	6.43	16900 T	C708	835	230	2950	4.75 UT	16900 T	C708	701	172 T	1620
PCB120	pg/g	161	114	70.8	5.01	2250 T	C708	113	37.9	513	4.75 UT	2250 T	C708	83.7	26	181
PCB121	pg/g	161	9	5.6	3.32 JT	106	C739	27.1	11 J	85.8	2.47 U	644 U	C455	10.5	2.5 U	31.3 U
PCB122	pg/g	161	124	77	5.79	9550	C455	301	49	890	4.75 UT	9550	C455	234	29.3	627
PCB123	pg/g	161	128	79.5	1.87 J	13500	C455	434	55.2 J	1750	0.569 UT	13500	C455	346	38.3	787
PCB124	pg/g	161	127	78.9	5.99	31000 JT	C384	1040	131	2690	4.75 UT	31000 JT	C384	822	102 J	1510
PCB126	pg/g	161	128	79.5	1 J	3320 JT	C384	113	23.2 J	254	0.642 UT	3320 JT	C384	90.7	16.3	191 J
PCB127	pg/g	161	1	0.6	48.6 J	48.6 J	C263	48.6	48.6 J	48.6 J	1.66 U	644 U	C455	9.11	2.5 U	25.8 U
PCB128 & 162	pg/g	161	139	86.3	5.08 J	123000 JT	C384	3800	603	7220	4.75 UT	123000 JT	C384	3290	455 T	5260
PCB129	pg/g	161	133	82.6	5.09	40300 JT	C384	1220	169 J	2450	4.75 UT	40300 JT	C384	1010	120	1740
PCB130	pg/g	161	135	83.9	10.2	50300 JT	C384	1770	401	3270	4.75 UT	50300 JT	C384	1490	307 T	2640
PCB131	pg/g	161	16	9.9	3.17 J	639	LWMC14	70.2	13.1 J	287 J	1.66 U	644 U	C455	15.3	2.5 U	46 U
PCB132 & 161	pg/g	161	141	87.6	6.43	210000 JT	C384	7600	1360	14700 J	4.75 UT	210000 JT	C384	6660	1220	11600
PCB133 & 142	pg/g	161	136	84.5	7.02	21100 JT	C384	889	246 J	3350	4.75 UT	21100 JT	C384	752	195	2930
PCB134 & 143	pg/g	161	135	83.9	5.27	42600 JT	C384	1510	281 J	3370	4.75 UT	42600 JT	C384	1260	219	2090
PCB135	pg/g	161	140	87	5.59	92700 JT	C384	3760	1030	12100	4.75 UT	92700 JT	C384	3270	839	10600
PCB136	pg/g	161	140	87	5.13 J	96700 JT	C384	3760	881	10400	4.75 UT	96700 JT	C384	3270	736 T	6770
PCB137	pg/g	161	132	82	5.95	39500 JT	C384	1290	177 J	3020	4.75 UT	39500 JT	C384	1060	127	1790
PCB138 & 163 & 164	pg/g	161	151	93.8	5.1 T	646000 JT	C384	23000	4590	50800 J	4.76 UJ	646000 JT	C384	21500	4330	37500
PCB139 & 149	pg/g	161	148	91.9	5.93 T	543000 JT	C384	20300	4850	47800 J	4.76 UJ	543000 JT	C384	18700	4400	46900
PCB140	pg/g	161	124	77	4.97	4170 T	C708	259	93	1400	2.47 U	4170 T	C708	203	60.1	676
PCB141	pg/g	161	139	86.3	6.27 J	119000 JT	C384	4610	890	16800 J	4.75 UT	119000 JT	C384	3980	766	7670
PCB144	pg/g	161	132	82	5.57	33900 JT	C384	1240	232	3960 J	4.75 UT	33900 JT	C384	1020	189 T	1940
PCB145	pg/g	161	27	16.8	2.11 J	320 JT	C384	45	10.6	180 J	1.66 U	320 JT	C384	13.7	2.5 U	49.8 U
PCB146 & 165	pg/g	161	140	87	5.39 J	84000 JT	C384	4180	1320	19500	4.75 UT	84000 JT	C384	3640	1160	17600
PCB147	pg/g	161	131	81.4	5.16	18600 JT	C384	731	144	3410	4.75 UT	18600 JT	C384	597	116	1180
PCB148	pg/g	161	113	70.2	4.92 J	1070	C739; LWMC24	112	51.3	436	4.75 UT	1070	C739; LWMC24	82.6	29.5	331 J
PCB150	pg/g	161	111	68.9	5.59	1530	LWMC24	92.2	39	392	4.75 UT	1530	LWMC24	67.2	21.3 T	286
PCB151	pg/g	161	141	87.6	8.09 J	132000 JT	C384	5680	1520 J	20300	4.75 UT	132000 JT	C384	4970	1350	15100 J
PCB152	pg/g	161	65	40.4	4.68 J	801 JT	C384	65.1	11.5	396 J	2.54 U	801 JT	C384	31.2	5.25	130 U
PCB153	pg/g	161	148	91.9	6.45 J	532000 JT	C384	21700	5340 J	64300 J	4.76 UJ	532000 JT	C384	20000	4990	55700
PCB154	pg/g	161	135	83.9	7.07	9000 T	C708	619	258	2640	4.75 UT	9000 T	C708	521	159	2150
PCB155	pg/g	161	18	11.2	2.65 J	70.3	LWMC24	13.7	8.01 J	41.3	2.47 U	644 U	C455	10.1	2.5 UJ	31.3 U
PCB156	pg/g	161	146	90.7	0.614 J	78000 JT	C384	2370	349 J	4410 J	0.431 U	78000 JT	C384	2150	317	3720
PCB157	pg/g	161	134	83.2	0.612 J	17000 JT	C384	519	73.5 J	1160	0.4 U	17000 JT	C384	432	56.2	734
PCB158 & 160	pg/g	161	137	85.1	5.66	84200 JT	C384	2790	425	6440 J	4.75 UT	84200 JT	C384	2380	351	4380
PCB159	pg/g	161	32	19.9	16.1 T	3710	C455	419	161	1530	4.32 U	3710	C455	88.6	2.5 U	382
PCB166	pg/g	161	101	62.7	2.98 JT	3330 JT	C384	141	20.1	916	2.98 JT	3330 JT	C384	91.5	9.36 J	220
PCB167	pg/g	161	142	88.2	0.792 J	28300 JT	C384	916	153 J	1880 J	0.464 U	28300 JT	C384	808	131 J	1430
PCB168	pg/g	161	96	59.6	4.09 JT	815 JT	C384	58.9	21.2	277 J	4.09 JT	815 JT	C384	39	12.7	156 U

Table D1.3-3. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB169	pg/g	161	24	14.9	0.495 JT	45.1 JT	C384	6.65	2.6 J	35.4 J	0.282 U	83.6 U	LWMC11	3.18	1.18 UJ	11.7 U
PCB170	pg/g	161	143	88.8	5.36	106000 JT	C384	5400	1520	28600	4.75 UT	106000 JT	C384	4800	1310 J	16200
PCB171	pg/g	161	137	85.1	6.23	31400 JT	C384	1630	460	7810	4.75 UT	31400 JT	C384	1380	375 J	4500
PCB172	pg/g	161	136	84.5	6.6	17800 JT	C384	974	284 J	4340	4.75 UT	17800 JT	C384	824	242 J	3160
PCB173	pg/g	161	123	76.4	5.86 J	3330 JT	C384	170	44.8	859 J	4.75 UT	3330 JT	C384	133	33.5	484
PCB174	pg/g	161	143	88.8	5.55	118000	C455	6110	1880 T	23700	4.75 UT	118000	C455	5430	1660	21700
PCB175	pg/g	161	123	76.4	5.21	5890 JT	C384	365	94.2	1340 J	2.47 U	5890 JT	C384	282	72	823
PCB176	pg/g	161	136	84.5	7.75	17000 JT	C384	930	278	3540 J	4.75 UT	17000 JT	C384	787	243	3100
PCB177	pg/g	161	140	87	5.15	65400 JT	C384	3760	1180	15900	4.75 UT	65400 JT	C384	3270	1050	14300
PCB178	pg/g	161	138	85.7	8.74	22400 JT	C384	1400	491 J	5530 J	4.75 UT	22400 JT	C384	1200	413	4910
PCB179	pg/g	161	139	86.3	11.5	54700	C455	3050	1010	11600 J	4.75 UT	54700	C455	2640	876	10800
PCB180	pg/g	161	147	91.3	5.01 T	255000	C455	12800	3790	49000	4.76 UJ	255000	C455	11700	3490 J	46100
PCB181	pg/g	161	92	57.1	5.37 T	9550	LWMC19	261	24.8	636	2.51 UT	9550	LWMC19	152	11.7	471
PCB182 & 187	pg/g	161	143	88.8	6.93	141000	C455	7990	2660	30000	4.75 UT	141000	C455	7100	2460	29100
PCB183	pg/g	161	141	87.6	5.28	67500	C455	3590	1050	14600	4.75 UT	67500	C455	3140	904 J	10900
PCB184	pg/g	161	31	19.3	2.7 J	115 JT	C384	22	9.04 J	94	2.47 U	644 U	C455	12.1	2.5 U	48.4
PCB185	pg/g	161	133	82.6	6.47	13500	C455	728	211	2550	4.75 UT	13500	C455	603	171	1940
PCB186	pg/g	161	9	5.6	3.29 J	192	LWMC14	38.8	11.7 J	143 J	1.66 U	644 U	C455	10.6	2.5 U	31 U
PCB188	pg/g	161	72	44.7	2.58 JT	311	LWMC24	27	11.8 J	110	2.47 U	644 U	C455	18.8	6.2 UT	66.7
PCB189	pg/g	161	137	85.1	0.639 J	4320 JT	C384	218	58.8	1160 J	0.18 UJ	4320 JT	C384	186	47.4 J	629
PCB190	pg/g	161	137	85.1	6.12	22500 JT	C384	1160	320	5320	4.75 UT	22500 JT	C384	986	278	3570
PCB191	pg/g	161	127	78.9	5.18	4760 JT	C384	257	70.7	1120	4.75 UT	4760 JT	C384	204	56.1	692
PCB192	pg/g	161	0	0	--	--	--	--	--	--	1.66 U	644 U	C455	9.11	2.5 U	25.8 U
PCB193	pg/g	161	137	85.1	5.04	11600 JT	C384	674	210	2760	4.75 UT	11600 JT	C384	574	188	1980
PCB194	pg/g	161	140	87	5.01	57300	C455	2900	917	11700	4.75 UT	57300	C455	2530	770	7070
PCB195	pg/g	161	137	85.1	6.63	23300	C455	1330	427	5260	4.75 UT	23300	C455	1130	324 T	3150
PCB196 & 203	pg/g	161	142	88.2	5.07	67000	C455	3780	1240	11300	4.75 UT	67000	C455	3340	1040	10300
PCB197	pg/g	161	121	75.2	5.32 J	2200	C455	150	50.6	519 J	4.75 UT	2200	C455	116	34.9	469
PCB198	pg/g	161	126	78.3	7.49	4150	C453	256	68.9	809	4.75 UT	4150	C453	203	51.5	789 J
PCB199	pg/g	161	141	87.6	5.12	64100	C455	3640	1210	13200 J	4.75 UT	64100	C455	3190	1000	10500
PCB200	pg/g	161	132	82	6.89	7830	C455	485	169 J	1660	4.75 UT	7830	C455	399	131 J	1650
PCB201	pg/g	161	131	81.4	5.35	7690	C455	488	168	1690 J	4.75 UT	7690	C455	400	128	1230
PCB202	pg/g	161	135	83.9	6.26	12600	C455	741	253	2570	4.75 UT	12600	C455	623	205 J	2000
PCB204	pg/g	161	7	4.3	8.74	280	LWMC14	53.4	18.6 J	202 J	1.66 U	644 U	C455	11	2.5 U	25.8 U
PCB205	pg/g	161	124	77	5.48	2610	C455	152	47.3 J	591	4.75 UT	2610	C455	120	35.5	384
PCB206	pg/g	161	140	87	5.25	78300	C207-1	3220	540 J	13500 J	4.75 UT	78300	C207-1	2800	456	12000 T
PCB207	pg/g	161	129	80.1	5	5410	C455	285	76.1 J	1440	4.75 UT	5410	C455	230	54.3	1330
PCB208	pg/g	161	129	80.1	7.14 J	32800	C207-1	1130	190	4480	4.75 UT	32800	C207-1	911	116	2980 T
PCB209	pg/g	161	138	85.7	11.1	128000	C453	5030	424	14000	4.75 UT	128000	C453	4320	301 J	7760
Total PCB Congeners	pg/g	161	157	97.5	1.38 JT	36800000 T	C455	693060.1	106363.3 T	2230605.5 J	1.38 JT	36800000 T	C455	675841.34	99600 JT	2195812.1 JT
PCBs[c]																
Total PCBs	µg/kg	1543	939	60.9	0.00138 JT	36800 T	C455	351.21186	70 T	1000 J	0.00138 JT	150000 UT	SD092	282.16061	22.6 JT	666.2 J
PCB Homologs																
Dichlorobiphenyl homologs	pg/g	149	119	79.9	13.8 T	2230000 T	C455	28300	1320 JT	57600 J	9.51 UT	2230000 T	C455	22600	780 JT	30700
Heptachlorobiphenyl homologs	pg/g	149	135	90.6	5.01 T	943000 T	C455	49100	14800 T	163000	4.76 UJT	943000 T	C455	44500	13300 JT	123000
Hexachlorobiphenyl homologs	pg/g	149	140	94	1.14 JT	3050000 JT	C384	104000	24400 J	214000 J	1.14 JT	3050000 JT	C384	97900	22600 T	200000 J
Monochlorobiphenyl homologs	pg/g	149	121	81.2	5.28 T	111000 T	C455	2250	147 JT	6010 T	4.75 UT	111000 T	C455	1830	104 T	3840 J
Nonachlorobiphenyl homologs	pg/g	149	128	85.9	5.25 T	115000 T	C207-1	4070	710	13600	4.75 UT	115000 T	C207-1	3500	551 T	12100
Octachlorobiphenyl homologs	pg/g	149	130	87.2	10.2 T	248000 T	C455	13400	4380 J	41400	4.75 UT	248000 T	C455	11700	3580 T	34800
Pentachlorobiphenyl homologs	pg/g	149	142	95.3	2.32 JT	5010000 JT	C384	165000	26500 J	222000 J	2.32 JT	5010000 JT	C384	157000	22500 T	219000 J
Tetrachlorobiphenyl homologs	pg/g	149	140	94	1.21 JT	14200000 T	C455	191000	18300 J	440000 J	1.21 JT	14200000 T	C455	180000	16100 T	434000 J
Trichlorobiphenyl homologs	pg/g	149	132	88.6	5.06 T	12700000 T	C455	145000	6910 J	272000 J	4.75 UT	12700000 T	C455	128000	5350 T	260000 J
PCDD/Fs Homologs																
Heptachlorodibenzofuran homologs	pg/g	326	295	90.5	0.012	44000	WB-39	815.762	19.9 T	2603	0.006 U	44000	WB-39	738.196	14.121	2277.5
Heptachlorodibenzo-p-dioxin homologs	pg/g	326	319	97.9	0.089	30500	C302	315.4731	37.702	641.0153	0.041 U	30500	C302	308.7044	34.8945	632.5128
Hexachlorodibenzofuran homologs	pg/g	327	297	90.8	0.014	120000	WB-36; WB-39	2479.11	14.6	5106	0.00399 U	120000	WB-36; WB-39	2251.67	10.4	3634 J
Hexachlorodibenzo-p-dioxin homologs	pg/g	326	308	94.5	0.02	4280	C302	45.129	6.255	94.575	0.009 U	4280	C302	42.8948	5.6965	91.675
Octachlorodibenzofuran	pg/g	331	258	77.9	0.014 J	23000	WB-39	678.607	23.4375	3530	0.008 U	23000	WB-39	529.166	10.327	2405

Table D1.3-3. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Octachlorodibenzo-p-dioxin	pg/g	331	288	87	0.241 J	183000	C455	1793.601	211.1195	3557 J	0.241 J	183000	C455	1560.924	160	3181.089 J
Pentachlorodibenzofuran homologs	pg/g	327	278	85	0.01	140000	WB-36	2503.747	9.0715	6895	0.003 U	140000	WB-36	2128.574	5.481	3200 J
Pentachlorodibenzo-p-dioxin homologs	pg/g	327	219	67	0.016	288	C302	8.8987	1.79	36.14 J	0.004 U	288	C302	6.0862	0.639	26.67
Tetrachlorodibenzofuran homologs	pg/g	326	260	79.8	0.021 T	110000	WB-36	1808.32	5.8	5502 J	0.00322 U	110000	WB-36	1442.32	2.75	3435.63
Tetrachlorodibenzo-p-dioxin homologs	pg/g	326	248	76.1	0.015	185.67	C334	5.4107	0.7225	25.865 J	0.00219 U	185.67	C334	4.2696	0.387	16.613
Total PCDD/F	pg/g	327	325	99.4	0.0578 JT	425000 JT	WB-36	9052.084	290 T	28240 J	0.0578 JT	425000 JT	WB-36	8996.728	281 T	28160 J
PCDD/Fs																
1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/g	331	271	81.9	0.01 J	26000	WB-39	484.902	8.35	1580	0.007 U	26000	WB-39	397.032	5.478	1100
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/g	331	277	83.7	0.038 J	10800	C455	158.301	25.6	322.4	0.038 J	10800	C455	132.531	15.763	254.5
1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/g	331	210	63.4	0.02 J	9000	WB-39	248.01	1.591 J	1200	0.005 U	9000	WB-39	157.38	0.368 J	445
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	330	250	75.8	0.014 J	84000	WB-39	1882.75	2.368	5940	0.00399 U	84000	WB-39	1426.36	0.9425 J	2757.5 J
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/g	331	181	54.7	0.017 J	33.3	C678	1.1698	0.33 J	3.872	0.003 U	33.3	C678	0.72912	0.104 J	2.825 J
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	331	241	72.8	0.0113 J	20000	WB-36; WB-39	455.802	1.49 JT	1500	0.003 U	20000	WB-36; WB-39	340.439	0.556 J	695 J
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/g	330	248	75.2	0.008 J	265	C678	6.5668	1.653	16.195	0.004 U	265	C678	5.2078	0.829 J	15.42
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	331	108	32.6	0.011 JT	9480	WB-35	233.8	0.7575 J	665.1	0.003 U	9480	WB-35	76.31	0.0305 U	90.5 J
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/g	331	243	73.4	0.013 J	103	C678	2.8335	0.689 J	8.8879 J	0.004 U	103	C678	2.1283	0.354 J	7.26 J
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	331	212	64	0.016 J	50000	WB-36	1312.41	1.045 J	4625	0.003 U	50000	WB-36	868.597	0.313 J	1435 J
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/g	331	159	48	0.0173 J	58.293	C334	1.7573	0.351 J	7.176 J	0.004 U	58.293	C334	0.93868	0.0975 U	3.475 U
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	331	218	65.9	0.021 J	5580	WB-35	97.401	0.942 J	214.5	0.003 U	5580	WB-35	64.165	0.341 J	90.95
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	331	231	69.8	0.0142 J	28000	WB-36	609.999	0.798 J	1800	0.003 U	28000	WB-36	425.722	0.27 J	875
2,3,7,8-Tetrachlorodibenzofuran	pg/g	330	187	56.7	0.095 J	37000	WB-36	1024.02	1.8	6520	0.00322 U	37000	WB-36	580.311	0.3395 U	1423.5 J
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	331	97	29.3	0.0217 J	83.6	C455	2.6505	0.526 J	10.52	0.002 U	83.6	C455	0.83218	0.0334 U	2.535
TCDD TEQ (ND = 0)	pg/g	331	313	94.6	0.000262 JT	24400 JT	WB-36	433.575	1.35 JT	1124 J	0.000262 JT	24400 JT	WB-36	409.997	1.12 JT	864 J
Total TCDD TEQ (ND = 0)	pg/g	433	412	95.2	0.0000696 JT	24400 JA	WB-36	333.339504	1.65 J	488.1 J	0.0000696 JT	24400 JA	WB-36	317.174302	1.38 JA	407.4 J
PCB TEQ																
Total PCB TEQ (ND=0)	pg/g	161	155	96.3	0.0000696 JT	365 JT	C384	10.49746	1.86 T	21.11296 J	0.0000696 JT	365 JT	C384	10.10929	1.72 T	20.4 JT
Pesticides																
2,4'-DDD	µg/kg	1490	928	62.3	0.056 NJ	420000 J	WB-37	1185	3.8 J	560	0.0277 U	420000 J	WB-37	738.7	1.3 J	246.5
2,4'-DDE	µg/kg	1490	397	26.6	0.041 J	3700 J	WB-37	59.8	2.5	218	0.0294 U	11000 U	WB-36	26.1	0.205 U	39.6 J
2,4'-DDT	µg/kg	1490	755	50.7	0.077 J	290000 J	WB-36	673	2.2	530 J	0.0389 UJ	290000 J	WB-36	343.5	0.53 J	130 J
4,4'-DDD	µg/kg	1679	1267	75.5	0.087 J	810000	WB-37	3397	5.2 J	1297 J	0.0415 U	810000	WB-37	2563	2.6	865.7 J
4,4'-DDE	µg/kg	1679	1114	66.3	0.054 NJ	24000	WB-9	115.4	4.2 J	240 J	0.027 U	24000	WB-9	85.55	2.4 NJ	150
4,4'-DDT	µg/kg	1660	1060	63.9	0.069 J	3500000	WB-24	9009	4.9 J	3800	0.049 UJ	3500000	WB-24	5753	1.7	1400 J
Aldrin	µg/kg	1172	135	11.5	0.11 J	1340 J	C356	23.33	0.88 J	72.96 J	0.0269 UJ	14000 U	WB-36	20.87	0.11 U	17.23 U
alpha-Endosulfan	µg/kg	1146	90	7.9	0.065 J	180 NJ	C092	4.398	0.33 J	10.33 J	0.0248 U	11000 UJ	WB-36	15.08	0.1 U	9.913 J
alpha-Hexachlorocyclohexane	µg/kg	1117	93	8.3	0.074 J	120	WB-13	3.979	0.482 J	9.4 J	0.0288 U	8700 U	WB-36	13.13	0.1145 UJ	5.55 J
Atrazine	µg/kg	20	0	0	--	--	--	--	--	--	200 UJ	320 U	WB-34	120	120 U	150 U
beta-Endosulfan	µg/kg	1146	163	14.2	0.047 J	170 J	C301	2.171	0.46	2.7 J	0.0216 UJ	38000 U	WB-9	39.17	0.1078 UJ	9.875 U
beta-Hexachlorocyclohexane	µg/kg	1146	360	31.4	0.057 JT	1000	WB-35	7.94	2.345 J	12.51 J	0.0291 U	13000 U	WB-36	18.52	0.4975 U	13.08 J
Chlordane (cis & trans)	µg/kg	71	0	0	--	--	--	--	--	--	3.5 U	320 U	WR-VC-52	14	6.5 U	36 U
Chlordane (technical)	µg/kg	33	0	0	--	--	--	--	--	--	8.1 U	968 U	S2	50.2	25.7 UJT	225 U
cis-Chlordane	µg/kg	1178	281	23.9	0.046 J	630 J	C455	5.622	0.65 J	16.8	0.0286 U	10000 U	WB-36	15.02	0.1785 UJ	18.72 U
cis-Nonachlor	µg/kg	996	187	18.8	0.044 J	330 NJ	C531	6.948	0.574 J	12.17 J	0.0359 U	2000 U	LWMC14	3.911	0.25 J	5.125 U
delta-Hexachlorocyclohexane	µg/kg	1125	47	4.2	0.12 NJ	45.4 NJ	C302	2.511	0.512 J	10.84 J	0.0615 UJ	13000 U	WB-36	16.83	0.16 U	7 U
Dieldrin	µg/kg	1208	77	6.4	0.038 NJ	100 J	C092	3.595	0.43	13.36 J	0.03 U	12000 U	WB-36	17.15	0.1693 UJ	8 J
Endosulfan sulfate	µg/kg	1144	22	1.9	0.13 J	2200 J	WB-42	173.9	0.77 J	646.5 J	0.051 U	10000 U	WB-36	18.42	0.2 UJ	8.5 U
Endrin	µg/kg	925	130	14.1	0.12 J	311 J	C301	14.58	1.9 J	69.5 J	0.0367 U	22000 U	WB-9	40.47	0.18 U	38.7 U
Endrin aldehyde	µg/kg	1146	63	5.5	0.069 NJ	407 NJ	C455	21.08	1.4 J	90.9 J	0.039 UJ	7500 U	SD092	14.97	0.1353 U	15.5 U
Endrin ketone	µg/kg	1123	128	11.4	0.11 NJ	263 NJ	C301	10.42	1.5 J	26.55 J	0.0253 U	13000 U	WB-36	20.19	0.145 UT	12.35 U
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	1220	121	9.9	0.052 J	172 NJ	C356	5.275	1.3 J	12 J	0.051 U	9900 U	WB-36	13.76	0.225 U	14.33 J
Heptachlor	µg/kg	1220	60	4.9	0.099 J	22 NJ	C527	1.243	0.5125 J	4.914 J	0.0262 U	14000 U	WB-36	16.23	0.103 UJ	5.655 J
Heptachlor epoxide	µg/kg	1157	126	10.9	0.091 J	610 J	WB-35	8.186	0.81 J	5.9 J	0.0341 U	10000 U	WB-36	14.63	0.15 U	8.1 UJ
Hexachlorocyclohexanes	µg/kg	9	0	0	--	--	--	--	--	--	10 U	400 U	OSS004	33	13 U	130 U
Methoxychlor	µg/kg	1158	66	5.7	0.14	3000 J	WB-35	66.87	1.9 J	176.8 J	0.034 UJ	38000 U	SD092	54.33	0.155 U	32.07 U
Mirex	µg/kg	987	34	3.4	0.12 JT	240 J	C302	16.77	0.415 J	88.75 J	0.0309 U	2000 U	LWMC14	1.923	0.089 UJ	1 U
Oxychlordane	µg/kg	994	114	11.5	0.092 NJ	339 J	C356	7.792	0.737 J	28.31 J	0.0155 U	2000 U	LWMC14	2.242	0.06675 U	2.5 J
Total chlordanes	µg/kg	1195	648	54.2	0.038 JT	2330 JT	C455	19.53	1.57 J	55.33 J	0.0359 UT	10000 UA	WB-36	25.41	0.95 UJT	55 J
Total endosulfan	µg/kg	1127	249	22.1	0.047 JT	2200 JT	WB-42	18.38	0.495 JT	20 J	0.0393 UA	38000 UT	WB-9	41.82	0.265 UT	16.7 U

Table D1.3-3. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Total DDD	µg/kg	1660	1287	77.5	0.079 JT	1230000 JT	WB-37	4197	7.6 A	1700 J	0.0415 UT	1230000 JT	WB-37	3255	3.74 J	1215 J
Total DDx	µg/kg	1659	1374	82.8	0.058 JT	3643000 A	WB-24	11367	15.4 J	4938.2 J	0.049 UJT	3643000 A	WB-24	9414.2	9.9 JT	3050.6 J
Total DDE	µg/kg	1660	1136	68.4	0.041 JT	24000 A	WB-9	134	4.365 J	320 J	0.0389 UT	24000 A	WB-9	101.3	2.6 J	189.3 J
Total DDT	µg/kg	1659	1155	69.6	0.069 JT	3500000 A	WB-24	8707	5.3 JT	3515 J	0.0427 UT	3500000 A	WB-24	6063	2.1 NJT	1551 J
Total 4,4'-DDx	µg/kg	1034	827	80	0.07 T	4764000 T	WB-9	14272	10.7 JT	1251 J	0.049 UJT	4764000 T	WB-9	11415	7.115 J	839.2 J
Toxaphene	µg/kg	1158	1	0.1	1900 NJ	1900 NJ	C531	1900	1900 NJ	1900 NJ	2.4 U	750000 U	WB-36	1150	25 U	1100 U
Toxaphene Peak 1	µg/kg	14	0	0	--	--	--	--	--	--	1800 U	750000 U	WB-36	52000	12000 U	220000 U
Toxaphene Peak 2	µg/kg	14	0	0	--	--	--	--	--	--	1800 U	750000 U	WB-36	52000	12000 U	220000 U
Toxaphene Peak 3	µg/kg	14	0	0	--	--	--	--	--	--	1800 U	750000 U	WB-36	52000	12000 U	220000 U
Toxaphene Peak 4	µg/kg	14	0	0	--	--	--	--	--	--	1800 U	750000 U	WB-36	52000	12000 U	220000 U
Toxaphene Peak 5	µg/kg	14	0	0	--	--	--	--	--	--	1800 U	750000 U	WB-36	52000	12000 U	220000 U
trans-Chlordane	µg/kg	1161	430	37	0.034 NJ	1140 J	C455	15.26	0.7115 J	26.35 J	0.0181 U	9800 U	WB-36	19.81	0.414 J	28 U
trans-Nonachlor	µg/kg	996	225	22.6	0.042 JT	886 NJ	C348	10.14	0.524 J	27.24 J	0.0312 U	2000 U	LWMC14	3.899	0.125 U	5.075 J
Polycyclic Aromatic Hydrocarbons																
1,6,7-Trimethylnaphthalene	µg/kg	211	113	53.6	0.25 J	290	T4-B411-06	47	23	150	0.25 J	990 U	T4-S3-01	37	3.9 J	150
1-Methylnaphthalene	µg/kg	478	347	72.6	0.31 J	1300000	C662	4500	11	1400	0.31 J	1300000	C662	3200	5.3	760
1-Methylphenanthrene	µg/kg	211	141	66.8	0.15 J	2000	T4-S3-01	130	30	580	0.15 J	2000	T4-S3-01	91	9.4	450
2,6-Dimethylnaphthalene	µg/kg	211	113	53.6	0.15 J	510	T4-PS20	43	21	150	0.15 J	990 U	T4-S3-01	34	4 J	140
2-Methylnaphthalene	µg/kg	1677	1317	78.5	0.3 J	3800000	C302	15700	21	10100	0.3 J	3800000	C302	12300	13	2340
Acenaphthene	µg/kg	1715	1426	83.1	0.19 J	3900000	C302	17200	37.5 J	19800	0.18 U	3900000	C302	14300	22	11100
Acenaphthylene	µg/kg	1715	1309	76.3	0.2 J	1500000 J	C301	3860	15 J	1610	0.2 J	1500000 J	C301	2960	9.5 U	943
Anthracene	µg/kg	1715	1429	83.3	0.22 J	1310000	GP26	8630	40	16600	0.22 J	1310000	GP26	7200	26	11200
Benzo(a)anthracene	µg/kg	1715	1524	88.9	0.17 J	772000	GP26	5630	91.5 J	16000	0.17 J	772000	GP26	5010	67	13000
Benzo(a)pyrene	µg/kg	1715	1508	87.9	0.16 J	1010000	GP26	6860	104	19000	0.14 U	1010000	GP26	6040	78	17000
Benzo(b)fluoranthene	µg/kg	1715	1500	87.5	0.19 J	850000	GP26	5480	110	15100	0.19 J	850000	GP26	4790	78	14000
Benzo(b+k)fluoranthene	µg/kg	436	370	84.9	0.21 T	157000 T	AN-1-3	2800	159	15000	0.21 T	157000 T	AN-1-3	2390	94	13000
Benzo(e)pyrene	µg/kg	382	323	84.6	0.18 J	340000	C662	2600	92	9800	0.18 J	340000	C662	2200	52	9000
Benzo(g,h,i)perylene	µg/kg	1714	1503	87.7	0.15 J	730000	C302	4850	85.1	14900	0.15 J	730000	C302	4250	62 J	13000
Benzo(k)fluoranthene	µg/kg	1715	1460	85.1	0.19 J	540000	C302	2910	63	10000	0.15 U	540000	C302	2480	41	7060
C1-Chrysene	µg/kg	178	153	86	0.52 J	210000	C662	2520	100	5060	0.25 U	210000	C662	2170	60	4160
C1-Dibenzothiophene	µg/kg	178	133	74.7	1.2 J	68000	C662	880	43	1700 J	0.21 U	68000	C662	658	16	1330 J
C1-Fluoranthene/pyrene	µg/kg	178	155	87.1	0.84 J	510000	C662	5740	150	12300 J	0.61 U	510000	C662	5000	84	11200 J
C1-Fluorene	µg/kg	178	143	80.3	0.52 J	150000	C662	1660	25	1890	0.5 U	150000	C662	1330	11.5	1550
C1-Naphthalene	µg/kg	7	2	28.6	37.2	58.1	SGP-14	47.7	47.7	57.1	4.55 UT	111 UJ	SGP-13	27.6	22.3 UT	57.3 J
C1-Phenanthrene/anthracene	µg/kg	178	153	86	0.95 J	880000	C662	10000	110	13200 J	0.75 U	880000	C662	8600	72.5	12000 J
C2-Chrysene	µg/kg	178	143	80.3	0.87 J	97000	C662	1350	75	2640	0.25 U	97000	C662	1080	48	2020
C2-Dibenzothiophene	µg/kg	178	135	75.8	0.88 J	140000	C662	2130	61	3030 J	0.21 U	140000	C662	1620	24.5	2900
C2-Fluoranthene/pyrene	µg/kg	170	141	82.9	0.88 J	210000	C662	2600	86	4400	0.61 U	210000	C662	2200	55	3000
C2-Fluorene	µg/kg	178	141	79.2	0.6 J	180000	C662	2260	57	3200	0.5 U	180000	C662	1790	24	2460
C2-Naphthalene	µg/kg	178	154	86.5	0.47 J	1300000	C662	11300	37	7590 J	0.37 U	1300000	C662	9810	22	6930
C2-Phenanthrene/anthracene	µg/kg	178	153	86	1 J	370000	C662	5190	120 T	8020 J	0.75 U	370000	C662	4460	71.5	7280 J
C3-Chrysene	µg/kg	178	133	74.7	3.3	46000	C662	749	57	1820	0.25 U	46000	C662	567	36	1330
C3-Dibenzothiophene	µg/kg	178	134	75.3	0.4 J	87000	C662	1030	66.5	1740	0.21 U	87000	C662	776	25	1420
C3-Fluoranthene/pyrene	µg/kg	171	134	78.4	0.84 J	89000	C662	1400	66	2700	0.61 U	89000	C662	1100	43	2000
C3-Fluorene	µg/kg	178	136	76.4	0.8 J	170000	C662	2440	89.5	3630 J	0.5 U	170000	C662	1860	37.5	2730
C3-Naphthalene	µg/kg	178	148	83.1	0.48 J	570000	C662	6250	82.5	7040	0.37 U	570000	C662	5190	27.5	5550 J
C3-Phenanthrene/anthracene	µg/kg	178	155	87.1	0.84 J	230000	C662	2890	130	4700	0.75 U	230000	C662	2510	69	4020
C4-Chrysene	µg/kg	178	91	51.1	6.2	6900	C662	208	43	685	0.25 U	6900	C662	116	16	490
C4-Naphthalene	µg/kg	178	141	79.2	0.74 J	290000	C662	3370	83	5400 J	0.37 U	290000	C662	2670	31	3300 J
C4-Phenanthrene/anthracene	µg/kg	177	138	78	0.81 J	95000	C662	1290	79	2290	0.75 U	95000	C662	1010	35	1960 J
Chrysene	µg/kg	1715	1511	88.1	0.17 J	980000	C302	6620	130	19000	0.17 J	980000	C302	5830	92.1	15000
Dibenzo(a,h)anthracene	µg/kg	1715	1314	76.6	0.22 J	88000	GP26	709	19	2330 J	0.22 J	88000	GP26	554	11 T	1870
Dibenzothiophene	µg/kg	257	215	83.7	0.21 J	570000	C662	3700	13	3290	0.21 J	570000	C662	3100	8.3	2920
Fluoranthene	µg/kg	1715	1541	89.9	0.24 J	3500000	C302	21200	231	47000	0.24 J	3500000	C302	19000	170	41300
Fluorene	µg/kg	1715	1396	81.4	0.22 J	1500000	C302	8800	32	14300 J	0.21 U	1500000	C302	7180	19	6910
Total HPAHs	µg/kg	1696	1596	94.1	0.15 JT	13400000 T	C302	81526	1055	200000	0.15 JT	13400000 T	C302	76720	845.5 J	187750
Indeno(1,2,3-cd)pyrene	µg/kg	1715	1471	85.8	0.18 J	610000	C302	4500	82	14000	0.16 U	610000	C302	3860	57	12000
Total LPAHs	µg/kg	1696	1575	92.9	0.22 JT	39900000 T	C302	174190	328 JT	111800	0.22 JT	39900000 T	C302	161760	258	98450

Table D1.3-3. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Naphthalene	µg/kg	1758	1285	73.1	0.27 J	20000000	C302	102000	55	11000	0.17 U	20000000	C302	74800	26 J	2780
Perylene	µg/kg	382	349	91.4	0.26 J	140000	C662	1100	92	4400	0.26 J	140000	C662	970	82	4200
Phenanthrene	µg/kg	1715	1538	89.7	0.24 J	8500000	C302	44800	170	64000	0.24 J	8500000	C302	40200	130	52300
Pyrene	µg/kg	1715	1563	91.1	0.15 J	4700000	C302	26400	250	53300	0.15 J	4700000	C302	24100	200 J	46300
Total BaPEq	µg/kg	1696	1553	91.6	0.00017 JT	1310000 T	GP26	8806.5	133 T	24880	0.00017 JT	1310000 T	GP26	8066.9	110	23075
Total cPAHs	µg/kg	1696	1553	91.6	0.17 JT	4500000 T	C302	31490	530 T	89400	0.17 JT	4500000 T	C302	28840	417.5	82250
Total PAHs	µg/kg	1696	1624	95.8	0.15 JT	53300000 T	C302	248670	1390 J	288550	0.15 JT	53300000 T	C302	238120	1174 J	280000
Phthalates																
Bis(2-ethylhexyl) phthalate	µg/kg	1591	635	39.9	2.4 J	18000	WR-VC-110	345	95 J	1100	2 U	40000 U	HA-43	227	40.5 U	740
Butylbenzyl phthalate	µg/kg	1589	264	16.6	2 J	11800	HA-42	74.6	11 J	160	1.7 U	11800	HA-42	47.9	6.5 U	125 U
Dibutyl phthalate	µg/kg	1591	379	23.8	3.2 J	3200 J	C521	34.5	8.8 J	84.3 J	3 U	20000 U	HA-43	67.6	10 U	140 U
Diethyl phthalate	µg/kg	1583	102	6.4	1.3 J	1950	GP25	103	4.45 J	696	1.3 J	8800 U	C301	47.9	5.5 U	144 U
Dimethyl phthalate	µg/kg	1589	42	2.6	0.5 J	5100 J	C302	164	8.75 J	218	0.5 J	6600 U	HA-43	39.6	4.6 U	105 U
Di-n-octyl phthalate	µg/kg	1583	35	2.2	3.1 J	3180	DM-24	158	16 J	591 J	0.2 U	12000 U	SD05	38.6	4.5 UJ	109 U
Semivolatile Organic Compounds																
1,2,4-Trichlorobenzene	µg/kg	1375	25	1.8	2.6 JT	530	OSS004	55.4	15 J	174 J	0.23 U	8900 U	GS-07	32.4	2.65 U	83.7 UJ
1,2-Dichlorobenzene	µg/kg	1390	37	2.7	1.4 J	730 J	WB-35	59.9	9.9 J	284 J	0.079 U	3720 U	DMMU-2-A	28.6	2.3 U	65 U
1,2-Diphenylhydrazine	µg/kg	20	0	0	--	--	--	--	--	--	200 UJ	320 U	WB-34	120	120 U	150 U
1,3-Dichlorobenzene	µg/kg	1353	17	1.3	0.23 J	330 JT	C019	31.3	11	111 J	0.068 U	7530 U	GP27	36.3	2.65 U	80 U
1,4-Dichlorobenzene	µg/kg	1449	85	5.9	0.42 J	2000 J	WB-35	111	8.8 J	690 J	0.13 U	5400 U	LWMTCLP11B	33.8	1.75 U	74 U
2,4-Dinitrotoluene	µg/kg	1250	3	0.2	11 J	2100	C283	937	700	1960	0.38 U	36000 U	LWMTCLP11C	114	3.98 U	277 U
2,6-Dinitrotoluene	µg/kg	1240	0	0	--	--	--	--	--	--	1.2 U	11700 U	GP26	81.8	4.7 U	266 U
2-Chloronaphthalene	µg/kg	1242	2	0.2	11 J	41	C293-2	26	26 J	39.5 J	0.27 U	9000 U	C301	44.5	4 U	159 UJ
2-Nitroaniline	µg/kg	1240	0	0	--	--	--	--	--	--	0.64 U	11700 U	GP26	75.1	4.5 U	260 U
3,3'-Dichlorobenzidine	µg/kg	1218	1	0.1	6.6 J	6.6 J	C635	6.6	6.6 J	6.6 J	1.2 U	11700 U	GP26	120	6.5 U	440 U
3-Nitroaniline	µg/kg	1236	2	0.2	4.8 JT	21 J	WB-39	12.9	12.9 J	20.2 J	0.89 U	12000 U	SD05	103	4.35 U	279 U
4-Bromophenyl phenyl ether	µg/kg	1240	0	0	--	--	--	--	--	--	0.5 U	3550 U	S2	31.6	2.35 U	115 U
4-Chloroaniline	µg/kg	1235	10	0.8	2.5 J	13 J	C757	6.19	5.65 J	11.7 J	1.7 U	21500 U	S2	94.7	3.55 U	173 U
4-Chlorophenyl phenyl ether	µg/kg	1240	0	0	--	--	--	--	--	--	0.87 U	5000 U	C301	35.1	3.35 U	115 U
4-Nitroaniline	µg/kg	1238	2	0.2	12 J	30	C362	21	21 J	29.1 J	1.8 UJ	11700 U	GP26	80.1	4.83 U	266 U
Acetophenone	µg/kg	20	0	0	--	--	--	--	--	--	200 UJ	320 U	WB-34	120	120 U	150 U
Aniline	µg/kg	962	31	3.2	2.6 J	320	WR-VC-64	31	14 J	110 J	1.5 UJ	3800 U	C301	21	2.1 U	100 U
Azobenzene	µg/kg	1019	1	0.1	1.1 JT	1.1 JT	C7482	1.1	1.1 JT	1.1 JT	0.46 U	6000 U	C301	20	2.3 U	41 U
Benzaldehyde	µg/kg	20	0	0	--	--	--	--	--	--	200 UJ	320 U	WB-34	120	120 U	150 U
Benzoic acid	µg/kg	1249	105	8.4	8.7 J	2600	SD092	315	200	868 J	8.7 J	240000 U	C301	893	130 J	2400 U
Benzyl alcohol	µg/kg	1327	167	12.6	2.2 J	3700	C199	37.9	7.7 J	70.7	1.5 U	11700 U	GP26	95	6.5 U	275 U
Bis(2-chloro-1-methylethyl) ether	µg/kg	103	2	1.9	3.2 J	4 JT	WB-41	3.6	3.6 J	4 J	1 U	910 U	SD143	40	9.5 U	130 U
Bis(2-chloroethoxy) methane	µg/kg	1240	0	0	--	--	--	--	--	--	0.46 U	3550 U	S2	30.7	2.15 U	115 U
Bis(2-chloroethyl) ether	µg/kg	1240	0	0	--	--	--	--	--	--	1.5 U	6000 U	C301	43.9	4 U	135 U
Bis(2-chloroisopropyl) ether	µg/kg	1137	2	0.2	2.6 JT	13 JT	C7482	7.8	7.8 J	12.5 J	1.4 U	3550 U	S2	29.9	1.85 U	105 U
Caprolactam	µg/kg	20	0	0	--	--	--	--	--	--	200 UJ	320 U	WB-34	120	120 U	150 U
Carbazole	µg/kg	1199	631	52.6	0.6 J	520000	C301	4060	17 J	5850	0.6 J	520000	C301	2140	6.8 J	1100
Dibenzofuran	µg/kg	1478	1122	75.9	0.22 J	230000	C302	1440	12 J	2700	0 U	230000	C302	1110	9.25	1900
Diphenyl	µg/kg	231	92	39.8	0.29 J	150	T4-B414-02	18	11	65	0.29 J	990 U	T4-S3-01	27	3.5 J	120 U
Hexachlorobenzene	µg/kg	1367	236	17.3	0.066 J	14000	OSS004	71.95	0.9445 J	50.65 J	0.0162 U	14000	OSS004	44.99	1.13 J	110 U
Hexachlorobutadiene	µg/kg	1436	97	6.8	0.081 J	34000	SD092	652.1	1.4	110.4 J	0.0297 U	34000	SD092	88.16	0.29 J	101.3 UJ
Hexachlorocyclopentadiene	µg/kg	1226	0	0	--	--	--	--	--	--	0.4 U	38000 U	C301	213	24.3 U	750 U
Hexachloroethane	µg/kg	1327	129	9.7	0.063 JT	20000	SD092	180.5	1.2 NJ	184	0.037 U	20000	SD092	67.04	0.25 U	115 U
Isophorone	µg/kg	1240	3	0.2	10 J	43	OSS004	24.3	20	40.7	0.75 U	4000 U	C301	31.7	2.5 U	115 U
Nitrobenzene	µg/kg	1251	0	0	--	--	--	--	--	--	2.2 U	7100 U	LWMTCLP11C	39.3	3.45 U	120 U
N-Nitrosodimethylamine	µg/kg	1146	0	0	--	--	--	--	--	--	6.1 UJ	16000 U	C301	69.2	9 U	168 U
N-Nitrosodiphenylamine	µg/kg	1329	74	5.6	1.7 J	560 J	C316	70.4	29.5 J	234	0.4 U	5500 U	C301	44.7	4 U	155 UJ
N-Nitrosodipropylamine	µg/kg	1240	2	0.2	13 J	25 J	SDDA18SB	19	19 J	24.4 J	1.7 U	8000 U	C301	51.2	5 U	150 U
Pyridine	µg/kg	11	0	0	--	--	--	--	--	--	310 U	36000 U	LWMTCLP11C	1800	170 U	9200 U
Retene	µg/kg	2	2	100	69.6	93.7 J	SED08	81.7	81.7 J	92.5 J	69.6	93.7 J	SED08	81.7	81.7 J	92.5 J
Phenols																
2,3,4,5-Tetrachlorophenol	µg/kg	1040	55	5.3	0.47 J	1100 J	C356	48	2.8 J	110	0.23 U	1100 J	C356	4.1	0.46 U	5.5 U
2,3,4,6;2,3,5,6-Tetrachlorophenol coelution	µg/kg	506	43	8.5	0.76 J	1000	C301; C302	55	2.5 J	85	0.4 U	1000	C301; C302	5.3	0.31 U	5 U

Table D1.3-3. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
2,3,4,6-Tetrachlorophenol	µg/kg	34	2	5.9	47 J	85	WB-36	66	66 J	83 J	1.2 U	320 U	WB-34	74	110 U	140 U
2,3,5,6-Tetrachlorophenol	µg/kg	568	36	6.3	0.32 J	450	C302	25	1.7 J	110 J	0.19 U	450	C302	7	0.32 J	35 J
2,4,5-Trichlorophenol	µg/kg	1294	60	4.6	0.48 J	200 J	C301	11.5	4.6 J	38.4 J	0.32 U	36000 U	LWMTCLP11C	64.9	1.2 J	230 U
2,4,6-Trichlorophenol	µg/kg	1294	128	9.9	0.17 J	1400	C360-2	33.6	1.4 J	54.9	0.12 U	36000 U	LWMTCLP11C	66.9	0.325 U	241 U
2,4-Dichlorophenol	µg/kg	1283	18	1.4	4.7 JT	140	SD081C	31.2	20.5	75.4	0.46 U	7010 U	GP26	52	2.95 U	159 UJ
2,4-Dimethylphenol	µg/kg	1072	2	0.2	23 J	28 JT	C6012	25.5	25.5 J	27.8 J	0.32 U	14000 U	C301	119	9.5 U	452 U
2,4-Dinitrophenol	µg/kg	1271	3	0.2	18 J	678	GP30	263	93 J	620 J	2.1 U	90000 U	C301	385	55 U	1680 U
2-Chlorophenol	µg/kg	1283	27	2.1	4 J	310	WB-42	62.9	20 JT	204	1.3 U	4300 U	C301	35.1	3.1 U	119 U
2-Methylphenol	µg/kg	1382	8	0.6	1.8 J	12 JT	C011-1	5.83	5.05 J	11.3 J	1.1 U	12000 U	SD05	55.8	4.85 U	150 U
2-Nitrophenol	µg/kg	1274	0	0	--	--	--	--	--	--	0.66 U	11700 U	GP26	68.6	3.95 U	251 U
3- and 4-Methylphenol Coelution	µg/kg	127	20	15.7	4.8 J	466	GP26	112	46	365	4.8 J	12000 U	SD05	442	225 U	1030 U
3-Methylphenol	µg/kg	20	0	0	--	--	--	--	--	--	200 UJ	320 U	WB-34	120	120 U	150 U
4,6-Dinitro-2-methylphenol	µg/kg	1282	0	0	--	--	--	--	--	--	1.4 U	12000 U	SD05	112	3 U	367 UJ
4-Chloro-3-methylphenol	µg/kg	1283	7	0.5	4.4 J	32 J	C402	11.7	6.8 J	27.8 J	1.1 U	5300 U	C301	44.7	3.5 U	129 U
4-Methylphenol	µg/kg	1238	660	53.3	1.6 J	800	C263	60.7	31.5	221	1.5 U	7300 U	C301	67.9	20	220
4-Nitrophenol	µg/kg	1280	3	0.2	5.2	600 J	SD05	218	48 JT	545 J	0.36 U	75000 U	C301	272	31 U	1000 UJ
m,p-Cresol	µg/kg	14	13	92.9	6.8 J	200	WB-36	72	67	190	3.6 U	200	WB-36	67	43 J	190
Pentachlorophenol	µg/kg	1379	390	28.3	0.32 J	5600	C301	36.3	3.85 J	65.6	0.16 UT	36000 U	LWMTCLP11C	129	2 NJ	276 U
Phenol	µg/kg	1383	329	23.8	2.1 J	347	GP27	22.3	11 J	77.6 J	2 U	7100 U	LWMTCLP11C	57.1	9 U	160 UJ
Petroleum																
C10-C12 Aliphatics	mg/kg	16	10	62.5	3.5	80 J	C532	18	11	54 J	2.4 U	80 J	C532	12	4.5	37 J
C10-C12 Aromatics	mg/kg	16	3	18.8	4.4	41	C527	17	5.6 J	37 J	2.4 U	41	C527	4.4	1.7 U	14 J
C12-C16 Aliphatics	mg/kg	16	11	68.8	3.3	550 J	C532	120	62	380 J	2.4 U	550 J	C532	80	35	300 J
C12-C16 Aromatics	mg/kg	16	9	56.3	5.8	110	C527; C531	46	33	110	2.4 U	110	C527; C531	27	6.7	110
C16-C21 Aliphatics	mg/kg	16	12	75	4.1	850 J	C532	190	120	590 J	2.4 U	850 J	C532	150	100	500 J
C16-C21 Aromatics	mg/kg	16	11	68.8	3.9	560	C531	220	120	540	2.4 U	560	C531	150	58	520
C21-C34 Aliphatics	mg/kg	16	15	93.8	3.4	1500 J	C532	330	250	880 J	2.4 U	1500 J	C532	310	250	840 J
C21-C34 Aromatics	mg/kg	16	11	68.8	5.6	570 J	C532	250	220	550 J	2.4 U	570 J	C532	170	110	530 J
C8-C10 Aliphatics	mg/kg	16	5	31.3	3.2	17 J	C532	8.8	6.1	16 J	2.4 UJ	17 J	C532	3.8	1.7 U	15 J
C8-C10 Aromatics	mg/kg	16	1	6.3	3.8	3.8	C527	3.8	3.8	3.8	2.4 U	3.8	C527; C528	1.7	1.6 U	2.4
Diesel fuels	mg/kg	34	25	73.5	2.1 J	2400	SDDC24SB	600	530	1900	2.1 J	2400	SDDC24SB	450	130	1500
Total Petroleum Hydrocarbons (Diesel)	mg/kg	1075	879	81.8	0.045 J	190000 J	C301	1310	200 J	2910 J	0.045 J	190000 J	C301	1070	130 J	2130 J
Total Petroleum Hydrocarbons (Diesel)(silica gel treated)	mg/kg	250	205	82	1.8 J	88000 J	C662	807	170 J	1720 J	1.3 U	88000 J	C662	662	120 J	1310 J
Total Petroleum Hydrocarbons (Gasoline)	mg/kg	847	233	27.5	0.74 J	21000 J	C301	310	19 J	580 J	0.02 U	21000 J	C301	86.7	1.7 U	57 J
Total Petroleum Hydrocarbons (Heavy Oil)	mg/kg	31	23	74.2	54 J	2560	HA-43	408	227 J	1170	25 U	2560	HA-43	312	169 J	1080
Jet fuel A	mg/kg	1	0	0	--	--	--	--	--	--	10 U	10 U	RB13	5	5 U	5 U
JP-4 jet fuel	mg/kg	1	0	0	--	--	--	--	--	--	10 U	10 U	RB13	5	5 U	5 U
Kerosene	mg/kg	1	0	0	--	--	--	--	--	--	10 U	10 U	RB13	5	5 U	5 U
Lube Oil	mg/kg	4	1	25	79	79	RB13	79	79	79	79	100 U	HC-S-11; HC-S-13	57	50 U	75
Mineral spirits	mg/kg	1	0	0	--	--	--	--	--	--	10 U	10 U	RB13	5	5 U	5 U
Motor oil	mg/kg	55	54	98.2	14	11000 J	LWMC11	800	345 J	2510	13 U	11000 J	LWMC11	786	340	2480
Naphtha distillate	mg/kg	1	0	0	--	--	--	--	--	--	10 U	10 U	RB13	5	5 U	5 U
Pencil pitch	mg/kg	14	14	100	21	2300	HC-S-11	764	404	2110	21	2300	HC-S-11	764	404	2110
Phytane	mg/kg	3	0	0	--	--	--	--	--	--	0.5 U	0.5 U	HC-S-11; HC-S-13	0.3	0.3 U	0.3 U
Pristane	mg/kg	3	0	0	--	--	--	--	--	--	0.5 U	0.5 U	HC-S-11; HC-S-13	0.3	0.3 U	0.3 U
Total Petroleum Hydrocarbons (Residual)	mg/kg	1020	854	83.7	0.24	110000 J	C301	1170	550 J	2920 J	0.1 U	110000 J	C301	987	420 J	2400 J
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	250	205	82	3.6 J	15000 J	C662	632	370 J	1560 J	3 U	15000 J	C662	519	275 J	1360 J
Total Petroleum Hydrocarbons	mg/kg	1090	951	87.2	0.32 JT	321000 JT	C301	2390	690 JT	5350 J	0.1 UT	321000 JT	C301	2090	560 J	4520 J
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	250	214	85.6	2.6 JA	103000 JA	C662	1380	518 J	3540 J	2.6 JA	103000 JA	C662	1180	405 J	2460 J
Herbicides																
2,4,5-T	µg/kg	182	0	0	--	--	--	--	--	--	0.45 U	21 U	WR-VC-03	1.08	0.61 U	7.95 U
2,4-D	µg/kg	194	5	2.6	7.14	473	C335	128	45.5 J	395 J	0.31 U	473	C335	5.81	0.43 U	26.9 U
2,4-DB	µg/kg	182	1	0.5	797	797	C335	797	797	797	0.45 U	797	C335	5.57	0.62 U	8.5 U
Dalapon	µg/kg	182	3	1.6	6.9	16 J	WR-VC-62	11.6	12 J	15.6 J	0.27 U	110 U	WR-VC-03	3.16	0.368 U	40.2 U
Dicamba	µg/kg	182	1	0.5	3 J	3 J	C527	3	3 J	3 J	0.97 U	42 U	WR-VC-03	2.25	1.32 U	15.9 U

Table D1.3-3. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Dichloroprop	µg/kg	182	0	0	--	--	--	--	--	--	0.49 U	21 U	WR-VC-03	1.14	0.665 U	7.95 U
Dinoseb	µg/kg	182	0	0	--	--	--	--	--	--	0.62 U	21 U	WR-VC-03	1.29	0.843 U	7.95 U
MCPA	µg/kg	182	3	1.6	1.58	144	C335	52.6	12.1 J	131 J	0.65 U	480 U	WR-VC-62	4.41	0.895 U	8.5 U
MCPP	µg/kg	182	3	1.6	1.62	3000 J	WR-VC-62	1010	37.2	2700 J	0.6 U	3100 U	WR-VC-58	26.4	0.815 U	8.5 U
Silvex	µg/kg	194	1	0.5	2.25 J	2.25 J	C333	2.25	2.25 J	2.25 J	0.45 U	21 U	WR-VC-03	1.44	0.625 U	8 U
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	µg/kg	600	0	0	--	--	--	--	--	--	0.035 U	7800 U	C301	35.1	0.0285 U	74.1 U
1,1,1-Trichloroethane	µg/kg	626	3	0.5	0.41 J	0.63 J	WB-42	0.547	0.6 J	0.627 J	0.067 U	7800 U	C301	36.5	0.055 U	81.5 UJ
1,1,2,2-Tetrachloroethane	µg/kg	625	16	2.6	0.18 J	18 J	WB-42	3.3	0.84 J	11 J	0.11 U	9700 U	C301	57.9	0.09 U	165 U
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	25	0	0	--	--	--	--	--	--	6.3 U	3100 U	WB-35	220	3.9 U	1300 U
1,1,2-Trichloroethane	µg/kg	626	2	0.3	0.55 J	1.9 J	WB-42	1.23	1.23 J	1.83 J	0.067 U	7000 U	C301	38.4	0.055 U	86 U
1,1-Dichloroethane	µg/kg	625	21	3.4	0.095 JT	3.7	WB-36	0.727	0.36 J	2.7 J	0.064 U	6400 U	C301	32.9	0.055 U	73.4 U
1,1-Dichloroethene	µg/kg	637	4	0.6	0.31 J	3.7 J	WB-42	1.73	1.46 J	3.49 J	0.069 U	8400 U	C301	43.6	0.075 UT	83.6 UJ
1,1-Dichloropropene	µg/kg	93	0	0	--	--	--	--	--	--	5 U	2170 U	GP27	32.5	7.4 U	83.7 UJ
1,2,3-Trichlorobenzene	µg/kg	119	0	0	--	--	--	--	--	--	6.3 U	7530 U	GP27	170	8.65 U	819 U
1,2,3-Trichloropropane	µg/kg	601	5	0.8	0.38 J	3.7	C166	1.53	0.88 J	3.34	0.13 U	15000 U	C301	64.3	0.105 U	84.5 U
1,2,4,5-Tetrachlorobenzene	µg/kg	20	0	0	--	--	--	--	--	--	200 UJ	320 U	WB-34	120	120 U	150 U
1,2,4-Trimethylbenzene	µg/kg	97	17	17.5	64.9	13100	GP26	1940	720	9090	0.18 U	13100	GP26	476	14.6 U	1810
1,2-Dibromo-3-chloropropane	µg/kg	117	0	0	--	--	--	--	--	--	6.3 U	7530 U	GP27	187	8.75 U	849 U
1,2-Dichloroethane	µg/kg	637	9	1.4	0.055 J	12	WB-36	1.78	0.37 J	7.68 J	0.035 U	8000 U	C301	42.6	0.0295 U	83.6 UJ
1,2-Dichloropropane	µg/kg	625	1	0.2	0.31 J	0.31 J	WB-42	0.31	0.31 J	0.31 J	0.04 U	8700 U	C301	40.9	0.0325 U	84.4 U
1,3,5-Trimethylbenzene	µg/kg	97	15	15.5	19.2	3860	GP26	456	209	1680	0.077 U	7530 U	GP27	207	9 U	757
1,3-Dichloropropane	µg/kg	93	0	0	--	--	--	--	--	--	5 U	2170 U	GP27	72.2	7.25 U	665 U
1,4-Dichloro-trans-2-butene	µg/kg	503	3	0.6	8.7 J	170 J	WB-33	90	91 JT	160 J	0.38 U	45000 U	GS-07	200	0.41 U	70 U
1,4-Dioxane	µg/kg	4	0	0	--	--	--	--	--	--	130 U	140 U	WB-56	66	65 U	69 U
1-Methyl-4-isopropylbenzene	µg/kg	85	10	11.8	27.7	206	GP31	98.5	105	204	12 U	7530 U	GP27	172	9.45 UJ	739 U
2,2-Dichloropropane	µg/kg	93	0	0	--	--	--	--	--	--	5 U	2170 U	GP27	32.3	7 UJT	83.7 UJ
2-Chloroethyl vinyl ether	µg/kg	505	0	0	--	--	--	--	--	--	0.17 UJT	23000 U	GS-07	65	0.13 U	14 U
2-Chlorotoluene	µg/kg	93	0	0	--	--	--	--	--	--	11.6 UJ	7530 U	GP27	144	7.9 U	737 U
4-Chlorotoluene	µg/kg	93	0	0	--	--	--	--	--	--	8.48 U	7530 U	GP27	144	7.9 U	737 U
Acetone	µg/kg	601	157	26.1	3.6 J	60000 J	GS-B7	577	31	322	2.1 U	89000 UJ	GS-07	486	14 UJ	670 UJT
Acrolein	µg/kg	106	2	1.9	0.86 J	1.4 J	C062	1.1	1.1 J	1.4 J	0.63 U	89000 UJ	GS-07	1100	60 UJ	6100 UJ
Acrylonitrile	µg/kg	494	0	0	--	--	--	--	--	--	0.26 U	89000 UJ	GS-07	200	0.2 U	37 U
Benzene	µg/kg	666	221	33.2	0.03 J	270000	C301	4340	0.33 J	14000	0.01 U	270000	C301	1460	0.14 J	320 J
Bromobenzene	µg/kg	93	0	0	--	--	--	--	--	--	5 U	7530 U	GP27	143	7.95 U	737 U
Bromochloromethane	µg/kg	625	0	0	--	--	--	--	--	--	0.068 U	8900 U	C301	39.1	0.06 U	82.8 UJ
Bromodichloromethane	µg/kg	625	0	0	--	--	--	--	--	--	0.045 UT	6000 U	C301	31.9	0.06 U	72.5 U
Bromoform	µg/kg	625	0	0	--	--	--	--	--	--	0.052 U	20000 U	C301	71.7	0.0425 U	198 U
Bromomethane	µg/kg	625	0	0	--	--	--	--	--	--	0.32 UT	16000 U	C301	58.5	0.325 U	185 U
BTEX	µg/kg	642	313	48.8	0.062 JT	850000 T	C301	9543.3	0.89 JT	18000 J	0.02 UT	850000 T	C301	4677.6	0.36 J	2409.2 J
Carbon disulfide	µg/kg	625	142	22.7	0.098 J	850	C263	7.27	0.325 J	4.15 J	0.069 U	12000 U	C301	51.9	0.14 U	188 U
Carbon tetrachloride	µg/kg	637	0	0	--	--	--	--	--	--	0.057 UT	8600 U	C301	44.1	0.09 U	84.1 U
Chlorobenzene	µg/kg	637	91	14.3	0.14 J	390000	WB-35	30300	5.3	210000 J	0.062 U	390000	WB-35	4370	0.065 U	1170 U
Chlorodibromomethane	µg/kg	625	1	0.2	0.28 J	0.28 J	WB-33	0.28	0.28 J	0.28 J	0.077 U	5800 U	C301	37.3	0.065 U	86.1 U
Chloroethane	µg/kg	615	5	0.8	0.9	1600 J	WB-35	327	9.2 J	1280 J	0.23 UT	13000 U	C301	49.2	0.24 U	84.2 U
Chloroform	µg/kg	637	42	6.6	0.078 J	2300 J	WB-35	116	2.05	308 J	0.063 U	6700 U	C301	44	0.055 U	140 J
Chloromethane	µg/kg	625	4	0.6	0.38 J	3.7	C358	1.35	0.665 J	3.27	0.085 UT	9600 U	C301	43.1	0.165 U	115 UJ
cis-1,2-Dichloroethene	µg/kg	232	8	3.4	16.9	1920	GP25	348	138	1340	0.11 UT	3100 U	WB-35	62.1	4 U	269
cis-1,3-Dichloropropene	µg/kg	626	0	0	--	--	--	--	--	--	0.035 U	5700 U	C301	31.3	0.0288 U	75.4 U
Dichlorodifluoromethane	µg/kg	625	0	0	--	--	--	--	--	--	0.067 UT	12000 U	C301	48.4	0.095 U	143 U
Ethylbenzene	µg/kg	655	124	18.9	0.05 J	140000	C301	6700	22	40500	0.009 U	140000	C301	1290	0.065 U	1440 U
Ethylene dibromide	µg/kg	606	0	0	--	--	--	--	--	--	0.058 U	8900 U	GS-07	47.1	0.046 U	128 U
Hexahydrobenzene	µg/kg	25	0	0	--	--	--	--	--	--	6.3 U	3100 U	WB-35	240	3.9 U	1300 U
Isopropylbenzene	µg/kg	629	167	26.6	0.063 J	19000 J	C301	549	2.3 J	3140 J	0.05 U	19000 J	C301	167	0.085 UT	468 J
m,p-Xylene	µg/kg	655	134	20.5	0.05 J	200000	C301	4770	5.05	24700	0.02 U	200000	C301	1000	0.125 U	615 J
Methyl acetate	µg/kg	25	2	8	140 J	530 J	WB-40	340	340 J	510 J	6.3 U	3100 U	WB-35	230	3.9 U	1300 UJ
Methyl iodide	µg/kg	507	1	0.2	7100 J	7100 J	C302	7100	7100 J	7100 J	0.38 U	23000 U	GS-07	110	0.55 U	73 UJ
Methyl isobutyl ketone	µg/kg	588	12	2	0.36 JT	34	GS-C7	4.33	1.6 J	18.4 J	0.27 U	97000 UJ	GS-C7	355	0.22 U	440 U

Table D1.3-3. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Methyl n-butyl ketone	µg/kg	596	3	0.5	4.7 J	9.3	C092	6.73	6.2	8.99	0.71 U	120000 UJ	GS-C7	362	0.6 U	483 U
Methyl tert-butyl ether	µg/kg	620	93	15	0.074 J	14 J	GS-09	0.5698	0.24 J	1.8	0.044 U	5200 U	C301	32.19	0.085 J	83.53 UJ
Methylcyclohexane	µg/kg	25	1	4	3.9 J	3.9 J	WB-64	3.9	3.9 J	3.9 J	3.9 J	3100 U	WB-35	240	3.9 U	1300 U
Methylene bromide	µg/kg	600	1	0.2	0.55 J	0.55 J	WB-33	0.55	0.55 J	0.55 J	0.079 UT	6900 U	C301	27.2	0.075 U	34.8 U
Methylene chloride	µg/kg	626	50	8	0.34 J	7100 J	GS-C7	235	78.2	373 J	0.17 U	14000 U	C301	101	1.85 U	421 U
Methylethyl ketone	µg/kg	437	274	62.7	1.5 J	120000 J	GS-C7	447	5.2 J	23.4 J	1.4 UJ	120000 J	GS-C7	659	6.8 J	687 UJ
Methylisopropylbenzene	µg/kg	9	0	0	--	--	--	--	--	--	20 U	200 U	OSS003	26	19 U	69 U
n-Butylbenzene	µg/kg	93	8	8.6	18.2	151	GP31	49.6	34.4	122	12 U	7530 U	GP27	159	8.35 U	737 U
n-Propylbenzene	µg/kg	97	9	9.3	25.3	218	GP31	84.2	66.9	182	0.12 U	7530 U	GP27	151	8.3 U	736 U
o-Xylene	µg/kg	655	167	25.5	0.04 J	80000	C301	1950	2.6 J	10600	0.008 U	80000	C301	514	0.17 J	665 U
Sec-butylbenzene	µg/kg	93	8	8.6	13	50.9	GP26	35.1	37.5 J	50.5	9.94 U	7530 U	GP27	147	8.3 U	737 U
Styrene	µg/kg	626	15	2.4	0.13 J	22000	C301	1470	0.22 J	6640	0.081 U	22000	C301	73.9	0.09 U	92.1 U
tert-Butylbenzene	µg/kg	93	0	0	--	--	--	--	--	--	12 U	7530 U	GP27	145	8.75 U	737 U
Tetrachloroethene	µg/kg	654	39	6	0.23 J	19000	WB-42	761	1.5	3110 J	0.092 U	19000	WB-42	87.2	0.09 U	205 U
Toluene	µg/kg	655	140	21.4	0.03 J	190000	C301	2920	2.65	8760	0.01 U	190000	C301	644	0.15 U	230 U
trans-1,2-Dichloroethene	µg/kg	625	5	0.8	0.44 J	8.1 J	WB-42	3.57	1.3 J	7.94 J	0.067 UT	9800 U	C301	41.4	0.165 U	83.9 UJ
trans-1,3-Dichloropropene	µg/kg	626	0	0	--	--	--	--	--	--	0.05 U	6100 U	C301	38.1	0.0405 U	92.1 U
Trichloroethene	µg/kg	654	122	18.7	0.11 J	1900000	C299	18100	0.56 J	379 J	0.07 U	1900000	C299	3420	0.213 J	149 J
Trichlorofluoromethane	µg/kg	626	0	0	--	--	--	--	--	--	0.091 U	9200 U	C301	40.5	0.075 U	84.4 U
Vinyl acetate	µg/kg	180	0	0	--	--	--	--	--	--	0.44 U	23000 UJ	GS-07	160	0.63 UJ	290 UJ
Vinyl chloride	µg/kg	638	19	3	0.14 J	4000 J	C299	223	0.96 J	449 J	0.096 U	15000 U	C301	64.1	0.08 U	94.2 U
Xylene	µg/kg	642	185	28.8	0.04 JT	280000 T	C301	5210	3.53 JT	28500	0.02 UT	280000 T	C301	1530	0.178 J	1330 U
Atterberg Limits																
Liquid Limit	percent	59	23	39	27.3	54.1	C019	36	36.4	47.5	0.1 U	54.1	C019	14.1	0.05 U	39.6
Plastic Limit	percent	59	23	39	22	37.3	C019	29.5	30.5	35.1	0.1 U	37.3	C019	11.5	0.05 U	34
Plasticity Index	percent	59	23	39	4.1	16.9	C019	6.47	5.6	13.6	0.01 U	16.9	C019	2.52	0.005 U	7.75

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

[c] Total PCBs are total PCB congeners whenever available and total Aroclors if not.

-- data not available.
BaPEq - benzo(a)pyrene equivalent
BTEX - benzene, toluene, ethylbenzene, and total xylene
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - non-detect
PAH - polycyclic aromatic hydrocarbon
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-4. Summary Statistics for All Chemicals in Surface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Grainsize																
< 0.075 mm	percent	2	2	100	52.1	73.8	HC-REF-02	63	63	72.7	52.1	73.8	HC-REF-02	63	63	72.7
> 0.075 mm	percent	2	2	100	26.2	47.9	HC-REF-01	37.1	37.1	46.8	26.2	47.9	HC-REF-01	37.1	37.1	46.8
>10 Phi clay	percent	3	3	100	0.6	0.7	WR01; WR07SD	0.7	0.7	0.7	0.6	0.7	WR01; WR07SD	0.7	0.7	0.7
>9 Phi clay	percent	50	50	100	0.24	13	U6TOC-2	3.01	2.56	5.74	0.24	13	U6TOC-2	3.01	2.56	5.74
8-9 Phi clay	percent	53	53	100	0.16	13.5	U6TOC-2	2.16	1.8	3.84	0.16	13.5	U6TOC-2	2.16	1.8	3.84
9-10 Phi clay	percent	3	3	100	0.4	0.9	WR01	0.6	0.4	0.9	0.4	0.9	WR01	0.6	0.4	0.9
Clay	percent	7	7	100	1	8.82	WR-PG-Ref03	4.7	4	8.27	1	8.82	WR-PG-Ref03	4.7	4	8.27
Coarse sand	percent	71	71	100	0.15	21.8	WR06SD	2.57	1.03	9.9	0.15	21.8	WR06SD	2.57	1.03	9.9
Coarse silt	percent	53	53	100	0.803 T	40.7	UG12A	13.7	12.2	29.6	0.803 T	40.7	UG12A	13.7	12.2	29.6
Fine gravel	percent	53	53	100	0	14.2	G079	0.6827	0.23	1.564	0	14.2	G079	0.6827	0.23	1.564
Fine sand	percent	71	71	100	0.7	58.7	U1C-3; UG11C	27.8	29.2 T	50.9	0.7	58.7	U1C-3; UG11C	27.8	29.2 T	50.9
Fine silt	percent	53	53	100	0.13	21.4	U6TOC-3	4.5	3.43	9.37	0.13	21.4	U6TOC-3	4.5	3.43	9.37
Fines	percent	80	80	100	0.28	98.4 T	U6TOC-2	30.5	28.3	67.4	0.28	98.4 T	U6TOC-2	30.5	28.3	67.4
Gravel	percent	20	19	95	0.09	12.3	WR07SD	2.373	0.36	11.04	0.0001 U	12.3	WR07SD	2.255	0.33	10.97
Medium gravel	percent	53	53	100	0 T	12.2	G079	0.4013	0.04	1.044	0 T	12.2	G079	0.4013	0.04	1.044
Medium sand	percent	71	71	100	0.37	56.1	U3C-3	20.2	13.5	53.6	0.37	56.1	U3C-3	20.2	13.5	53.6
Medium silt	percent	53	53	100	0.34	25.5	U6TOC-3	7.5	6.98	14.1	0.34	25.5	U6TOC-3	7.5	6.98	14.1
Sand	percent	9	9	100	58.5 T	99.36	SED099-41	86.69	96	99.28	58.5 T	99.36	SED099-41	86.69	96	99.28
Silt	percent	7	7	100	2	48.9	WR-PG-Ref03	21.2	12.1	44.6	2	48.9	WR-PG-Ref03	21.2	12.1	44.6
Very coarse sand	percent	71	70	98.6	0	7.8	WR04SD	0.827	0.395	3.298	0	7.8	WR04SD	0.8154	0.39	3.28
Very fine sand	percent	71	71	100	1.16	42	UG11A	15.4	16.1	29.7	1.16	42	UG11A	15.4	16.1	29.7
Very fine silt	percent	53	53	100	0.19	21.9	U6TOC-2	3.37	2.51	6.17	0.19	21.9	U6TOC-2	3.37	2.51	6.17
Conventionals																
Ammonia	mg/kg	40	40	100	1.9	132	U6TOC-2	51	51 J	98.9	1.9	132	U6TOC-2	51	51 J	98.9
Moisture	percent	2	2	100	68	101	HC-REF-02	84.5	84.5	99.4	68	101	HC-REF-02	84.5	84.5	99.4
Specific Gravity	NA	27	27	100	0.87	2.07	G788	1.38	1.44	1.57	0.87	2.07	G788	1.38	1.44	1.57
Sulfide	mg/kg	40	24	60	0.4 J	49.3	WR-PG-Ref03	5.63	2.7 J	11.5 J	0.2 U	49.3	WR-PG-Ref03	3.45	1.15	9.61 J
Total organic carbon	percent	77	77	100	0.12	2.57	U6TOC-2	1.13	1.18	2.29	0.12	2.57	U6TOC-2	1.13	1.18	2.29
Total solids	percent	74	74	100	32.6	80.3	G788	55.9	54.7	69.7	32.6	80.3	G788	55.9	54.7	69.7
Total volatile solids	percent	22	22	100	2.35	7.41	CD01	5.16	5.05	7.22	2.35	7.41	CD01	5.16	5.05	7.22
Metals																
Aluminum	mg/kg	63	63	100	8100	35000	WR-PG-Ref03	21600	23200	32300	8100	35000	WR-PG-Ref03	21600	23200	32300
Antimony	mg/kg	72	40	55.6	0.05 J	5.45	G079	0.385	0.1 J	0.761 J	0.05 J	5.45	G079	0.346	0.09 J	1.23 UJ
Arsenic	mg/kg	77	73	94.8	1.9 J	5.29	U6TOC-2	2.94	2.84 T	4.05	1.9 J	5.29	U6TOC-2	2.85	2.78	4.04
Barium	mg/kg	10	10	100	82.1 J	108 J	WR07SD	91	89.5 J	103 J	82.1 J	108 J	WR07SD	91	89.5 J	103 J
Beryllium	mg/kg	10	10	100	0.27 J	0.47 J	WR06SD	0.35	0.33 J	0.43 J	0.27 J	0.47 J	WR06SD	0.35	0.33 J	0.43 J
Cadmium	mg/kg	72	63	87.5	0.04 J	0.281 T	G027	0.1256	0.12	0.2099	0.04 J	0.3 UJ	HC-SS29; HC-SS31; HC-SS32	0.1201	0.118	0.2095
Calcium	mg/kg	1	0	0	--	--	--	--	--	--	0.0001 U	0.0001 U	WR03SD	0.00005	0.00005 U	0.00005 U
Chromium	mg/kg	66	66	100	11.9 J	40.5	HC08	23.1	23.1 J	32.4	11.9 J	40.5	HC08	23.1	23.1 J	32.4
Cobalt	mg/kg	10	10	100	10 J	13.8 J	WR06SD	11.5	11.6 J	13.1 J	10 J	13.8 J	WR06SD	11.5	11.6 J	13.1 J
Copper	mg/kg	72	72	100	10.5 J	50.9	HC08	24.6	24.5	35.9 J	10.5 J	50.9	HC08	24.6	24.5	35.9 J
Lead	mg/kg	72	72	100	3.96 JT	31.6 J	BH04SD	8.55	7.68 J	14	3.96 JT	31.6 J	BH04SD	8.55	7.68 J	14
Manganese	mg/kg	10	10	100	269 J	399 J	WR01	323	314 J	387 J	269 J	399 J	WR01	323	314 J	387 J
Mercury	mg/kg	68	60	88.2	0.009 J	0.061	G786	0.03314	0.034	0.05115	0.009 J	0.19 U	HC-SS29; HC-SS31; HC-SS32	0.03535	0.034	0.07985
Nickel	mg/kg	72	72	100	12.3 J	35.7	HC08	21.3	21.3	26.5 J	12.3 J	35.7	HC08	21.3	21.3	26.5 J
Selenium	mg/kg	36	16	44.4	0.03	0.19 J	WR05SD	0.109	0.109	0.174 J	0.03	3.2 U	WR01	0.339	0.077 J	1.45 U
Silver	mg/kg	72	58	80.6	0.024	0.235	U6TOC-2	0.1132	0.1095	0.2112	0.024	0.81 U	WR01	0.1376	0.11	0.3523 U
Thallium	mg/kg	10	1	10	0.09 J	0.09 J	WR07SD	0.09	0.09 J	0.09 J	0.02 UJ	1.6 U	WR01	0.51	0.68 U	0.78 U
Vanadium	mg/kg	10	10	100	39.7 J	70.8 J	WR05SD	56.8	57 J	68.7 J	39.7 J	70.8 J	WR05SD	56.8	57 J	68.7 J
Zinc	mg/kg	72	72	100	41.1 J	165	U2C-2	75.2	74.5	100	41.1 J	165	U2C-2	75.2	74.5	100
Butyltins																
Butyltin ion	µg/kg	8	5	62.5	0.24 J	1.3 J	G028	0.738	0.79 J	1.26 J	0.044 U	1.3 J	G028	0.47	0.24 J	1.24 J
Dibutyltin ion	µg/kg	8	5	62.5	0.15 J	0.83 J	G028	0.554	0.6 JT	0.812 J	0.041 U	0.83 J	G028	0.355	0.3 J	0.799 J
Tetrabutyltin	µg/kg	8	0	0	--	--	--	--	--	--	0.11 U	0.15 U	WR-PG-Ref03	0.061	0.058 U	0.073 U
Tributyltin ion	µg/kg	8	4	50	0.72 J	2.3	G028	1.31	1.1 J	2.12 J	0.082 U	2.3	G028	0.675	0.388 J	1.88 J

Table D1.3-4. Summary Statistics for All Chemicals in Surface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB Aroclors																
Aroclor 1016	µg/kg	81	1	1.2	15	15	UG02C	15	15	15	1 U	21 U	HC08	2.96	0.87 U	9.5 U
Aroclor 1221	µg/kg	81	0	0	--	--	--	--	--	--	1 U	42 U	HC08	4.33	1.44 U	18.5 U
Aroclor 1232	µg/kg	81	1	1.2	21 NJ	21 NJ	UG02C	21	21 NJ	21 NJ	1 U	34 U	UG03B	3.56	1.35 U	10 U
Aroclor 1242	µg/kg	81	1	1.2	13 NJ	13 NJ	UG02C	13	13 NJ	13 NJ	1 U	21 U	HC08	2.9	0.885 U	9.5 U
Aroclor 1248	µg/kg	81	1	1.2	4.82 J	4.82 J	U6TOC-3	4.82	4.82 J	4.82 J	1 U	21 U	HC08	2.71	1.01 U	9.5 U
Aroclor 1254	µg/kg	81	20	24.7	1.16 J	26	U2C-2	4.06	2.65	7.52 J	0.784 U	26	U2C-2	3.38	1.9 J	9.5 U
Aroclor 1260	µg/kg	81	22	27.2	1.3 NJ	11 J	U2C-2	2.94	2.15 J	7.73	1 U	21 U	HC08	3.19	1.8 J	9.5 U
Aroclor 1262	µg/kg	63	0	0	--	--	--	--	--	--	1 U	9.8 U	WR01	1.33	0.71 U	4.64 U
Aroclor 1268	µg/kg	63	0	0	--	--	--	--	--	--	1 U	9.8 U	WR01	1.29	0.65 U	4.64 U
Aroclors	µg/kg	81	25	30.9	1.47 JT	52.8 NJT	UG02C	7.99	4.46 T	32.5 J	1 UT	52.8 NJT	UG02C	6.46	3.8 NJT	19.5 UT
PCB Congeners																
PCB001	pg/g	26	2	7.7	1.91 J	7.99	U2C-2	4.95	4.95 J	7.69 J	1.91 J	29.5 U	WR01	6.95	2.52 U	14.7 U
PCB002	pg/g	26	12	46.2	5.41	13.7	UG02A	8.72	7.53	13.5	4.74 U	29.5 U	WR01	9.53	9.63 U	14.7 U
PCB003	pg/g	26	2	7.7	2.55 J	13.9	U2C-2	8.23	8.23 J	13.3 J	2.55 J	29.5 U	WR01	7.2	2.54 J	14.7 U
PCB004	pg/g	10	1	10	2	2	BH03SD	2	2	2	1.77 U	29.5 U	WR01	6.46	1.49	14.6 U
PCB004 & 010	pg/g	16	2	12.5	4.75	14.6	U2C-2	9.68	9.68	14.1	4.75	20.2 U	UG02A	5.85	4.96 U	11.2
PCB005	pg/g	10	1	10	3.41	3.41	BH03SD	3.41	3.41	3.41	1.77 U	29.5 U	WR01	6.6	2.2	14.6 U
PCB005 & 008	pg/g	16	9	56.3	11.1	60.1	U2C-2	18.9	13.7 JT	42.6	9.48 U	60.1	U2C-2	13.1	11.7	27.3
PCB006	pg/g	26	2	7.7	3.35	15.7	U2C-2	9.53	9.53	15.1	1.77 U	29.5 U	WR01	6.04	4.95 U	14.7 U
PCB007	pg/g	10	0	0	--	--	--	--	--	--	1.77 U	29.5 U	WR01	6.35	0.978 U	14.6 U
PCB007 & 009	pg/g	16	1	6.3	7.92	7.92	U2C-2	7.92	7.92	7.92	2.49 U	20.2 U	UG02A	5.22	4.96 U	8.47
PCB008	pg/g	10	2	20	2	2.51	WR06SD	2.26	2.26	2.48	1.85 U	29.5 U	WR01	6.62	2.26	14.6 U
PCB009	pg/g	10	0	0	--	--	--	--	--	--	1.77 U	29.5 U	WR01	6.35	0.978 U	14.6 U
PCB010	pg/g	10	0	0	--	--	--	--	--	--	1.77 U	29.5 U	WR01	6.35	0.978 U	14.6 U
PCB011	pg/g	26	23	88.5	2.81	162	UG12A	78.7	96.5	140	2.81	162	UG12A	71.3	73.9	139
PCB012	pg/g	10	1	10	57.3	57.3	BH04SD	57.3	57.3	57.3	3.54 U	59.1 U	WR01	15.6	1.95 U	44.8
PCB012 & 013	pg/g	16	1	6.3	15.3	15.3	U2C-2	15.3	15.3	15.3	2.49 U	20.2 U	UG02A	5.68	4.96 U	11.4
PCB013	pg/g	10	1	10	57.3	57.3	BH04SD	57.3	57.3	57.3	3.54 U	59.1 U	WR01	15.6	1.95 U	44.8
PCB014	pg/g	26	0	0	--	--	--	--	--	--	1.77 U	29.5 U	WR01	5.45	4.95 U	14.4 U
PCB015	pg/g	26	15	57.7	1.98	104	U2C-2	17.2	14.1	43.7	1.85 U	104	U2C-2	13.8	12.9 J	17.6
PCB016	pg/g	10	1	10	1.85	1.85	WR06SD	1.85	1.85	1.85	1.85	29.5 U	WR01	6.45	1.42	14.6 U
PCB016 & 032	pg/g	16	15	93.8	6.43	91	U2C-2	19.3	14.7	42.3	4.97 U	91	U2C-2	18.3	14.3	38.9
PCB017	pg/g	26	14	53.8	2.05	62.4	U2C-2	13.1	10.3	31	1.85 U	62.4	U2C-2	9.88	9.63	14.7 U
PCB018	pg/g	26	17	65.4	3.74	151	U2C-2	27.1	22.2	56.7	3.7 U	151	U2C-2	22.6	21.8	32.2
PCB019	pg/g	26	2	7.7	2.5	9.57	U2C-2	6.04	6.04	9.22	1.77 U	29.5 U	WR01	4.34	2.48 U	14.4 U
PCB020	pg/g	10	6	60	4.33	19.4	BH03SD	8.96	7.22	16.9	4.33	59.1 U	WR01	16.9	14.4	29.2 U
PCB020 & 021 & 033	pg/g	16	15	93.8	7.37	125	U2C-2	26.4	20	57.7	4.97 U	125	U2C-2	24.9	19.4	52.9
PCB021	pg/g	10	1	10	4.25	4.25	BH03SD	4.25	4.25	4.25	3.54 U	59.1 U	WR01	12.9	3.1	29.2 U
PCB022	pg/g	26	17	65.4	2.35	88.5	U2C-2	17.3	13.4	36	1.85 U	88.5	U2C-2	13.8	13.4	22.2
PCB023	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	29.5 U	WR01	3.95	2.47 U	14.4 U
PCB024	pg/g	10	0	0	--	--	--	--	--	--	1.77 U	29.5 U	WR01	6.35	0.978 U	14.6 U
PCB024 & 027	pg/g	16	2	12.5	2.2	10.6	U2C-2	6.4	6.4	10.2	2.2	10.6	U2C-2	3.12	2.48 U	6.44
PCB025	pg/g	26	11	42.3	4.96	67.6	U2C-2	11.7	6.47	37.7	1.77 U	67.6	U2C-2	7.96	5.17	14.7 U
PCB026	pg/g	26	13	50	6.92 J	106	U2C-2	17.1	9.73	50.9	3.54 U	106	U2C-2	13.7	8.31	29.4 U
PCB027	pg/g	10	0	0	--	--	--	--	--	--	1.77 U	57.3 U	BH04SD	7.78	0.978 U	22.4 U
PCB028	pg/g	26	22	84.6	4.33	378	U2C-2	47.3	40.4	57.9	4.33	378	U2C-2	44.5	33.8	57.7
PCB029	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	59.1 U	WR01	6.39	2.47 U	28.8 U
PCB030	pg/g	26	2	7.7	3.74	4.45	BH03SD	4.1	4.1	4.41	1.24 U	59.1 U	WR01	6.56	2.48 U	28.8 U
PCB031	pg/g	26	22	84.6	2.94	253	U2C-2	37.9	35.5	50.7	2.94	253	U2C-2	33.8	31.2	50.2
PCB032	pg/g	10	2	20	1.79	2.38	BH03SD	2.09	2.09	2.35	1.79	59.1 U	WR01	8.07	2.09	22.7 U
PCB033	pg/g	10	1	10	4.25	4.25	BH03SD	4.25	4.25	4.25	3.54 U	57.6 U	WR07SD	11.5	3.1	28.8 U
PCB034	pg/g	26	1	3.8	2.98	2.98	U2C-2	2.98	2.98	2.98	1.24 U	29.5 U	WR01	4.01	2.48 U	14.4 U
PCB035	pg/g	26	2	7.7	2.2	10.3	U2C-2	6.25	6.25	9.9	1.77 U	29.5 U	WR01	4.35	2.48 U	14.4 U
PCB036	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	29.5 U	WR01	3.95	2.47 U	14.4 U
PCB037	pg/g	26	25	96.2	1.98	117	U2C-2	15.3	13.2	22.1	1.98	117	U2C-2	14.8	12.8	22.1
PCB038	pg/g	26	1	3.8	3.92	3.92	U2C-2	3.92	3.92	3.92	1.24 U	29.5 U	WR01	4.05	2.48 U	14.4 U
PCB039	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	29.5 U	WR01	3.95	2.47 U	14.4 U
PCB040	pg/g	26	15	57.7	6.25	83.1	U2C-2	14.9	9.14	39.1	4.74 U	83.1	U2C-2	9.82	6.88	19.3

Table D1.3-4. Summary Statistics for All Chemicals in Surface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB041	pg/g	10	4	40	6.25	20.3	WR01	12.9	12.5	19.7	5.31 U	20.3	WR01	6.85	2.91 U	18.5
PCB041 & 064 & 071 & 072	pg/g	16	16	100	6.52	637	U2C-2	75.6	40.1	214	6.52	637	U2C-2	75.6	40.1	214
PCB042	pg/g	10	7	70	2.01	10	WR01	4.52	3.02	9.27	1.85 U	10	WR01	3.45	2.29	8.9
PCB042 & 059	pg/g	16	14	87.5	4.93	215	U2C-2	29.9	15.8	91.4	4.93	215	U2C-2	26.4	15	72.4
PCB043	pg/g	10	0	0	--	--	--	--	--	--	1.77 U	1.97 U	WR01	0.955	0.958 U	0.983 U
PCB043 & 049	pg/g	16	16	100	5.2	695	U2C-2	84.9	50.6	223	5.2	695	U2C-2	84.9	50.6	223
PCB044	pg/g	26	26	100	5.65	725	U2C-2	62.3	42.3	79.6	5.65	725	U2C-2	62.3	42.3	79.6
PCB045	pg/g	26	16	61.5	3.93	53.8	U2C-2	9.65	6.63 J	22.9	3.54 U	53.8	U2C-2	6.73	5.26	11.4
PCB046	pg/g	26	4	15.4	2.21	23.3	U2C-2	8.64	4.52	20.7	1.77 U	23.3	U2C-2	2.99	2.46 U	5.55
PCB047	pg/g	26	22	84.6	4.97	235	U2C-2	27.9	17.6	42.5	4.95 U	235	U2C-2	24.5	14.8	40.5
PCB048	pg/g	10	3	30	2.48	8.11	WR01	5.08	4.66	7.77	1.77 U	8.11	WR01	2.19	0.958 U	6.56
PCB048 & 075	pg/g	16	13	81.3	6.2	114	U2C-2	17.8	10.4	54.6	4.74 U	114	U2C-2	14.9	8.81	39.8
PCB049	pg/g	10	8	80	5.07	29.6	WR01	13.4	8.02	26.9	3.7 U	29.6	WR01	11.1	6.87	26.1
PCB050	pg/g	26	2	7.7	4.81	6.6	BH03SD	5.71	5.71	6.51	1.24 U	10.1 U	UG02A	2.52	2.46 U	4.99
PCB051	pg/g	26	6	23.1	2.63	17.1	U2C-2	6.77	5.21	14.5	2.63	17.1	U2C-2	3.43	2.48 U	6.68
PCB052	pg/g	10	10	100	6.56	44.7	WR01	22.1	17.2	44.4	6.56	44.7	WR01	22.1	17.2	44.4
PCB052 & 069	pg/g	16	16	100	8.42	1040	U2C-2	124	68.8	337	8.42	1040	U2C-2	124	68.8	337
PCB053	pg/g	26	16	61.5	3.7	55.4	U2C-2	10.4	7.62 J	22.5	3.54 U	55.4	U2C-2	7.18	6.05	11
PCB054	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	10.1 U	UG02A	1.87	2.39 U	2.52 U
PCB055	pg/g	26	2	7.7	10	28.7	BH04SD	19.4	19.4	27.8	1.24 U	29.5 U	WR01	5.7	2.49 U	14.7 U
PCB056	pg/g	10	10	100	2.53	17.1	WR01	7.26	4.62	16.8	2.53	17.1	WR01	7.26	4.62	16.8
PCB056 & 060	pg/g	16	14	87.5	9.03	277	U2C-2	48.5	34.3	128	4.97 U	277	U2C-2	42.9	33.2	105
PCB057	pg/g	26	1	3.8	4.59	4.59	U2C-2	4.59	4.59	4.59	1.24 U	10.1 U	UG02A	2	2.43 U	4.07
PCB058	pg/g	26	1	3.8	4.18	4.18	U2C-2	4.18	4.18	4.18	1.24 U	10.1 U	UG02A	1.98	2.43 U	3.77
PCB059	pg/g	10	0	0	--	--	--	--	--	--	5.31 U	5.91 U	WR01	2.86	2.88 U	2.95 U
PCB060	pg/g	10	6	60	2.08	8.77	WR01	4.91	3.95	8.67	1.85 U	8.77	WR01	3.33	2.2	8.59
PCB061	pg/g	10	10	100	12.1	73.3	WR01	29.7	22.4	63.4	12.1	73.3	WR01	29.7	22.4	63.4
PCB061 & 070	pg/g	16	16	100	8.12	707	U2C-2	109	81.5	256	8.12	707	U2C-2	109	81.5	256
PCB062	pg/g	26	2	7.7	5.31	5.91	WR01	5.61	5.61	5.88	1.24 U	10.1 U	UG02A	2.82	2.51 U	5.25
PCB063	pg/g	26	2	7.7	2.92	22	U2C-2	12.5	12.5	21	1.77 U	22	U2C-2	2.76	2.46 U	4.52
PCB064	pg/g	10	10	100	2.6	18.5	WR01	7.77	5.25	17.8	2.6	18.5	WR01	7.77	5.25	17.8
PCB065	pg/g	26	10	38.5	5.65	43	WR01	16.4	11.4	38.5	1.24 U	43	WR01	7.83	2.51 U	30.4
PCB066	pg/g	10	10	100	5.96	40.6	WR01	16.9	10.5	38.9	5.96	40.6	WR01	16.9	10.5	38.9
PCB066 & 076	pg/g	16	16	100	6.49	544	U2C-2	86.8	64.8	205	6.49	544	U2C-2	86.8	64.8	205
PCB067	pg/g	26	2	7.7	2.06	39.8	U2C-2	20.9	20.9	37.9	1.77 U	39.8	U2C-2	3.41	2.43 U	4.42 U
PCB068	pg/g	26	1	3.8	14.6	14.6	U2C-2	14.6	14.6	14.6	1.24 U	14.6	U2C-2	2.38	2.43 U	4.42 U
PCB069	pg/g	10	8	80	5.07	29.6	WR01	13.4	8.02	26.9	3.7 U	29.6	WR01	11.1	6.87	26.1
PCB070	pg/g	10	10	100	12.1	73.3	WR01	29.7	22.4	63.4	12.1	73.3	WR01	29.7	22.4	63.4
PCB071	pg/g	10	5	50	5.69	20.3	WR01	11.4	8.59	19.5	5.31 U	20.3	WR01	7.13	4.31	18.5
PCB072	pg/g	10	0	0	--	--	--	--	--	--	1.77 U	1.97 U	WR01	0.955	0.958 U	0.983 U
PCB073	pg/g	26	1	3.8	25.7	25.7	U2C-2	25.7	25.7	25.7	1.24 U	25.7	U2C-2	2.81	2.43 U	4.42 U
PCB074	pg/g	26	25	96.2	7.43	218	U2C-2	35.4	26.7	68.9	4.97 U	218	U2C-2	34.2	25.7	67.8
PCB075	pg/g	10	0	0	--	--	--	--	--	--	5.31 U	5.91 U	WR01	2.86	2.88 U	2.95 U
PCB076	pg/g	10	10	100	12.1	73.3	WR01	29.7	22.4	63.4	12.1	73.3	WR01	29.7	22.4	63.4
PCB077	pg/g	26	14	53.8	2.46	56.8	U2C-2	11.8	9.12	27.4	1.77 U	56.8	U2C-2	7.06	4.9	11.5
PCB078	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	10.1 U	UG02A	1.87	2.39 U	2.52 U
PCB079	pg/g	26	2	7.7	1.99	14	U2C-2	8	8	13.4	1.77 U	14	U2C-2	2.41	2.43 U	4.42 U
PCB080	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	10.1 U	UG02A	1.87	2.39 U	2.52 U
PCB081	pg/g	26	3	11.5	0.348 J	1.28 J	U2C-2	0.71	0.501 J	1.2 J	0.348 J	2.14 U	UG12A	0.67	0.723 U	1.05 U
PCB082	pg/g	26	14	53.8	4.52	137	U2C-2	22	13.9	60.2	4.52	137	U2C-2	16.6	13.6 U	18.7
PCB083	pg/g	26	6	23.1	14.9	120	WR04SD	41.8	23	104	1.24 U	120	WR04SD	15.5	2.51 U	48.3
PCB084	pg/g	10	7	70	2.94	51	BH03SD	15.9	7.56	42.7	1.96 U	51	BH03SD	14	10.4	38.5
PCB084 & 092	pg/g	16	15	93.8	6.24	643	U2C-2	80.1	45.9	239	6.24	643	U2C-2	75.5	43.4	210
PCB085	pg/g	10	4	40	8.72	25	BH03SD	15.3	13.7	23.8	5.55 U	88.6 U	WR01	27.8	32.4	44.2 U
PCB085 & 116	pg/g	16	15	93.8	6.96	243	U2C-2	35.7	23.1	94.9	4.97 U	243	U2C-2	33.7	22.6	84.3
PCB086	pg/g	26	8	30.8	5.05	177	WR01	50.5	24.4	144	1.24 U	177	WR01	20.5	2.52 U	82.2
PCB087	pg/g	10	7	70	14.7	177	WR01	56.9	29.1	149	11.1 U	177	WR01	49	24.4	135
PCB087 & 117 & 125	pg/g	16	16	100	5.6	554	U2C-2	66.3	38.2	184	5.6	554	U2C-2	66.3	38.2	184
PCB088	pg/g	10	5	50	3.93	34.2	BH03SD	15.9	8	32.9	3.7 U	59.1 U	WR01	14.1	6.72	32.1

Table D1.3-4. Summary Statistics for All Chemicals in Surface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	Units	# Analyzed	# Detected	% Detected	Minimum[a]	Maximum[a]	Maximum Location(s)	Mean	Median[b]	95th[b]	Minimum (full DL)[a]	Maximum (full DL)[a]	Maximum Location(s)	Mean (half DL)	Median (half DL)[b]	95th (half DL)[b]
PCB088 & 091	pg/g	16	15	93.8	5.37	243	U2C-2	30.2	16.1	88.1	4.97 U	243	U2C-2	28.5	15.8	77
PCB089	pg/g	26	3	11.5	1.6	13.6	U2C-2	5.74	2.02	12.4	1.6	29.5 U	WR01	3.43	2.47 U	13.5
PCB090	pg/g	10	8	80	8.72	524	WR04SD	92.5	25.4	367	8.72	524	WR04SD	82.4	33.8	322
PCB090 & 101	pg/g	16	16	100	16.9	1680	U2C-2	199	117	545	16.9	1680	U2C-2	199	117	545
PCB091	pg/g	10	5	50	3.93	34.2	BH03SD	15.9	8	32.9	3.7 U	59.1 U	WR01	14.1	6.72	32.1
PCB092	pg/g	10	7	70	2.9	83.1	WR04SD	17.6	5.09	62.6	1.96 U	83.1	WR04SD	15.2	7.23	52.4
PCB093	pg/g	26	8	30.8	10.7	311	WR04SD	88.7	38.5	254	1.24 U	311	WR04SD	31.5	2.51 U	144
PCB094	pg/g	26	1	3.8	6.23	6.23	U2C-2	6.23	6.23	6.23	1.24 U	29.5 U	WR01	3.07	2.47 U	11.5
PCB095	pg/g	10	8	80	10.7	311	WR04SD	88.7	38.5	254	9.78 U	311	WR04SD	78.1	38.5	238
PCB095 & 098 & 102	pg/g	16	16	100	12.3	1310	U2C-2	146	78.4	409	12.3	1310	U2C-2	146	78.4	409
PCB096	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	29.5 U	WR01	2.87	2.46 U	11.2 U
PCB097	pg/g	26	22	84.6	9.23	442	U2C-2	57.4	32.7	172	4.97 U	442	U2C-2	52.1	32	154
PCB098	pg/g	10	8	80	10.7	311	WR04SD	88.7	38.5	254	9.78 U	311	WR04SD	78.1	38.5	238
PCB099	pg/g	26	22	84.6	7.15	680	U2C-2	77.4	54.1	118	7.15	680	U2C-2	69.9	47.5	112
PCB100	pg/g	26	9	34.6	6.74	311	WR04SD	79.6	27.1	246	1.24 U	311	WR04SD	31.8	2.52 U	144
PCB101	pg/g	10	8	80	8.72	524	WR04SD	92.5	25.4	367	8.72	524	WR04SD	82.4	33.8	322
PCB102	pg/g	10	8	80	10.7	311	WR04SD	88.7	38.5	254	9.78 U	311	WR04SD	78.1	38.5	238
PCB103	pg/g	26	2	7.7	9.04	22.7	U2C-2	15.9	15.9	22	1.24 U	29.5 U	WR01	4.01	2.47 U	14.4 U
PCB104	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	10.1 U	UG02A	1.87	2.39 U	2.52 U
PCB105	pg/g	26	25	96.2	4.66	389	U2C-2	44.3	34.6	59	4.66	389	U2C-2	43.1	32.9	58.7
PCB106	pg/g	10	0	0	--	--	--	--	--	--	1.85 U	29.5 U	WR01	3.57	0.968 U	14.1 U
PCB106 & 118	pg/g	16	16	100	12.9	1200	U2C-2	170	121	415	12.9	1200	U2C-2	170	121	415
PCB107	pg/g	10	6	60	2.13	8.54	WR04SD	4.07	3.23	7.61	1.85 U	29.5 U	WR01	5.43	3.23	14.1 U
PCB107 & 109	pg/g	16	12	75	5.14	101	U2C-2	17.7	10.1	53.4	4.74 U	101	U2C-2	14	9.55	36.1
PCB108	pg/g	10	0	0	--	--	--	--	--	--	3.7 U	59.1 U	WR01	7.53	1.93 U	28.2 U
PCB108 & 112	pg/g	16	9	56.3	5.25	73.8	U2C-2	13.6	5.98	47.2	4.74 U	73.8	U2C-2	8.71	5.29	23.9
PCB109	pg/g	10	7	70	14.7	177	WR01	56.9	29.1	149	1.85 U	177	WR01	48.5	24.4	135
PCB110	pg/g	26	24	92.3	11.1	1920	U2C-2	186	137	220	11.1	1920	U2C-2	174	122	217
PCB111	pg/g	10	0	0	--	--	--	--	--	--	1.85 U	29.5 U	WR01	3.57	0.968 U	14.1 U
PCB111 & 115	pg/g	16	2	12.5	3.56	24.3	U2C-2	13.9	13.9	23.3	3.56	24.3	U2C-2	4.06	2.49 U	9.86
PCB112	pg/g	10	0	0	--	--	--	--	--	--	1.85 U	29.5 U	WR01	9.84	13.8 U	14.7 U
PCB113	pg/g	26	9	34.6	8.72	524	WR04SD	83.3	23.1	344	1.24 U	524	WR04SD	33.5	2.52 U	67
PCB114	pg/g	26	14	53.8	1.57 J	22.8	U2C-2	3.95	2.46 J	10.2 J	0.739 U	26.5 U	WR06SD	3	2.1 J	10.8 J
PCB115	pg/g	10	8	80	11.1	224	WR04SD	81.8	47.3	214	11.1	224	WR04SD	72.2	36	211
PCB116	pg/g	10	4	40	8.72	25	BH03SD	15.3	13.7	23.8	5.55 U	88.6 U	WR01	27.8	32.4	44.2 U
PCB117	pg/g	10	4	40	8.72	25	BH03SD	15.3	13.7	23.8	5.55 U	88.6 U	WR01	27.8	32.4	44.2 U
PCB118	pg/g	10	9	90	10.5	129	WR04SD	42.4	27.9	102	10.5	129	WR04SD	39.5	26.4	98.3
PCB119	pg/g	26	9	34.6	5.62	177	WR01	50.9	29.1	139	4.74 U	177	WR01	22.5	3.79 U	82.2
PCB120	pg/g	26	2	7.7	2.03	6.47	U2C-2	4.25	4.25	6.25	1.24 U	29.5 U	WR01	3.12	2.47 U	11.6
PCB121	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	29.5 U	WR01	2.87	2.46 U	11.2 U
PCB122	pg/g	26	2	7.7	2.3	11.7	U2C-2	7	7	11.2	1.85 U	29.5 U	WR01	3.34	2.47 U	12.9
PCB123	pg/g	26	12	46.2	1.02 J	17.2	U2C-2	3.82	2.95 J	9.73	0.913 U	29.5 U	WR01	3.34	1.52 J	14.4 U
PCB124	pg/g	26	10	38.5	3.89	41.8	U2C-2	9.28	5.91 J	26	3.7 U	59.1 U	WR01	7.05	3.19	28.8 U
PCB125	pg/g	10	7	70	14.7	177	WR01	56.9	29.1	149	11.1 U	177	WR01	49	24.4	135
PCB126	pg/g	26	9	34.6	0.757 J	6.61	U2C-2	2.57	1.54 J	6.55 J	0.617 U	26.5 U	WR06SD	1.91	0.968 U	6.58 J
PCB127	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	29.5 U	WR01	2.87	2.46 U	11.2 U
PCB128	pg/g	10	8	80	4.83	132	WR04SD	28.8	13	98.8	3.91 U	132	WR04SD	25.9	13	89.3
PCB128 & 162	pg/g	16	15	93.8	7.33	228	U2C-2	36.6	25.2	93	4.97 U	228	U2C-2	34.5	24.9	83.4
PCB129	pg/g	26	19	73.1	5.34	1620	WR04SD	126	18.9	337	4.74 U	1620	WR04SD	94.6	6.69	173
PCB130	pg/g	26	19	73.1	2.31	126	U2C-2	17.9	12.1	55.3	1.85 U	126	U2C-2	14.2	9.12	39.5
PCB131	pg/g	26	2	7.7	3.13	7.57	WR04SD	5.35	5.35	7.35	1.24 U	29.5 U	WR01	3.21	2.47 U	11.8
PCB132	pg/g	10	9	90	4.09	438	WR04SD	72.2	21.3	299	4.09	438	WR04SD	66.3	17.3	281
PCB132 & 161	pg/g	16	16	100	6.24	502	U2C-2	60.8	36.6	166	6.24	502	U2C-2	60.8	36.6	166
PCB133	pg/g	10	2	20	3.25	20.3	WR04SD	11.8	11.8	19.4	1.85 U	26.5 U	WR06SD	4.35	0.97 U	17.1
PCB133 & 142	pg/g	16	5	31.3	5.01 T	47.9	U2C-2	14.5	5.65	40	4.74 U	47.9	U2C-2	6.39	2.51 U	18.4
PCB134	pg/g	10	4	40	4.23	58	WR04SD	20.7	10.2	51.4	3.7 U	58	WR04SD	11.9	3.1	43.8
PCB134 & 143	pg/g	16	9	56.3	4.98	93.2	U2C-2	16.8	7.46 T	59.9	4.74 U	93.2	U2C-2	10.7	5.21	30.7
PCB135	pg/g	26	22	84.6	5.77	804	WR04SD	71.5	19.2	318	4.97 U	804	WR04SD	62.4	19	265
PCB136	pg/g	26	22	84.6	3.1	326	U2C-2	38.9	14.1	257	1.96 U	326	U2C-2	33.6	13.2	209

Table D1.3-4. Summary Statistics for All Chemicals in Surface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB137	pg/g	26	17	65.4	1.98	66	U2C-2	9.84	6.97	20.8	1.85 U	66	U2C-2	7.62	5.9	12.3
PCB138	pg/g	10	9	90	18.9	1620	WR04SD	252	97.7	1050	18.9	1620	WR04SD	232	75.4	979
PCB138 & 163 & 164	pg/g	16	16	100	24.7	1700	U2C-2	235	151	603	24.7	1700	U2C-2	235	151	603
PCB139	pg/g	10	2	20	4.6	5.96	WR04SD	5.28	5.28	5.89	3.7 U	53.1 U	WR06SD	5.05	1.94 U	17.3
PCB139 & 149	pg/g	16	16	100	20.9	2190	U2C-2	227	106	665	20.9	2190	U2C-2	227	106	665
PCB140	pg/g	26	5	19.2	2.66	17.7	U2C-2	6.95	4.6	15.4	2.66	53.1 U	WR06SD	4.23	2.48 U	14.8
PCB141	pg/g	26	24	92.3	2.62	437	WR04SD	49.2	21.8	268	2.62	437	WR04SD	46	21.3	241
PCB142	pg/g	10	0	0	--	--	--	--	--	--	1.85 U	26.5 U	WR06SD	2.19	0.968 U	7.73 U
PCB143	pg/g	10	5	50	3.82	58	WR04SD	17.3	6.21	49.2	3.7 U	58	WR04SD	12.1	4.03	43.8
PCB144	pg/g	26	15	57.7	3.22	104	WR04SD	19.1	6.24	103	1.85 U	104	WR04SD	12.2	5.69	80.6
PCB145	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	29.5 U	WR01	5.45	2.49 U	14.6 U
PCB146	pg/g	10	9	90	2.53	251	WR04SD	37.9	13.1	162	2.53	251	WR04SD	35.5	13.2	151
PCB146 & 165	pg/g	16	15	93.8	7.38	269	U2C-2	39.6	24.5	116	4.97 U	269	U2C-2	37.3	24.3	106
PCB147	pg/g	26	11	42.3	4.08	1720	WR04SD	213	55.9	961	4.08	1720	WR04SD	92.8	3.3	178
PCB148	pg/g	26	3	11.5	1.33	5.2	U2C-2	3.05	2.63	4.94	1.33	29.5 U	WR01	6.03	2.51 U	14.6 U
PCB149	pg/g	10	9	90	11.3	1720	WR04SD	254	67.1	1110	11.3	1720	WR04SD	230	53.2	1040
PCB150	pg/g	26	2	7.7	2.64	4.95	U2C-2	3.8	3.8	4.83	1.24 U	26.5 U	WR06SD	2.55	2.47 U	5.03
PCB151	pg/g	26	24	92.3	6.06	804	WR04SD	84.2	29.7	502	5.87 U	804	WR04SD	79.4	29.7	451
PCB152	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	26.5 U	WR06SD	2.34	2.43 U	4.42 U
PCB153	pg/g	26	26	100	14.4	1940	WR04SD	235	117	1270	14.4	1940	WR04SD	235	117	1270
PCB154	pg/g	26	10	38.5	6.48	804	WR04SD	106	28.9	473	4.74 U	804	WR04SD	44	2.73 U	63.7
PCB155	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	26.5 U	WR06SD	2.34	2.43 U	4.42 U
PCB156	pg/g	26	22	84.6	2.18 J	132	U2C-2	21.2	13.5	104	2.18 J	132	U2C-2	19.3	13	87.6
PCB157	pg/g	26	22	84.6	0.798 J	108	WR04SD	10.2	4.17 J	26.1	0.798 J	108	WR04SD	9.93	4.17 J	26.7
PCB158	pg/g	10	8	80	2.65	132	WR04SD	22.9	7.62	91.9	1.96 U	132	WR04SD	19.7	7.62	80.4
PCB158 & 160	pg/g	16	15	93.8	5.25	170	U2C-2	25.1	16.6	66.4	4.97 U	170	U2C-2	23.7	16	59
PCB159	pg/g	26	6	23.1	2.01	46.4	WR04SD	12.3	3.42	38.9	1.85 U	46.4	WR04SD	4.96	2.48 U	15.5
PCB160	pg/g	10	9	90	18.9	1620	WR04SD	252	97.7	1050	18.9	1620	WR04SD	232	75.4	979
PCB161	pg/g	10	0	0	--	--	--	--	--	--	1.85 U	26.5 U	WR06SD	2.19	0.968 U	7.73 U
PCB162	pg/g	10	0	0	--	--	--	--	--	--	1.85 U	26.5 U	WR06SD	2.19	0.968 U	7.73 U
PCB163	pg/g	10	9	90	18.9	1620	WR04SD	252	97.7	1050	18.9	1620	WR04SD	232	75.4	979
PCB164	pg/g	10	8	80	2.19	114	WR04SD	20.1	5.79	80.9	1.96 U	114	WR04SD	17.5	5.79	71.4
PCB165	pg/g	10	0	0	--	--	--	--	--	--	1.85 U	26.5 U	WR06SD	2.19	0.968 U	7.73 U
PCB166	pg/g	26	9	34.6	4.83	132	WR04SD	26.2	12	94	1.24 U	132	WR04SD	11.6	2.51 U	34.5
PCB167	pg/g	26	21	80.8	0.867 J	53	U2C-2	9.52	6.35	40.6	0.867 J	53	U2C-2	8.34	5.83	33.8
PCB168	pg/g	26	9	34.6	3.33	113	BH03SD	50.6	43.1	103	1.24 U	113	BH03SD	20.7	2.52 U	83.2
PCB169	pg/g	26	0	0	--	--	--	--	--	--	0.362 U	29.2 U	WR04SD	1.7	0.895 U	10.4 U
PCB170	pg/g	26	22	84.6	4.3	341	U2C-2	46.8	35.1	62.5	4.3	341	U2C-2	42.8	32.6	61.1
PCB171	pg/g	26	16	61.5	5.9	96.5	U2C-2	16.2	11.1	38.5	3.82 U	96.5	U2C-2	14.3	10.6	28.5 U
PCB172	pg/g	26	15	57.7	4.33	58.4	U2C-2	11.3	7.66	26.3	1.91 U	58.4	U2C-2	9.76	7.29	23.6 U
PCB173	pg/g	26	6	23.1	1.48	19.1	BH03SD	9.6	9.38	17.2	1.48	58.4 U	WR04SD	7.6	2.5 U	28.5 U
PCB174	pg/g	26	22	84.6	4.07	433	U2C-2	54.9	42.7	66.6	4.07	433	U2C-2	48.6	37.5	65.1
PCB175	pg/g	26	3	11.5	2.55	21.6	U2C-2	8.91	2.58	19.7	1.9 U	29.2 U	WR04SD	4.8	2.49 U	14.5 U
PCB176	pg/g	26	14	53.8	2.34	67.4	U2C-2	9.98	5.7	28.4	1.91 U	67.4	U2C-2	8.17	5.55	14.5 U
PCB177	pg/g	26	21	80.8	2.28	239	U2C-2	33.3	23.7	43.1	2.28	239	U2C-2	29.2	21.1	42
PCB178	pg/g	26	16	61.5	5.38	97.9	U2C-2	15.6	10.3	36.4	1.91 U	97.9	U2C-2	12.3	9.78	15.6
PCB179	pg/g	26	20	76.9	3.41	237	U2C-2	29.8	20.3	39.7	1.96 U	237	U2C-2	25.8	17.4	29
PCB180	pg/g	26	22	84.6	9.86	830	U2C-2	113	81.7	139	9.86	830	U2C-2	99.6	78	139
PCB181	pg/g	26	1	3.8	3.61	3.61	U2C-2	3.61	3.61	3.61	1.24 U	29.2 U	WR04SD	3.97	2.48 U	14.2 U
PCB182	pg/g	10	0	0	--	--	--	--	--	--	1.9 U	55.5 U	WR03SD	7.58	0.983 U	21.8 U
PCB182 & 187	pg/g	16	16	100	12.4	608	U2C-2	92.9	67.3	220	12.4	608	U2C-2	92.9	67.3	220
PCB183	pg/g	26	20	76.9	6.01	263	U2C-2	35.3	25	56.6	3.91 U	263	U2C-2	31.1	25	42.3
PCB184	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	55.5 U	WR03SD	4.42	2.47 U	14.5 U
PCB185	pg/g	26	14	53.8	5.12	45.7	BH03SD	15.5	7.14	44.5	3.91 U	58.4 U	WR04SD	12.9	6.48 J	40.9
PCB186	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	29.2 U	WR04SD	3.88	2.47 U	14.2 U
PCB187	pg/g	10	6	60	6.36	83	BH03SD	41.2	41.7	78.2	6.36	83	BH03SD	30.4	14.5 U	74.3
PCB188	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	26.5 U	WR06SD	2.34	2.43 U	4.42 U
PCB189	pg/g	26	12	46.2	0.457 J	19.5	BH03SD	4.02	1.94 J	15.7	0.425 U	29.5 U	WR01	6.21	1.97 J	14.7 U
PCB190	pg/g	26	17	65.4	3.93	68.2	U2C-2	12.7	9.51	24.5	1.91 U	68.2	U2C-2	10.8	9.48	14.5 U

Table D1.3-4. Summary Statistics for All Chemicals in Surface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB191	pg/g	26	3	11.5	1.96	13.5	U2C-2	6.13	2.93	12.4	1.9 U	29.2 U	WR04SD	4.48	2.48 U	14.2 U
PCB192	pg/g	26	0	0	--	--	--	--	--	--	1.24 U	29.2 U	WR04SD	3.88	2.47 U	14.2 U
PCB193	pg/g	26	16	61.5	4.92 J	138	BH03SD	28.9	7.5	93.2	4.74 U	138	BH03SD	22.7	6.85 J	78.1
PCB194	pg/g	26	21	80.8	2.8	424	WR04SD	44	21.2	155	2.8	424	WR04SD	37.4	18	124
PCB195	pg/g	26	16	61.5	3.25	61.3	U2C-2	11.5	9.13	25.2	1.96 U	61.3	U2C-2	10.5	9.23	14.5 U
PCB196	pg/g	10	5	50	3.59	256	WR04SD	59.6	13.3	209	1.85 U	256	WR04SD	33.7	11.4 U	150
PCB196 & 203	pg/g	16	16	100	6.37	221	U2C-2	38.7	29.4	85.3	6.37	221	U2C-2	38.7	29.4	85.3
PCB197	pg/g	26	3	11.5	6.91	82.5	WR04SD	32.2	7.27	75	1.24 U	82.5	WR04SD	11.2	2.5 U	29.3 U
PCB198	pg/g	26	9	34.6	1.72	451	WR04SD	64.6	10.4	288	1.72	451	WR04SD	26.6	2.52 U	43
PCB199	pg/g	26	23	88.5	4.26	451	WR04SD	52.1	30.2	194	4.26	451	WR04SD	48.9	27.9	169
PCB200	pg/g	26	4	15.4	3.93	82.5	WR04SD	30.2	17.3	74.3	3.7 U	82.5	WR04SD	12.1	2.51 U	29.3 U
PCB201	pg/g	26	6	23.1	2.26	52.8	WR04SD	18.5	12.8	46.1	1.85 U	52.8	WR04SD	7.24	2.49 U	24.4
PCB202	pg/g	26	14	53.8	2.13	90	WR04SD	16	7.53	58.1	1.85 U	90	WR04SD	10.9	6.95	35.6
PCB203	pg/g	10	7	70	2.94	278	WR04SD	48	8.89	200	2.94	278	WR04SD	37.3	11.4 U	162
PCB204	pg/g	26	1	3.8	25.8	25.8	BH03SD	25.8	25.8	25.8	1.24 U	28.7 U	BH04SD	4.14	2.47 U	14.1 U
PCB205	pg/g	26	3	11.5	1.39	26.5	WR04SD	11.8	7.42	24.6	1.39	26.5	WR04SD; WR06SD	3.59	2.47 U	11.8
PCB206	pg/g	26	23	88.5	2.14	90.9	WR04SD	18.8	15.1	67.8	2.14	90.9	WR04SD	17.3	13.3	60.6
PCB207	pg/g	26	2	7.7	2.91	9.59	U2C-2	6.25	6.25	9.26	1.9 U	29.2 U	WR04SD	3.78	2.48 U	13.7 U
PCB208	pg/g	26	15	57.7	2.84	19.2	U2C-2	6.47	6.01 J	11.3	1.91 U	29.2 U	WR04SD	5.92	5.51	14.4 U
PCB209	pg/g	26	19	73.1	4.05	41.6	U2C-2	22.4	24.3	38.5	4.03 U	41.6	U2C-2	17.6	14.9	38.2
Total PCB Congeners	pg/g	26	26	100	290 JT	31000 T	U2C-2	4220	2710 J	19700	290 JT	31000 T	U2C-2	4220	2710 J	19700
PCBs[c]																
Total PCBs	µg/kg	81	42	51.9	0.29 JT	31 T	U2C-2	4.48	2.99 J	14.3 J	0.29 JT	42 UT	HC08	5.69	2.9 JT	19.5 UT
PCB Homologs																
Dichlorobiphenyl homologs	pg/g	26	24	92.3	8.48 T	312 T	U2C-2	101	120	178 J	8.48 T	312 T	U2C-2	95.5	108	176 J
Heptachlorobiphenyl homologs	pg/g	26	22	84.6	36.7 T	3480 T	U2C-2	469	381 J	737	36.7 T	3480 T	U2C-2	401	315 J	695
Hexachlorobiphenyl homologs	pg/g	26	26	100	60.3 T	16800 T	WR04SD	1580	679 J	7310	60.3 T	16800 T	WR04SD	1580	679 J	7310
Monochlorobiphenyl homologs	pg/g	26	12	46.2	5.41 T	28.7 T	U2C-2	10.9	8.5	21.9	4.74 UT	29.5 UT	WR01	10.6	10	16
Nonachlorobiphenyl homologs	pg/g	26	23	88.5	2.14 T	101 T	U2C-2	23.5	21.3 T	85.3	2.14 T	101 T	U2C-2	21.5	14.6	76.9
Octachlorobiphenyl homologs	pg/g	26	23	88.5	12.6 T	2190 T	WR04SD	207	94.1 T	709	12.6 T	2190 T	WR04SD	186	93.1 J	623
Pentachlorobiphenyl homologs	pg/g	26	25	96.2	63.5 T	9870 T	U2C-2	1230	757 JT	4180	63.5 T	9870 T	U2C-2	1180	736 J	4050
Tetrachlorobiphenyl homologs	pg/g	26	26	100	41.2 T	5830 T	U2C-2	581	437	708	41.2 T	5830 T	U2C-2	581	437	708
Trichlorobiphenyl homologs	pg/g	26	26	100	2.41 T	1480 T	U2C-2	168	122	261	2.41 T	1480 T	U2C-2	168	122	261
PCDD/Fs Homologs																
Heptachlorodibenzofuran homologs	pg/g	39	38	97.4	0.487	28.9 JT	G027	4.5344	2.486	20.179	0.487	28.9 JT	G027	4.4248	2.382	19.919
Heptachlorodibenzo-p-dioxin homologs	pg/g	39	38	97.4	1.58	102 JT	G027	14.411	8.9435	35.447	1.58	102 JT	G027	14.062	8.437	35.131
Hexachlorodibenzofuran homologs	pg/g	39	38	97.4	0.11 J	18.148 T	U1C-1	2.2439	1.192	8.0575 J	0.0289 U	18.148 T	U1C-1	2.1868	1.191	7.555 J
Hexachlorodibenzo-p-dioxin homologs	pg/g	39	38	97.4	0.053	18.1 JT	G027	2.572	1.582	6.347	0.0337 U	18.1 JT	G027	2.506	1.539	6.238
Octachlorodibenzofuran	pg/g	48	32	66.7	1.021 J	55.8	WR04SD	8.5298	5.2025 J	31.36 J	0.462 U	55.8	WR04SD	5.8979	2.81	24.255 J
Octachlorodibenzo-p-dioxin	pg/g	49	35	71.4	5.46	521 JT	G027	89.8951	62.6	238.1	5.46	521 JT	G027	66.4365	41.823	215.599 J
Pentachlorodibenzofuran homologs	pg/g	39	36	92.3	0.069	7.94 JT	G027	0.87911	0.5495 J	2.118 J	0.00787 U	7.94 JT	G027	0.81211	0.42 J	1.8672 J
Pentachlorodibenzo-p-dioxin homologs	pg/g	39	26	66.7	0.029 J	2.37 JT	G027	0.35467	0.238 J	0.9855 J	0.009 U	2.37 JT	G027	0.24266	0.0719 J	0.6878 J
Tetrachlorodibenzofuran homologs	pg/g	39	29	74.4	0.047	4 JT	G027	0.52423	0.392 T	0.9236 J	0.00701 U	4 JT	G027	0.39628	0.185	0.8956 J
Tetrachlorodibenzo-p-dioxin homologs	pg/g	39	31	79.5	0.0403 J	2.01 JT	G027	0.4322	0.337	1.1	0.014 U	2.01 JT	G027	0.3478	0.167	1.076
Total PCDD/F	pg/g	39	38	97.4	2.39 T	733 T	G027	90.3	59.1 J	298 J	2.39 T	733 T	G027	88.1	57.1 JT	297 J
PCDD/Fs																
1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/g	49	34	69.4	0.154 J	16.6	WR04SD	2.0034	1.13 J	8.9085 J	0.154 J	16.6	WR04SD	1.6283	0.885 J	6.764 J
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/g	49	34	69.4	0.985 J	87.9	WR01	12.858	7.72	43.2 J	0.784 U	87.9	WR01	9.2722	5.09	38.198
1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/g	49	21	42.9	0.016 J	11.1	WR04SD	0.6627	0.1 J	0.682 JT	0.009 U	11.1	WR04SD	0.3871	0.055 J	0.523 U
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	49	24	49	0.033 J	16.2	WR04SD	0.85111	0.133 J	0.80615 J	0.00976 U	16.2	WR04SD	0.52749	0.0972 J	0.6408 J
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/g	49	23	46.9	0.011 J	0.528 JT	G027	0.09917	0.065 J	0.2816 J	0.011 J	1.24 U	WR03SD	0.1749	0.048 J	0.615 U
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	49	23	46.9	0.015 J	2.62	WR04SD	0.2098	0.051 J	0.6823 J	0.005 U	2.62	WR04SD	0.2083	0.04775 U	0.6456 J
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/g	49	37	75.5	0.053 J	2.41 JT	G027	0.4679	0.265 J	1.578	0.0382 U	2.41 JT	G027	0.4466	0.398 J	1.352 J
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	49	1	2	0.117 JT	0.117 JT	G027	0.117	0.117 JT	0.117 JT	0.003 U	1.17 U	WR02SD	0.1176	0.0123 U	0.523 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/g	49	36	73.5	0.041 J	2.75	BH03SD	0.3571	0.187 J	1.24 J	0.016 U	2.75	BH03SD	0.3584	0.206 J	1.1 J
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	49	11	22.4	0.017 J	0.353 JT	U1C-1	0.090273	0.0394 J	0.312 J	0.00417 U	1.17 U	WR06SD	0.13211	0.01805 U	0.523 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/g	49	16	32.7	0.015 J	0.391 JT	G027	0.074869	0.0365 J	0.18175 J	0.006 U	1.18 U	WR03SD	0.14842	0.033 JT	0.585 U
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	49	18	36.7	0.014 J	1.41	WR04SD	0.2405	0.0825 J	0.917 J	0.004 U	1.41	WR04SD	0.1954	0.046 J	0.6756 J
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	49	16	32.7	0.011 J	1.83	WR04SD	0.19147	0.05825 J	0.717 J	0.005 U	1.83	WR04SD	0.1635	0.026 J	0.52 U

Table D1.3-4. Summary Statistics for All Chemicals in Surface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
2,3,7,8-Tetrachlorodibenzofuran	pg/g	49	11	22.4	0.046 J	0.69	WR04SD	0.2432	0.164 J	0.597 J	0.012 U	0.69	WR04SD	0.09478	0.0465 U	0.2986
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	49	1	2	0.244 JT	0.244 JT	G027	0.244	0.244 JT	0.244 JT	0.0036 U	0.244 JT	G027	0.036632	0.0105 U	0.11 U
TCDD TEQ (ND = 0)	pg/g	49	48	98	0.00684 JT	2.99 T	WR04SD	0.31492	0.1135 J	1.1571	0.00684 JT	2.99 T	WR04SD	0.30903	0.111 A	1.1424
Total TCDD TEQ (ND = 0)	pg/g	54	54	100	0.000674 JA	3.01 T	WR04SD	0.327086	0.119 J	1.1105 J	0.000674 JA	3.01 T	WR04SD	0.327086	0.119 J	1.1105 J
PCB TEQ																
Total PCB TEQ (ND=0)	pg/g	26	25	96.2	0.000455 T	0.723 JT	U2C-2	0.0996443	0.00608 JT	0.5618 J	0.000455 T	2.65 UT	WR06SD	0.146773	0.006205 J	0.70575 J
PBDE Congeners																
PBDE028	µg/kg	3	0	0	--	--	--	--	--	--	0.94 U	1 U	UG02B; UG06B	0.49	0.5 U	0.5 U
PBDE047	µg/kg	3	3	100	1	1.3	UG02B	1.1	1.1	1.3	1	1.3	UG02B	1.1	1.1	1.3
PBDE099	µg/kg	3	3	100	0.86 J	1.3	UG02B	1	0.9 J	1.3 J	0.86 J	1.3	UG02B	1	0.9 J	1.3 J
PBDE100	µg/kg	3	3	100	0.19 J	0.44 J	UG02B	0.29	0.24 J	0.42 J	0.19 J	0.44 J	UG02B	0.29	0.24 J	0.42 J
PBDE153	µg/kg	3	0	0	--	--	--	--	--	--	0.94 U	1 U	UG02B; UG06B	0.49	0.5 U	0.5 U
PBDE154	µg/kg	3	2	66.7	0.16 J	0.2 J	UG06B	0.18	0.18 J	0.2 J	0.16 J	1 U	UG02B	0.29	0.2 J	0.47 J
PBDE183	µg/kg	3	0	0	--	--	--	--	--	--	0.94 U	1 U	UG02B; UG06B	0.49	0.5 U	0.5 U
PBDE209	µg/kg	3	0	0	--	--	--	--	--	--	9.4 U	10 U	UG02B; UG06B	4.9	5 U	5 U
Pesticides																
2,4'-DDD	µg/kg	63	12	19	0.045 NJ	1.35 JT	G027	0.2803	0.1715 J	0.8308 J	0.032 U	2.5 U	UG04A	0.2193	0.115 U	0.7 U
2,4'-DDE	µg/kg	63	13	20.6	0.061 J	0.391	U6TOC-2	0.202	0.159	0.3874 J	0.03 U	0.5 UJ	WR01	0.1153	0.075 U	0.2497 J
2,4'-DDT	µg/kg	63	16	25.4	0.11 NJ	0.439 J	U6TOC-2	0.2509	0.2365 J	0.3798 J	0.03 U	0.5 UJ	WR01	0.1354	0.1 U	0.3158 J
4,4'-DDD	µg/kg	81	47	58	0.12 J	2.25 T	G027	0.5892	0.494 J	1.2 J	0.047 U	3.3 U	HC-SS29; HC-SS31; HC-SS32	0.5941	0.465 UJ	1.65 U
4,4'-DDE	µg/kg	81	55	67.9	0.087 J	2.3 NJ	G786	0.882	0.82	1.77	0.034 U	2.3 NJ	G786; HC-SS29; HC-SS31; HC-SS32	0.815	0.78	1.5 J
4,4'-DDT	µg/kg	76	17	22.4	0.163 NJ	13	HC10	1.549	0.69 J	4.84	0.0585 UJ	13	HC10	0.7392	0.291 J	3.35 U
Aldrin	µg/kg	77	7	9.1	0.17 J	0.55	UG03B	0.3341	0.32 J	0.508	0.0329 UJ	2.1 U	HC08	0.243	0.135 U	0.95 U
alpha-Endosulfan	µg/kg	75	22	29.3	0.079 J	1.3	UG11C	0.259	0.155 J	0.7035 J	0.025 U	2.1 U	HC08	0.2669	0.12 J	0.965 U
alpha-Hexachlorocyclohexane	µg/kg	75	2	2.7	0.128 J	5.03 NJ	U5Q-1	2.579	2.579 J	4.785 J	0.0351 U	5.03 NJ	U5Q-1	0.2705	0.055 U	0.965 U
beta-Endosulfan	µg/kg	75	2	2.7	0.075 J	0.261 J	U5Q-3	0.168	0.168 J	0.2517 J	0.0252 U	2.1 U	HC08	0.2217	0.0265 U	0.95 U
beta-Hexachlorocyclohexane	µg/kg	75	17	22.7	0.18 J	2.01 J	U2C-1	0.8198	0.561 J	1.898 J	0.0356 U	2.1 U	HC08	0.4027	0.22 UJ	1.211 J
Chlordane (cis & trans)	µg/kg	3	0	0	--	--	--	--	--	--	1.9 U	7.1 U	WR-PG-Ref01	2.2	2.1 U	3.4 U
cis-Chlordane	µg/kg	77	18	23.4	0.055 J	0.5 T	G027	0.181	0.136 J	0.4813 J	0.031 U	2.1 U	HC08	0.2225	0.082 J	0.95 U
cis-Nonachlor	µg/kg	63	4	6.3	0.128 J	0.213 NJ	U6TOC-2	0.164	0.1575 J	0.2051 J	0.0438 U	0.9 UT	G027	0.09736	0.06 U	0.24 UJ
delta-Hexachlorocyclohexane	µg/kg	75	4	5.3	0.217 J	0.287 J	U6TOC-3	0.2523	0.2525 J	0.2819 J	0.037 U	2.1 U	HC08	0.2214	0.06 U	0.95 U
Dieldrin	µg/kg	77	10	13	0.092 NJ	0.4 T	G027	0.2089	0.162 J	0.3955	0.03 U	2.1 U	HC08	0.2515	0.092 NJ	0.95 U
Endosulfan sulfate	µg/kg	75	1	1.3	0.67	0.67	G029	0.67	0.67	0.67	0.053 U	2.1 U	HC08	0.2754	0.105 U	0.95 U
Endrin	µg/kg	57	0	0	--	--	--	--	--	--	0.046 U	2.1 U	HC08	0.287	0.06 U	0.96 U
Endrin aldehyde	µg/kg	75	2	2.7	0.045 JT	0.147 NJ	U1C-2	0.096	0.096 J	0.1419 J	0.042 UJ	2.1 U	HC08	0.2277	0.045 JT	0.95 U
Endrin ketone	µg/kg	75	6	8	0.089 J	0.12 J	UG03C	0.105	0.11 J	0.1175 J	0.029 U	2.1 U	HC08	0.2274	0.04 U	0.95 U
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	77	1	1.3	0.32 NJ	0.32 NJ	UG12C	0.32	0.32 NJ	0.32 NJ	0.043 U	2.1 U	HC08	0.2134	0.086 U	0.95 U
Heptachlor	µg/kg	77	1	1.3	0.5 NJ	0.5 NJ	UG12C	0.5	0.5 NJ	0.5 NJ	0.0319 U	2.1 U	HC08	0.2137	0.0395 U	0.95 U
Heptachlor epoxide	µg/kg	65	1	1.5	0.14 NJ	0.14 NJ	G787	0.14	0.14 NJ	0.14 NJ	0.0417 U	2.1 U	HC08	0.2222	0.1 U	0.95 U
Methoxychlor	µg/kg	75	0	0	--	--	--	--	--	--	0.0415 U	5 UJ	WR01	0.508	0.1 U	2.33 UJ
Mirex	µg/kg	53	0	0	--	--	--	--	--	--	0.0377 U	0.34 U	WR-PG-Ref03	0.05032	0.06 U	0.095 U
Oxychlordane	µg/kg	63	0	0	--	--	--	--	--	--	0.0189 U	1.5 U	UG12C	0.1284	0.1 U	0.289 U
Total chlordanes	µg/kg	77	38	49.4	0.057 JT	1.53 T	G027	0.3909	0.3445 J	0.806 J	0.0438 UT	2.1 UA	HC08	0.3825	0.24 UJT	1 U
Total endosulfan	µg/kg	75	24	32	0.079 JT	1.3 T	UG11C	0.2795	0.18 J	0.7125	0.053 UT	2.1 UT	HC08	0.3284	0.1745 UT	0.965 U
Total DDD	µg/kg	81	47	58	0.12 JT	3.6 T	G027	0.661	0.5 T	1.34 J	0.047 UT	3.6 T	G027	0.6381	0.47 UJT	1.65 UA
Total DDx	µg/kg	81	56	69.1	0.087 JT	14.57 JA	HC10	2.011	1.715 J	5.375 J	0.087 JT	14.57 JA	HC10	1.707	1.2 T	3.35 UA
Total DDE	µg/kg	81	55	67.9	0.087 JT	2.45 T	U6TOC-2	0.929	0.86 T	1.79 J	0.034 UT	2.45 T	U6TOC-2	0.847	0.79 T	1.5 JT
Total DDT	µg/kg	81	23	28.4	0.21 JT	13 A	HC10	1.321	0.69 T	2.84 J	0.0486 UJT	13 A	HC10	0.7361	0.36 T	3.35 UA
Total 4,4'-DDx	µg/kg	39	26	66.7	0.087 JT	14.57 T	HC10	1.788	1.198 J	3.78 J	0.087 JT	14.57 T	HC10	1.729	0.986 JT	3.414 J
Toxaphene	µg/kg	75	0	0	--	--	--	--	--	--	3.4 U	110 U	HC08	14.4	6.35 U	46.5 U
trans-Chlordane	µg/kg	77	32	41.6	0.061 NJ	0.715 T	G027	0.2393	0.214 J	0.409 J	0.0221 U	2.1 U	HC08	0.2818	0.21 J	0.95 U
trans-Nonachlor	µg/kg	63	23	36.5	0.044 J	0.376 NJ	U6TOC-2	0.1427	0.116 J	0.328 J	0.034 U	0.5 UJ	WR01	0.11	0.07 J	0.268 J

Table D1.3-4. Summary Statistics for All Chemicals in Surface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Polycyclic Aromatic Hydrocarbons																
1-Methylnaphthalene	µg/kg	32	28	87.5	0.41 J	2.9	G029	0.89	0.75 J	2 J	0.31 U	2.9	G029	0.8	0.72 J	1.8 J
2-Methylnaphthalene	µg/kg	71	31	43.7	0.41 J	4.6	G029	1.24	1.1 J	2.68 J	0.39 U	50 U	HC-SS29; HC-SS31; HC-SS32	2.71	1.05 U	17.8 U
Acenaphthene	µg/kg	78	24	30.8	0.3 J	6.5 JT	G027	0.831	0.555 J	1 J	0.23 U	50 U	HC-SS29; HC-SS31; HC-SS32	2.52	0.488 J	12.7 U
Acenaphthylene	µg/kg	77	36	46.8	0.27 J	7.85 JT	G027	1.79	1.5 J	3.75 J	0.24 U	50 U	HC-SS29; HC-SS31; HC-SS32	2.85	1.2 U	11.3 J
Anthracene	µg/kg	78	25	32.1	0.43 J	30.5 JT	G027	3.41	1.6 J	11.4 J	0.33 U	50 U	HC-SS29; HC-SS31; HC-SS32	3.39	1.18 UJ	25 U
Benzo(a)anthracene	µg/kg	78	57	73.1	0.61 J	118 JT	G027	9.48	5.5	28.8	0.24 U	118 JT	G027	8.63	4.9	25.5
Benzo(a)pyrene	µg/kg	78	51	65.4	0.53 J	124 JT	G027	11	6.9 T	27.5	0.33 U	124 JT	G027	9.06	5.55	25.3
Benzo(b)fluoranthene	µg/kg	78	55	70.5	0.45 J	155 JT	G027	13.2	7.9	34.4	0.45 J	155 JT	G027	11.1	6.8	26
Benzo(b+k)fluoranthene	µg/kg	18	9	50	3.2 T	43 T	SED099-42	16.7	15.4 T	34.6	3.2 T	50 UT	HC-SS29; HC-SS31; HC-SS32	15.1	15.2	27.7
Benzo(e)pyrene	µg/kg	32	32	100	0.37 J	90.5 JT	G027	9.36	5.45	28.7	0.37 J	90.5 JT	G027	9.36	5.45	28.7
Benzo(g,h,i)perylene	µg/kg	77	52	67.5	0.86 J	92.5 JT	G027	9.22	5.9 J	24.3	0.45 U	92.5 JT	G027	8.07	5.2	25 U
Benzo(k)fluoranthene	µg/kg	78	50	64.1	0.19 J	52 JT	G027	5.09	3	14.6	0.19 J	52 JT	G027	5.11	2.6 J	25 U
C1-Chrysene	µg/kg	32	32	100	0.57 J	80 JT	G027	14	12	27	0.57 J	80 JT	G027	14	12	27
C1-Dibenzothiophene	µg/kg	32	22	68.8	0.61 J	8.6	UG02B	1.85	1.2 J	5.48 J	0.21 U	8.6	UG02B	1.31	0.97 J	3.81 J
C1-Fluoranthene/pyrene	µg/kg	32	32	100	1.2 J	91.5 JT	G027	13.5	9.7	31.7	1.2 J	91.5 JT	G027	13.5	9.7	31.7
C1-Fluorene	µg/kg	32	28	87.5	0.58 J	7.2 JT	G027	1.7	1.6 J	3.7	0.5 U	7.2 JT	G027	1.5	1.3 J	3.4
C1-Phenanthrene/anthracene	µg/kg	32	31	96.9	1.7 J	55.5 JT	G027	6.91	5.8	11.5	0.75 U	55.5 JT	G027	6.71	5.45	11.3
C2-Chrysene	µg/kg	32	31	96.9	1.6 J	60.5 JT	G027	10.4	7.6	21	0.25 U	60.5 JT	G027	10.1	7.55	20.6
C2-Dibenzothiophene	µg/kg	32	26	81.3	1.3 J	11.8 T	G027	3.4	2.7 J	7.2	0.21 U	11.8 T	G027	2.79	2.55	7.08
C2-Fluoranthene/pyrene	µg/kg	32	32	100	1.7 J	46 JT	G027	11	9.8	20	1.7 J	46 JT	G027	11	9.8	20
C2-Fluorene	µg/kg	32	30	93.8	0.55 J	8 T	G027	3	2.7 J	6.2	0.5 U	8 T	G027	2.8	2.4 J	6.1
C2-Naphthalene	µg/kg	32	32	100	0.49 J	8.05 T	G027	2.28	1.9 J	5.36	0.49 J	8.05 T	G027	2.28	1.9 J	5.36
C2-Phenanthrene/anthracene	µg/kg	32	31	96.9	1.8 J	47.5 JT	G027	11	11	20	0.75 U	47.5 JT	G027	10.7	11	19.6
C3-Chrysene	µg/kg	32	30	93.8	2.1	53 T	G027	9.2	6.7	21	0.25 U	53 T	G027	8.7	6.6	20
C3-Dibenzothiophene	µg/kg	32	26	81.3	1.4 J	17 T	G027	3.7	3	6.5	0.21 U	17 T	G027	3	2.5 J	6.4
C3-Fluoranthene/pyrene	µg/kg	32	28	87.5	1.8 J	33 T	G027	7.3	5.9	17	0.61 U	33 T	G027	6.4	5.6	15
C3-Fluorene	µg/kg	32	27	84.4	1.4 J	14.1 JT	G027	4.65	4.1	7.93	0.5 U	14.1 JT	G027	3.96	3.85	7.71
C3-Naphthalene	µg/kg	32	31	96.9	0.55 J	12	UG02B	2.2	1.5 J	7.2	0.37 U	12	UG02B	2.1	1.5 J	6.9
C3-Phenanthrene/anthracene	µg/kg	32	32	100	1.6 J	44	UG03B	11	7.7	28	1.6 J	44	UG03B	11	7.7	28
C4-Chrysene	µg/kg	32	6	18.8	4.3	28 T	G027	9.9	6.9	23	0.25 U	28 T	G027	2	0.13 U	8.9
C4-Naphthalene	µg/kg	32	29	90.6	0.7 J	18	UG02B	3.2	2.4 J	9.5 J	0.37 U	18	UG02B	2.9	2.4 J	8.2 J
C4-Phenanthrene/anthracene	µg/kg	32	27	84.4	1.6 J	21 T	G027	6.4	5.4	15	0.75 U	21 T	G027	5.5	5.2	14
Chrysene	µg/kg	78	56	71.8	0.42 J	135 JT	G027	12.9	7.85	48.3	0.42 J	135 JT	G027	11	6.5	33.9
Dibenzo(a,h)anthracene	µg/kg	78	42	53.8	0.47 J	19 JT	G027	1.71	0.995 J	4 J	0.28 U	50 U	HC-SS29; HC-SS31; HC-SS32	3.2	1.15 UJ	19.9 J
Dibenzothiophene	µg/kg	32	16	50	0.25 J	6.55 T	G027	0.806	0.38 J	2.46 J	0.21 U	6.55 T	G027	0.472	0.245 J	0.809 J
Fluoranthene	µg/kg	78	55	70.5	1 J	260 JT	G027	19.3	12	45.3	0.77 U	260 JT	G027	15.4	9.3 J	33.9
Fluorene	µg/kg	78	29	37.2	0.56 J	8.55 JT	G027	1.23	0.98 JT	1.5 J	0.28 U	50 U	HC-SS29; HC-SS31; HC-SS32	2.78	0.98 J	12.7 U
Total HPAHs	µg/kg	78	62	79.5	1.7 JT	1320 T	G027	96	61.3 J	265 J	1 UT	1320 T	G027	77.9	49.8 J	188 J
Indeno(1,2,3-cd)pyrene	µg/kg	78	51	65.4	0.25 J	99 JT	G027	7.99	5.2	15	0.25 J	99 JT	G027	7.04	4.65	25 U
Total LPAHs	µg/kg	78	54	69.2	0.44 JT	192 T	G027	15.4	10.8 J	29.1 J	0.44 JT	192 T	G027	12.5	7.3 J	26.4 J
Naphthalene	µg/kg	78	28	35.9	1.5 J	9.9	UG03B	5.06	4.7	8.1	0.55 U	50 U	HC-SS29; HC-SS31; HC-SS32	4.37	2.98	12.2
Perylene	µg/kg	32	32	100	0.49 J	59	G787	16	14	42	0.49 J	59	G787	16	14	42
Phenanthrene	µg/kg	77	40	51.9	0.91 J	128 JT	G027	11.2	6.2	21.6	0.59 U	128 JT	G027	8.02	4.3 J	25 U
Pyrene	µg/kg	78	60	76.9	0.82 J	265 JT	G027	18.8	11	36.2	0.77 U	265 JT	G027	16.1	10 J	30.8
Total BaPEq	µg/kg	78	62	79.5	0.17 JT	181 JT	G027	13	8.5 J	34.3 J	0.17 JT	181 JT	G027	11.9	8.01 J	27.1 J
Total cPAHs	µg/kg	78	62	79.5	0.49 JT	700 JT	G027	53.1	34.2 J	140 J	0.49 JT	700 JT	G027	43.8	25 J	140 J
Total PAHs	µg/kg	78	63	80.8	0.91 JT	1510 T	G027	107.4	74.4 T	270.1 J	0.91 JT	1510 T	G027	88.39	55.75 J	195.8 J

Table D1.3-4. Summary Statistics for All Chemicals in Surface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Phthalates																
Bis(2-ethylhexyl) phthalate	µg/kg	72	56	77.8	4.2 J	2100	U1C-3	94	40	210	3.2 UJ	2100	U1C-3	84	34 J	200
Butylbenzyl phthalate	µg/kg	72	17	23.6	2.7 J	33 J	UG11C	10	8 J	21 J	2.2 U	100 U	HC-SS29; HC-SS31; HC-SS32	8	2.8 J	41 J
Dibutyl phthalate	µg/kg	72	40	55.6	4.8 J	360	G786	22	13	24	4.1 U	360	G786	18	11 UJ	50 U
Diethyl phthalate	µg/kg	72	25	34.7	1.4 J	7.3 J	UG11C	3.1	2.9 J	4.8 J	1.3 U	100 U	HC-SS29; HC-SS31; HC-SS32	7.1	3.2 J	29 UJ
Dimethyl phthalate	µg/kg	72	3	4.2	1.2 J	4.7 J	UG03B	2.9	2.8 J	4.5 J	1 U	100 U	HC-SS29; HC-SS31; HC-SS32	5.7	1.5 U	29 UJ
Di-n-octyl phthalate	µg/kg	72	0	0	--	--	--	--	--	--	1.7 U	100 U	HC-SS29; HC-SS31; HC-SS32	5.6	1 U	29 UJ
Semivolatile Organic Compounds																
1,2,4-Trichlorobenzene	µg/kg	72	0	0	--	--	--	--	--	--	2.2 U	21 U	HC08	2.8	1.4 U	10 U
1,2-Dichlorobenzene	µg/kg	72	0	0	--	--	--	--	--	--	1.9 U	21 U	HC08	2.5	1.5 U	7.5 U
1,2-Diphenylhydrazine	µg/kg	10	0	0	--	--	--	--	--	--	21 U	25 U	WR01	12	12 U	12 UJ
1,3-Dichlorobenzene	µg/kg	72	0	0	--	--	--	--	--	--	2.4 U	21 U	HC08	2.6	1.5 UJ	7.5 U
1,4-Dichlorobenzene	µg/kg	72	2	2.8	0.23 J	0.29 J	WR-PG-Ref03	0.26	0.26 J	0.29 J	0.19 U	21 U	HC08	2.6	1.6 U	7.5 U
2,4-Dinitrotoluene	µg/kg	63	0	0	--	--	--	--	--	--	1.5 U	25 UJ	WR01	3.2	2.1 U	12 U
2,6-Dinitrotoluene	µg/kg	63	0	0	--	--	--	--	--	--	2 U	25 U	WR01	3.4	2.1 U	12 U
2-Chloronaphthalene	µg/kg	63	0	0	--	--	--	--	--	--	1.6 U	25 UJ	WR01	3.5	2.7 U	12 U
2-Nitroaniline	µg/kg	63	0	0	--	--	--	--	--	--	3.2 U	120 UJ	WR01; WR02SD; WR03SD; WR05SD; WR06SD; WR07SD	10	2.1 U	60 U
3,3'-Dichlorobenzidine	µg/kg	61	0	0	--	--	--	--	--	--	3.7 U	25 UJ	WR01	4.3	2.9 U	12 U
3-Nitroaniline	µg/kg	62	0	0	--	--	--	--	--	--	2.5 UJ	130 UJ	WR01	11	2.1 U	60 U
4-Bromophenyl phenyl ether	µg/kg	63	0	0	--	--	--	--	--	--	1.6 U	25 UJ	WR01	2.8	1.1 U	12 U
4-Chloroaniline	µg/kg	61	0	0	--	--	--	--	--	--	1.9 U	25 UJ	WR01	3.2	1.7 U	12 U
4-Chlorophenyl phenyl ether	µg/kg	63	0	0	--	--	--	--	--	--	1.4 U	25 UJ	WR01	2.9	1.5 U	12 U
4-Nitroaniline	µg/kg	63	0	0	--	--	--	--	--	--	1.8 U	120 UJ	WR01; WR02SD; WR03SD; WR05SD; WR06SD; WR07SD	11	2.5 U	60 U
Aniline	µg/kg	62	12	19.4	5.1 J	230	U3C-2	31	11 J	120	1.5 U	230	U3C-2	8.7	1.3 U	20 J
Azobenzene	µg/kg	53	1	1.9	1.2 JT	1.2 JT	UG03A2	1.2	1.2 JT	1.2 JT	1.1 U	7.2 U	U6TOC-2; U6TOC-3	1.3	1.1 U	2.8 U
Benzoic acid	µg/kg	72	21	29.2	7.8 J	180 J	UG12B	110	120 J	170 J	7.8 J	480 U	G027; UG11C	89	88 UJ	160 J
Benzyl alcohol	µg/kg	72	29	40.3	2.5 J	17	UG02B	9.1	7 J	16 J	2.1 U	25 UJ	HC-SS29; HC-SS31; HC-SS32; WR01	7.6	6.4 J	14 J
Bis(2-chloro-1-methylethyl) ether	µg/kg	10	0	0	--	--	--	--	--	--	21 U	25 UJ	WR01	12	12 U	12 UJ
Bis(2-chloroethoxy) methane	µg/kg	63	0	0	--	--	--	--	--	--	1.5 U	25 UJ	WR01	2.8	1.1 U	12 U
Bis(2-chloroethyl) ether	µg/kg	63	0	0	--	--	--	--	--	--	1.9 U	25 UJ	WR01	3.2	1.9 U	12 U
Bis(2-chloroisopropyl) ether	µg/kg	53	0	0	--	--	--	--	--	--	1.8 U	13 U	G027; UG11C	1.5	1.3 U	2.9 U
Carbazole	µg/kg	63	11	17.5	1.4 JT	11.3 JT	G027	2.73	1.7 J	7.3 J	1.3 U	25 UJ	WR01	3	1.2 U	12 UJ
Dibenzofuran	µg/kg	72	19	26.4	0.59 J	3.3 JT	G027	0.96	0.76 J	1.7 J	0.25 U	50 U	HC-SS29; HC-SS31; HC-SS32	2.4	0.63 J	17 U
Hexachlorobenzene	µg/kg	72	26	36.1	0.075 J	1.04 J	U2C-3	0.347	0.208 J	0.975 J	0.068 U	24 U	WR03SD; WR05SD	2.1	0.255 J	10.7 U
Hexachlorobutadiene	µg/kg	72	4	5.6	0.21	0.4	UG12A	0.3325	0.36 J	0.394 J	0.0363 U	21 U	HC08	1.103	0.07 U	10 U
Hexachlorocyclopentadiene	µg/kg	63	0	0	--	--	--	--	--	--	21 UJ	150 U	G027; UG11C	17	15 U	30 U
Hexachloroethane	µg/kg	72	3	4.2	0.56 J	1.3 NJ	WR-PG-Ref03	0.8267	0.62 J	1.232 J	0.0536 U	50 UJ	HC-SS29; HC-SS31; HC-SS32	1.941	0.08 U	17.03 U
Isophorone	µg/kg	63	0	0	--	--	--	--	--	--	1 U	25 UJ	WR01	2.7	1.2 U	12 U
Nitrobenzene	µg/kg	63	0	0	--	--	--	--	--	--	2.2 U	25 UJ	WR01	3.2	1.6 U	12 U
N-Nitrosodimethylamine	µg/kg	63	1	1.6	6.6 JT	6.6 JT	UG03A2	6.6	6.6 JT	6.6 JT	6.1 UJ	31 U	G027; UG11C	5.9	4.8 U	12 U
N-Nitrosodiphenylamine	µg/kg	72	0	0	--	--	--	--	--	--	1.6 U	25 UJ	WR01	3.7	1.8 U	12 U
N-Nitrosodipropylamine	µg/kg	63	0	0	--	--	--	--	--	--	2.4 U	25 UJ	WR01	3.6	2.4 U	12 U

Table D1.3-4. Summary Statistics for All Chemicals in Surface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Phenols																
2,3,4,5-Tetrachlorophenol	µg/kg	63	1	1.6	7.5 J	7.5 J	UG11C	7.5	7.5 J	7.5 J	0.33 U	25 UJ	WR01	2.9	0.6 U	12 U
2,3,4,6;2,3,5,6-Tetrachlorophenol coelution	µg/kg	18	0	0	--	--	--	--	--	--	0.53 U	5.4 U	U6TOC-2; U6TOC-3	1.2	1.4 U	2.7 U
2,3,4,6-Tetrachlorophenol	µg/kg	10	0	0	--	--	--	--	--	--	21 U	25 U	WR01	12	12 UJ	12 UJ
2,3,5,6-Tetrachlorophenol	µg/kg	35	0	0	--	--	--	--	--	--	0.21 U	7.1 U	G080	0.59	0.17 U	3 U
2,4,5-Trichlorophenol	µg/kg	63	0	0	--	--	--	--	--	--	0.43 U	25 U	WR01	2.7	0.65 U	12 UJ
2,4,6-Trichlorophenol	µg/kg	63	2	3.2	0.27 J	2.1 J	U1C-1	1.2	1.2 J	2 J	0.14 U	25 UJ	WR01	2.4	0.27 U	12 UJ
2,4-Dichlorophenol	µg/kg	63	0	0	--	--	--	--	--	--	1 U	25 UJ	WR01	2.7	1.4 U	12 U
2,4-Dimethylphenol	µg/kg	60	0	0	--	--	--	--	--	--	5.5 UJ	110 U	HC08	8.1	4.8 U	15 UJ
2,4-Dinitrophenol	µg/kg	63	0	0	--	--	--	--	--	--	17 U	120 UJ	WR01; WR02SD; WR03SD; WR05SD; WR06SD	26	27 U	60 UJ
2-Chlorophenol	µg/kg	63	0	0	--	--	--	--	--	--	2 U	25 UJ	WR01	3.1	1.4 U	12 U
2-Methylphenol	µg/kg	72	0	0	--	--	--	--	--	--	1.5 U	25 UJ	WR01	4	2.7 U	12 U
2-Nitrophenol	µg/kg	63	0	0	--	--	--	--	--	--	1.5 U	25 UJ	WR01	3.2	1.9 U	12 U
3- and 4-Methylphenol Coelution	µg/kg	7	2	28.6	7.3 J	11 J	HC08	9.2	9.2 J	11 J	7.3 J	100 U	HC-SS29; HC-SS31; HC-SS32	32	50 U	50 U
4,6-Dinitro-2-methylphenol	µg/kg	63	0	0	--	--	--	--	--	--	1.4 U	130 UJ	WR01	10	1.4 U	60 U
4-Chloro-3-methylphenol	µg/kg	63	2	3.2	2 J	5.2 J	G080	3.6	3.6 J	5 J	1.4 U	25 UJ	WR01	3.1	1.7 U	12 UJ
4-Methylphenol	µg/kg	65	35	53.8	1.6 J	44 J	UG11C	9.5	6.4 J	25 J	1.5 U	44 J	UG11C	7.5	6 J	16 J
4-Nitrophenol	µg/kg	63	0	0	--	--	--	--	--	--	7.5 UT	120 UJ	WR01; WR02SD; WR03SD; WR05SD; WR06SD; WR07SD	24	22 U	60 U
Pentachlorophenol	µg/kg	78	6	7.7	1.5 J	12	U1C-1	4.6	2.6 J	11 J	0.25 U	250 U	HC-SS29; HC-SS31; HC-SS32	14	1.6 U	110 U
Phenol	µg/kg	72	13	18.1	2.4 J	18 J	G080	6.2	4.6 J	14 J	2.2 U	100 U	HC-SS29; HC-SS31; HC-SS32	9.9	7 U	40 U
Petroleum																
Total Petroleum Hydrocarbons (Diesel)	mg/kg	43	34	79.1	2.6 T	69 J	UG02F	36.1	35.5 J	59.1 J	2.6 T	69 J	UG02F	30.1	30.3 JT	57.8 J
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	32	32	100	1.7 T	49.5 JT	G027	22.1	20.4 J	38.9 J	1.7 T	49.5 JT	G027	22.1	20.4 J	38.9 J
Total Petroleum Hydrocarbons (Gasoline)	mg/kg	16	0	0	--	--	--	--	--	--	1.6 U	37 U	HC04	8.8	6.8 U	18 U
Total Petroleum Hydrocarbons (Heavy Oil)	mg/kg	4	0	0	--	--	--	--	--	--	25 U	25 U	HC-SS29; HC-SS31; HC-SS32	13	13 U	13 U
Jet fuel A	mg/kg	4	0	0	--	--	--	--	--	--	10 U	10 U	HC-SS29; HC-SS31; HC-SS32	5	5 U	5 U
JP-4 jet fuel	mg/kg	4	0	0	--	--	--	--	--	--	10 UJ	10 UJ	HC-SS29; HC-SS31; HC-SS32	5	5 UJ	5 UJ
Kerosene	mg/kg	4	0	0	--	--	--	--	--	--	10 U	10 U	HC-SS29; HC-SS31; HC-SS32	5	5 U	5 U
Lube Oil	mg/kg	4	0	0	--	--	--	--	--	--	25 U	25 U	HC-SS29; HC-SS31; HC-SS32	13	13 U	13 U
Mineral spirits	mg/kg	4	0	0	--	--	--	--	--	--	10 U	10 U	HC-SS29; HC-SS31; HC-SS32	5	5 U	5 U
Naphtha distillate	mg/kg	4	0	0	--	--	--	--	--	--	10 UJ	10 UJ	HC-SS29; HC-SS31; HC-SS32	5	5 UJ	5 UJ
Non-petroleum hydrocarbons	mg/kg	4	0	0	--	--	--	--	--	--	50 U	50 U	HC-SS29; HC-SS31; HC-SS32	30	30 U	30 U
Total Petroleum Hydrocarbons (Residual)	mg/kg	39	36	92.3	9.2 T	420 J	UG02F	226	219 J	390 J	9.2 T	420 J	UG02F	210	214 JT	390 J
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	32	32	100	6.9 T	315 JT	G027	96.8	86 J	182 J	6.9 T	315 JT	G027	96.8	86 J	182 J
Total Petroleum Hydrocarbons	mg/kg	43	39	90.7	11.8 A	489 JA	UG02F	254	250 JA	447 J	11.8 A	489 JA	UG02F	232	240	445 J
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	32	32	100	8.6 A	365 T	G027	119	108 J	217 J	8.6 A	365 T	G027	119	108 J	217 J

Table D1.3-4. Summary Statistics for All Chemicals in Surface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Herbicides																
2,4,5-T	µg/kg	3	0	0	--	--	--	--	--	--	3 U	4.1 U	WR-PG-Ref03	1.7	1.5 U	2 U
2,4-D	µg/kg	3	0	0	--	--	--	--	--	--	3.6 U	4.9 U	WR-PG-Ref03	2	1.9 U	2.4 U
2,4-DB	µg/kg	3	0	0	--	--	--	--	--	--	21 U	28 U	WR-PG-Ref03	12	11 U	14 U
Dalapon	µg/kg	3	1	33.3	24 J	24 J	WR-PG-Ref01	24	24 J	24 J	11 U	24 J	WR-PG-Ref01	12	7.5 U	22 J
Dicamba	µg/kg	3	0	0	--	--	--	--	--	--	4.4 U	6 U	WR-PG-Ref03	2.5	2.3 U	2.9 U
Dichloroprop	µg/kg	3	0	0	--	--	--	--	--	--	3.9 U	5.4 U	WR-PG-Ref03	2.2	2 U	2.6 U
Dinoseb	µg/kg	3	0	0	--	--	--	--	--	--	3.9 U	5.4 U	WR-PG-Ref03	2.2	2 U	2.6 U
MCPA	µg/kg	3	0	0	--	--	--	--	--	--	380 U	510 U	WR-PG-Ref03	210	190 U	250 U
MCPP	µg/kg	3	0	0	--	--	--	--	--	--	590 U	2500 U	WR-PG-Ref03	730	650 U	1200 U
Silvex	µg/kg	3	0	0	--	--	--	--	--	--	2.8 U	3.9 U	WR-PG-Ref03	1.6	1.5 U	1.9 U
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	µg/kg	3	0	0	--	--	--	--	--	--	0.048 U	0.066 U	WR-PG-Ref03	0.0272	0.0245 U	0.0322 U
1,1,1-Trichloroethane	µg/kg	13	0	0	--	--	--	--	--	--	0.092 U	10 U	WR01	3.15	3.7 U	4.94 U
1,1,2,2-Tetrachloroethane	µg/kg	13	0	0	--	--	--	--	--	--	0.15 U	10 U	WR01	3.2	3.7 U	4.9 U
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	10	0	0	--	--	--	--	--	--	6.6 U	10 U	WR01	4.1	4 U	5 U
1,1,2-Trichloroethane	µg/kg	13	0	0	--	--	--	--	--	--	0.092 U	10 U	WR01	3.15	3.7 U	4.94 U
1,1-Dichloroethane	µg/kg	13	0	0	--	--	--	--	--	--	0.088 U	10 U	WR01	3.15	3.7 U	4.94 U
1,1-Dichloroethene	µg/kg	10	0	0	--	--	--	--	--	--	0.13 U	9.8 U	BH04SD	2.7	3.6 U	4.5 U
1,2,3-Trichlorobenzene	µg/kg	10	0	0	--	--	--	--	--	--	6.6 U	10 U	WR01	4.1	4 U	5 U
1,2,3-Trichloropropane	µg/kg	3	0	0	--	--	--	--	--	--	0.17 U	0.24 U	WR-PG-Ref03	0.098	0.09 U	0.12 U
1,2-Dibromo-3-chloropropane	µg/kg	10	0	0	--	--	--	--	--	--	6.6 U	10 U	WR01	4.1	4 U	5 U
1,2-Dichloroethane	µg/kg	13	0	0	--	--	--	--	--	--	0.048 U	10 U	WR01	3.15	3.7 U	4.94 U
1,2-Dichloropropane	µg/kg	13	0	0	--	--	--	--	--	--	0.055 U	10 U	WR01	3.15	3.7 U	4.94 U
1,4-Dichloro-trans-2-butene	µg/kg	3	0	0	--	--	--	--	--	--	0.79 U	1.1 U	WR-PG-Ref03	0.45	0.41 U	0.54 U
2-Chloroethyl vinyl ether	µg/kg	3	0	0	--	--	--	--	--	--	0.24 UJ	0.32 UJ	WR-PG-Ref03	0.13	0.12 UJ	0.16 UJ
Acetone	µg/kg	13	1	7.7	54	54	BH04SD	54	54	54	8.9 U	54	BH04SD	11	8 U	28
Acrylonitrile	µg/kg	3	0	0	--	--	--	--	--	--	0.36 U	0.49 U	WR-PG-Ref03	0.2	0.19 U	0.24 U
Benzene	µg/kg	17	3	17.6	0.079 J	0.12 J	WR-PG-Ref03	0.0927	0.079 J	0.116 J	0.079 J	10 U	WR01	3.01	3.6 U	4.92 U
Bromochloromethane	µg/kg	13	0	0	--	--	--	--	--	--	0.093 U	10 U	WR01	3.15	3.7 U	4.94 U
Bromodichloromethane	µg/kg	13	0	0	--	--	--	--	--	--	0.11 U	10 U	WR01	3.2	3.7 U	4.9 U
Bromoform	µg/kg	13	0	0	--	--	--	--	--	--	0.071 U	10 U	WR01	3.15	3.7 U	4.94 U
Bromomethane	µg/kg	13	0	0	--	--	--	--	--	--	0.58 UJ	10 U	WR01	3.2	3.7 U	4.9 U
BTEX	µg/kg	17	3	17.6	0.079 JT	2 JT	WR-PG-Ref03	0.719	0.079 JT	1.81 J	0.079 JT	10 UT	WR01	3.12	3.6 UT	4.92 U
Carbon disulfide	µg/kg	13	0	0	--	--	--	--	--	--	0.21 U	10 U	WR01	3.2	3.7 U	4.9 U
Carbon tetrachloride	µg/kg	13	0	0	--	--	--	--	--	--	0.16 U	10 U	WR01	3.2	3.7 U	4.9 U
Chlorobenzene	µg/kg	13	0	0	--	--	--	--	--	--	0.11 U	10 U	WR01	3.2	3.7 U	4.9 U
Chlorodibromomethane	µg/kg	13	0	0	--	--	--	--	--	--	0.11 U	10 U	WR01	3.2	3.7 U	4.9 U
Chloroethane	µg/kg	13	0	0	--	--	--	--	--	--	0.44 U	10 U	WR01	3.2	3.7 U	4.9 U
Chloroform	µg/kg	13	0	0	--	--	--	--	--	--	0.087 U	10 U	WR01	3.15	3.7 U	4.94 U
Chloromethane	µg/kg	13	0	0	--	--	--	--	--	--	0.3 U	10 U	WR01	3.2	3.7 U	4.9 U
cis-1,2-Dichloroethene	µg/kg	10	0	0	--	--	--	--	--	--	6.6 U	10 U	WR01	4.1	4 U	5 U
cis-1,3-Dichloropropene	µg/kg	13	0	0	--	--	--	--	--	--	0.048 U	10 U	WR01	3.15	3.7 U	4.94 U
Dichlorodifluoromethane	µg/kg	13	0	0	--	--	--	--	--	--	0.17 U	10 U	WR01	3.2	3.7 U	4.9 U
Ethylbenzene	µg/kg	17	0	0	--	--	--	--	--	--	0.11 U	10 U	WR01	3	3.6 U	4.9 U
Ethylene dibromide	µg/kg	13	0	0	--	--	--	--	--	--	0.079 U	10 U	WR01	3.15	3.7 U	4.94 U
Hexahydrobenzene	µg/kg	10	0	0	--	--	--	--	--	--	6.6 U	10 U	WR01	4.1	4 U	5 U
Isopropylbenzene	µg/kg	13	0	0	--	--	--	--	--	--	0.068 U	10 U	WR01	3.15	3.7 U	4.94 U
m,p-Xylene	µg/kg	17	0	0	--	--	--	--	--	--	0.21 U	10 U	WR01	3	3.6 U	4.9 U
Methyl acetate	µg/kg	10	0	0	--	--	--	--	--	--	6.6 U	10 U	WR01	4.1	4 U	5 U
Methyl iodide	µg/kg	3	0	0	--	--	--	--	--	--	1.1 U	1.5 U	WR-PG-Ref03	0.62	0.55 U	0.73 U
Methyl isobutyl ketone	µg/kg	13	0	0	--	--	--	--	--	--	0.38 U	21 U	WR01	6.4	7.5 U	10 U
Methyl n-butyl ketone	µg/kg	13	0	0	--	--	--	--	--	--	0.99 U	21 U	WR01	6.4	7.5 U	10 U
Methyl tert-butyl ether	µg/kg	13	0	0	--	--	--	--	--	--	0.061 U	10 U	WR01	3.15	3.7 U	4.94 U
Methylcyclohexane	µg/kg	10	0	0	--	--	--	--	--	--	6.6 U	10 U	WR01	4.1	4 U	5 U
Methylene bromide	µg/kg	3	0	0	--	--	--	--	--	--	0.13 U	0.18 U	WR-PG-Ref03	0.073	0.065 U	0.088 U
Methylene chloride	µg/kg	13	0	0	--	--	--	--	--	--	2.6 U	23 U	WR02SD	6.2	6 U	11 U
Methylethyl ketone	µg/kg	10	0	0	--	--	--	--	--	--	7.9 UJ	21 U	WR01	7.8	7.8 U	10 U
o-Xylene	µg/kg	17	0	0	--	--	--	--	--	--	0.12 U	10 U	WR01	3	3.6 U	4.9 U

Table D1.3-4. Summary Statistics for All Chemicals in Surface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Styrene	µg/kg	13	0	0	--	--	--	--	--	--	0.12 U	10 U	WR01	3.2	3.7 U	4.9 U
Tetrachloroethene	µg/kg	13	0	0	--	--	--	--	--	--	0.15 U	10 U	WR01	3.2	3.7 U	4.9 U
Toluene	µg/kg	17	1	5.9	1.9	1.9	WR-PG-Ref03	1.9	1.9	1.9	0.24 U	10 U	WR01	3.1	3.6 U	4.9 U
trans-1,2-Dichloroethene	µg/kg	13	0	0	--	--	--	--	--	--	0.3 U	10 U	WR01	3.2	3.7 U	4.9 U
trans-1,3-Dichloropropene	µg/kg	13	0	0	--	--	--	--	--	--	0.068 U	10 U	WR01	3.15	3.7 U	4.94 U
Trichloroethene	µg/kg	17	0	0	--	--	--	--	--	--	0.096 U	10 U	WR01	3	3.6 U	4.92 U
Trichlorofluoromethane	µg/kg	13	0	0	--	--	--	--	--	--	0.13 U	10 U	WR01	3.2	3.7 U	4.9 U
Vinyl chloride	µg/kg	13	0	0	--	--	--	--	--	--	0.14 U	10 U	WR01	3.2	3.7 U	4.9 U
Xylene	µg/kg	17	0	0	--	--	--	--	--	--	0.21 UT	10 UT	WR01	3	3.6 UT	4.9 U

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

[c] Total PCBs are total PCB congeners whenever available and total Aroclors if not.

-- data not available.
BaPEq - benzo(a)pyrene equivalent
BTEX - benzene, toluene, ethylbenzene, and total xylene
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - non-detect
PAH - polycyclic aromatic hydrocarbon
PBDE - polybrominated diphenyl ether
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-5. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Grainsize																
>9 Phi clay	percent	3	3	100	3.19 T	4.18	C016	3.69	3.7	4.13	3.19 T	4.18	C016	3.69	3.7	4.13
8-9 Phi clay	percent	3	3	100	2.24 T	3.21	C016	2.73	2.73	3.16	2.24 T	3.21	C016	2.73	2.73	3.16
Coarse sand	percent	3	3	100	0.39	1.3 T	C032	0.97	1.22	1.29	0.39	1.3 T	C032	0.97	1.22	1.29
Coarse silt	percent	3	3	100	10.3 T	23.7	C016	15.1	11.4	22.5	10.3 T	23.7	C016	15.1	11.4	22.5
Fine gravel	percent	3	3	100	0.1	0.37	C016	0.25	0.29 T	0.36	0.1	0.37	C016	0.25	0.29 T	0.36
Fine sand	percent	3	3	100	25.2	51.6	C017	40.5	44.8 T	50.9	25.2	51.6	C017	40.5	44.8 T	50.9
Fine silt	percent	3	3	100	2.55 T	4.96	C016	3.69	3.55	4.82	2.55 T	4.96	C016	3.69	3.55	4.82
Fines	percent	3	3	100	22.2 T	43.6 T	C016	30.6	25.9 T	41.8	22.2 T	43.6 T	C016	30.6	25.9 T	41.8
Medium gravel	percent	3	3	100	0 T	0 T	C016; C017; C032	0	0	0	0 T	0 T	C016; C017; C032	0	0	0
Medium sand	percent	3	3	100	2.74	12.8 T	C032	8.44	9.78	12.5	2.74	12.8 T	C032	8.44	9.78	12.5
Medium silt	percent	3	3	100	1.11 T	2.89	C016	1.74	1.22	2.72	1.11 T	2.89	C016	1.74	1.22	2.72
Very coarse sand	percent	3	3	100	0.25	0.72	C016	0.541	0.653 T	0.713	0.25	0.72	C016	0.541	0.653 T	0.713
Very fine sand	percent	3	3	100	16	24.5	C016	20.3	20.3 T	24.1	16	24.5	C016	20.3	20.3 T	24.1
Very fine silt	percent	3	3	100	2.8 T	4.68	C016	3.6	3.31	4.54	2.8 T	4.68	C016	3.6	3.31	4.54
Conventionals																
Total organic carbon	percent	3	3	100	1.15	1.8 T	C016	1.47	1.47	1.77	1.15	1.8 T	C016	1.47	1.47	1.77
Total solids	percent	3	3	100	59.8	65.7	C017	62	60.4 T	65.2	59.8	65.7	C017	62	60.4 T	65.2
Metals																
Aluminum	mg/kg	3	3	100	18900	25100	C032	22700	24200	25000	18900	25100	C032	22700	24200	25000
Antimony	mg/kg	3	3	100	0.138 J	0.365 J	C017	0.228	0.18 J	0.347 J	0.138 J	0.365 J	C017	0.228	0.18 J	0.347 J
Arsenic	mg/kg	3	3	100	2.37	2.45	C032	2.41	2.4	2.45	2.37	2.45	C032	2.41	2.4	2.45
Cadmium	mg/kg	3	3	100	0.132	0.217	C016	0.179	0.187	0.214	0.132	0.217	C016	0.179	0.187	0.214
Chromium	mg/kg	3	3	100	19.7	23.4	C032	21.2	20.5	23.1	19.7	23.4	C032	21.2	20.5	23.1
Copper	mg/kg	3	3	100	26	33	C016	28.6	26.8	32.4	26	33	C016	28.6	26.8	32.4
Lead	mg/kg	3	3	100	9.34 J	19.4 J	C016	14.4	14.6 J	18.9 J	9.34 J	19.4 J	C016	14.4	14.6 J	18.9 J
Mercury	mg/kg	3	3	100	0.031	0.172 T	C016	0.0943	0.08	0.163	0.031	0.172 T	C016	0.0943	0.08	0.163
Nickel	mg/kg	3	3	100	19	21.1	C017	20.2	20.6	21.1	19	21.1	C017	20.2	20.6	21.1
Selenium	mg/kg	3	3	100	0.08	0.11	C016	0.09	0.08	0.11	0.08	0.11	C016	0.09	0.08	0.11
Silver	mg/kg	3	3	100	0.109	0.174	C017	0.145	0.151	0.172	0.109	0.174	C017	0.145	0.151	0.172
Zinc	mg/kg	3	3	100	65.8	119	C017	87.6	78.1	115	65.8	119	C017	87.6	78.1	115
Butyltins																
Butyltin ion	µg/kg	3	1	33.3	0.96 J	0.96 J	C032	0.96	0.96 J	0.96 J	0.046 U	0.96 J	C032	0.336	0.025 U	0.867 J
Dibutyltin ion	µg/kg	3	0	0	--	--	--	--	--	--	0.043 U	0.047 U	C016; C032	0.0228	0.0235 U	0.0235 U
Tetrabutyltin	µg/kg	3	0	0	--	--	--	--	--	--	0.11 U	0.12 U	C016; C032	0.058	0.06 U	0.06 U
Tributyltin ion	µg/kg	3	0	0	--	--	--	--	--	--	0.085 U	0.094 U	C032	0.0453	0.0465 U	0.047 U
PCB Aroclors																
Aroclor 1016	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1.4 U	C032	0.57	0.5 U	0.68 U
Aroclor 1221	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1 U	C016; C017; C032	0.5	0.5 U	0.5 U
Aroclor 1232	µg/kg	3	0	0	--	--	--	--	--	--	1 U	2.8 U	C032	0.8	0.5 U	1.3 U
Aroclor 1242	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1.5 U	C032	0.58	0.5 U	0.73 U
Aroclor 1248	µg/kg	3	0	0	--	--	--	--	--	--	1 U	11 U	C017	2.3	0.85 U	5 U
Aroclor 1254	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1.8 U	C032	0.63	0.5 U	0.86 U
Aroclor 1260	µg/kg	3	0	0	--	--	--	--	--	--	1.5 U	9.9 U	C017	2.8	2.8 U	4.7 U
Aroclor 1262	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1 U	C016; C017; C032	0.5	0.5 U	0.5 U
Aroclor 1268	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1 U	C016; C017; C032	0.5	0.5 U	0.5 U
Aroclors	µg/kg	3	0	0	--	--	--	--	--	--	2.8 UT	11 UT	C017	3.2	2.8 UT	5.2 U
PCBs[c]																
Total PCBs	µg/kg	3	0	0	--	--	--	--	--	--	2.8 UT	11 UT	C017	3.2	2.8 UT	5.2 U
PCDD/Fs Homologs																
Heptachlorodibenzofuran homologs	pg/g	3	3	100	14.9	50.6	C016	35.4	40.7	49.6	14.9	50.6	C016	35.4	40.7	49.6
Heptachlorodibenzo-p-dioxin homologs	pg/g	3	3	100	51.2	125	C016	93.1	103	123	51.2	125	C016	93.1	103	123
Hexachlorodibenzofuran homologs	pg/g	3	3	100	6.52 J	34.5	C016	20.5	20.4	33.1	6.52 J	34.5	C016	20.5	20.4	33.1
Hexachlorodibenzo-p-dioxin homologs	pg/g	3	3	100	5.94 J	20.4	C016	14.7	17.9	20.2	5.94 J	20.4	C016	14.7	17.9	20.2
Octachlorodibenzofuran	pg/g	3	3	100	14.8	43.6	C017	32.8	40.1	43.3	14.8	43.6	C017	32.8	40.1	43.3
Octachlorodibenzo-p-dioxin	pg/g	3	3	100	261	779	C016	601	763	777	261	779	C016	601	763	777
Pentachlorodibenzofuran homologs	pg/g	3	3	100	2.05 J	23.4	C016	11.1	7.95	21.9	2.05 J	23.4	C016	11.1	7.95	21.9
Pentachlorodibenzo-p-dioxin homologs	pg/g	3	3	100	0.563 J	5.13 J	C016	2.37	1.41 J	4.76 J	0.563 J	5.13 J	C016	2.37	1.41 J	4.76 J
Tetrachlorodibenzofuran homologs	pg/g	3	3	100	0.87 J	9.63	C016	4.37	2.62	8.93	0.87 J	9.63	C016	4.37	2.62	8.93
Tetrachlorodibenzo-p-dioxin homologs	pg/g	3	2	66.7	0.936 J	5.57	C016	3.25	3.25 J	5.34 J	0.142 U	5.57	C016	2.19	0.936 J	5.11 J
Total PCDD/F	pg/g	3	3	100	359 T	1090 T	C016	816	1000 T	1080	359 T	1090 T	C016	816	1000 T	1080

Table D1.3-5. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCDD/Fs																
1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/g	3	3	100	3.87 J	15.7	C016	9.81	9.86	15.1	3.87 J	15.7	C016	9.81	9.86	15.1
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/g	3	3	100	27.4	54.8	C016	41.7	42.8	53.6	27.4	54.8	C016	41.7	42.8	53.6
1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/g	3	3	100	0.333 J	1.1 J	C016	0.738	0.782 J	1.07 J	0.333 J	1.1 J	C016	0.738	0.782 J	1.07 J
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	3	3	100	0.305 J	1.62 J	C016	0.869	0.683 J	1.53 J	0.305 J	1.62 J	C016	0.869	0.683 J	1.53 J
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/g	3	3	100	0.191 J	0.527 J	C016	0.414	0.524 J	0.527 J	0.191 J	0.527 J	C016	0.414	0.524 J	0.527 J
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	3	3	100	0.219 J	1.42 J	C016	0.835	0.865 J	1.36 J	0.219 J	1.42 J	C016	0.835	0.865 J	1.36 J
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/g	3	3	100	1.01 J	2.98 J	C016	2.01	2.03 J	2.89 J	1.01 J	2.98 J	C016	2.01	2.03 J	2.89 J
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	3	0	0	--	--	--	--	--	--	0.0593 U	0.203 U	C016	0.06505	0.064 U	0.09775 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/g	3	3	100	0.545 J	1.49 J	C016	1.03	1.05 J	1.45 J	0.545 J	1.49 J	C016	1.03	1.05 J	1.45 J
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	3	1	33.3	0.286 J	0.286 J	C016	0.286	0.286 J	0.286 J	0.0356 U	0.286 J	C016	0.1118	0.03155 U	0.2606 J
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/g	3	1	33.3	0.532 J	0.532 J	C016	0.532	0.532 J	0.532 J	0.0465 U	0.532 J	C016	0.2046	0.0585 U	0.4847 J
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	3	3	100	0.301 J	1.39 J	C016	0.811	0.742 J	1.33 J	0.301 J	1.39 J	C016	0.811	0.742 J	1.33 J
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	3	1	33.3	0.485 J	0.485 J	C016	0.485	0.485 J	0.485 J	0.0356 U	0.485 J	C016	0.1779	0.031 U	0.4396 J
2,3,7,8-Tetrachlorodibenzofuran	pg/g	3	1	33.3	0.435 J	0.435 J	C016	0.435	0.435 J	0.435 J	0.234 U	0.435 J	C016	0.223	0.118 U	0.403 J
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	3	0	0	--	--	--	--	--	--	0.0445 U	0.191 U	C016	0.06292	0.071 U	0.09305 U
TCDD TEQ (ND = 0)	pg/g	3	3	100	0.656 T	2.63 T	C016	1.55	1.37 T	2.5	0.656 T	2.63 T	C016	1.55	1.37 T	2.5
Total TCDD TEQ (ND = 0)	pg/g	3	3	100	0.656 T	2.63 T	C016	1.55	1.37 T	2.5	0.656 T	2.63 T	C016	1.55	1.37 T	2.5
Pesticides																
2,4'-DDD	µg/kg	3	3	100	0.12 J	2	C016	1.2	1.6 J	2 J	0.12 J	2	C016	1.2	1.6 J	2 J
2,4'-DDE	µg/kg	3	0	0	--	--	--	--	--	--	0.044 U	0.2 U	C016; C017	0.074	0.1 U	0.1 U
2,4'-DDT	µg/kg	3	2	66.7	0.73 J	0.95	C017	0.84	0.84 J	0.94 J	0.2 U	0.95	C017	0.59	0.73 J	0.93 J
4,4'-DDD	µg/kg	3	3	100	0.29	3.7	C016	1.8	1.3	3.5	0.29	3.7	C016	1.8	1.3	3.5
4,4'-DDE	µg/kg	3	3	100	0.58	2.4 J	C016	1.7	2 J	2.4 J	0.58	2.4 J	C016	1.7	2 J	2.4 J
4,4'-DDT	µg/kg	3	2	66.7	0.9	0.91	C016	0.91	0.91	0.91	0.13 U	0.91	C016	0.63	0.9	0.91
Aldrin	µg/kg	3	0	0	--	--	--	--	--	--	0.055 U	0.2 U	C016	0.0517	0.0275 U	0.0928 U
alpha-Endosulfan	µg/kg	3	1	33.3	0.15 J	0.15 J	C032	0.15	0.15 J	0.15 J	0.025 U	0.2 U	C016	0.0875	0.1 U	0.145 J
alpha-Hexachlorocyclohexane	µg/kg	3	0	0	--	--	--	--	--	--	0.047 U	0.047 U	C016; C017; C032	0.0235	0.0235 U	0.0235 U
beta-Endosulfan	µg/kg	3	0	0	--	--	--	--	--	--	0.051 U	0.2 U	C017	0.0503	0.0255 U	0.0926 U
beta-Hexachlorocyclohexane	µg/kg	3	0	0	--	--	--	--	--	--	0.054 U	0.2 U	C032	0.0513	0.027 U	0.0927 U
cis-Chlordane	µg/kg	3	3	100	0.11 J	0.98 J	C016	0.45	0.25 J	0.91 J	0.11 J	0.98 J	C016	0.45	0.25 J	0.91 J
cis-Nonachlor	µg/kg	3	0	0	--	--	--	--	--	--	0.053 U	0.71 U	C017	0.217	0.27 U	0.347 U
delta-Hexachlorocyclohexane	µg/kg	3	0	0	--	--	--	--	--	--	0.037 U	0.037 U	C016; C017; C032	0.0185	0.0185 U	0.0185 U
Dieldrin	µg/kg	3	0	0	--	--	--	--	--	--	0.036 U	0.036 U	C016; C017; C032	0.018	0.018 U	0.018 U
Endosulfan sulfate	µg/kg	3	0	0	--	--	--	--	--	--	0.053 U	0.2 U	C016; C032	0.0755	0.1 U	0.1 U
Endrin	µg/kg	3	0	0	--	--	--	--	--	--	0.046 U	0.2 U	C017	0.0487	0.023 U	0.0923 U
Endrin aldehyde	µg/kg	3	0	0	--	--	--	--	--	--	0.047 U	0.047 U	C016; C017; C032	0.0235	0.0235 U	0.0235 U
Endrin ketone	µg/kg	3	0	0	--	--	--	--	--	--	0.042 U	0.23 U	C017	0.0787	0.1 U	0.114 U
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	3	0	0	--	--	--	--	--	--	0.043 U	0.2 U	C016; C032	0.0738	0.1 U	0.1 U
Heptachlor	µg/kg	3	0	0	--	--	--	--	--	--	0.07 U	0.07 U	C016; C017; C032	0.035	0.035 U	0.035 U
Heptachlor epoxide	µg/kg	3	0	0	--	--	--	--	--	--	0.057 U	0.24 U	C017	0.0828	0.1 U	0.118 U
Methoxychlor	µg/kg	3	0	0	--	--	--	--	--	--	0.054 U	0.4 U	C032	0.0973	0.065 U	0.187 U
Mirex	µg/kg	3	0	0	--	--	--	--	--	--	0.049 U	0.049 U	C016; C017; C032	0.0245	0.0245 U	0.0245 U
Oxychlordane	µg/kg	3	1	33.3	0.29	0.29	C016	0.29	0.29	0.29	0.054 U	0.29	C016	0.115	0.027 U	0.264
Total chlordanes	µg/kg	3	3	100	0.187 T	2.93 T	C016	1.34	0.89 T	2.73	0.187 T	2.93 T	C016	1.34	0.89 T	2.73
Total endosulfan	µg/kg	3	1	33.3	0.15 T	0.15 T	C032	0.15	0.15 T	0.15 T	0.15 T	0.2 UT	C016; C017	0.12	0.1 UT	0.15
Total DDD	µg/kg	3	3	100	0.41 T	5.7 T	C016	3	2.9 T	5.4	0.41 T	5.7 T	C016	3	2.9 T	5.4
Total DDx	µg/kg	3	3	100	0.99 T	9.74 T	C016	5.83	6.75 T	9.44	0.99 T	9.74 T	C016	5.83	6.75 T	9.44
Total DDE	µg/kg	3	3	100	0.58 T	2.4 T	C016	1.7	2 T	2.4	0.58 T	2.4 T	C016	1.7	2 T	2.4
Total DDT	µg/kg	3	2	66.7	1.64 T	1.85 T	C017	1.75	1.75	1.84	0.2 UT	1.85 T	C017	1.2	1.64 T	1.83
Toxaphene	µg/kg	3	0	0	--	--	--	--	--	--	6.1 U	14 U	C016; C017	5.7	7 U	7 U
trans-Chlordane	µg/kg	3	3	100	0.077 J	0.94	C016	0.552	0.64	0.91	0.077 J	0.94	C016	0.552	0.64	0.91
trans-Nonachlor	µg/kg	3	1	33.3	0.72	0.72	C016	0.72	0.72	0.72	0.036 U	0.72	C016	0.253	0.022 U	0.65
Polycyclic Aromatic Hydrocarbons																
1-Methylnaphthalene	µg/kg	3	3	100	0.79 J	4.4	C016	3	3.8	4.3	0.79 J	4.4	C016	3	3.8	4.3
2-Methylnaphthalene	µg/kg	3	3	100	1.3 J	6.1	C016	4.3	5.4	6	1.3 J	6.1	C016	4.3	5.4	6
Acenaphthene	µg/kg	3	3	100	0.71 J	4.1	C016	2.6	2.9	4	0.71 J	4.1	C016	2.6	2.9	4
Acenaphthylene	µg/kg	3	3	100	0.91 J	8.4	C016	3.7	1.8 J	7.7 J	0.91 J	8.4	C016	3.7	1.8 J	7.7 J
Anthracene	µg/kg	3	3	100	3	13	C016	7.1	5.4	12	3	13	C016	7.1	5.4	12
Benzo(a)anthracene	µg/kg	3	3	100	25	28	C016	26	26	28	25	28	C016	26	26	28
Benzo(a)pyrene	µg/kg	3	3	100	20	34	C016	29	32	34	20	34	C016	29	32	34
Benzo(b)fluoranthene	µg/kg	3	3	100	30	46	C017	40	44	46	30	46	C017	40	44	46

Table D1.3-5. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Benzo(e)pyrene	µg/kg	3	3	100	17	29	C016	25	28	29	17	29	C016	25	28	29
Benzo(g,h,i)perylene	µg/kg	3	3	100	13	35	C016	26	31	35	13	35	C016	26	31	35
Benzo(k)fluoranthene	µg/kg	3	3	100	11	16	C016; C017	14	16	16	11	16	C016; C017	14	16	16
C1-Chrysene	µg/kg	3	3	100	11	22	C017	17	18	22	11	22	C017	17	18	22
C1-Dibenzothiophene	µg/kg	3	3	100	1.4 J	12	C016	7.3	8.4	12	1.4 J	12	C016	7.3	8.4	12
C1-Fluoranthene/pyrene	µg/kg	3	3	100	25	50	C016	34	26	48	25	50	C016	34	26	48
C1-Fluorene	µg/kg	3	3	100	1.1 J	4.8	C016	3.2	3.6	4.7	1.1 J	4.8	C016	3.2	3.6	4.7
C1-Phenanthrene/anthracene	µg/kg	3	3	100	9.1	33	C016	19	15	31	9.1	33	C016	19	15	31
C2-Chrysene	µg/kg	3	3	100	15	25	C016	18	15	24	15	25	C016	18	15	24
C2-Dibenzothiophene	µg/kg	3	3	100	3.1	13	C016	7.2	5.6	12	3.1	13	C016	7.2	5.6	12
C2-Fluoranthene/pyrene	µg/kg	3	3	100	16	28	C016	20	17	27	16	28	C016	20	17	27
C2-Fluorene	µg/kg	3	3	100	3.4	15	C016	8.5	7	14	3.4	15	C016	8.5	7	14
C2-Naphthalene	µg/kg	3	3	100	1.8 J	24	C017	14	16	23	1.8 J	24	C017	14	16	23
C2-Phenanthrene/anthracene	µg/kg	3	3	100	9.6	42	C016	25	24	40	9.6	42	C016	25	24	40
C3-Chrysene	µg/kg	3	3	100	13	29	C016	19	14	28	13	29	C016	19	14	28
C3-Dibenzothiophene	µg/kg	3	3	100	3.5	14	C016	7.3	4.3	13	3.5	14	C016	7.3	4.3	13
C3-Fluoranthene/pyrene	µg/kg	3	3	100	10	22	C016	15	13	21	10	22	C016	15	13	21
C3-Fluorene	µg/kg	3	3	100	4.7	21	C016	12	11	20	4.7	21	C016	12	11	20
C3-Naphthalene	µg/kg	3	3	100	1.9 J	21	C017	13	17	21	1.9 J	21	C017	13	17	21
C3-Phenanthrene/anthracene	µg/kg	3	3	100	10	43	C016	24	20	41	10	43	C016	24	20	41
C4-Chrysene	µg/kg	3	0	0	--	--	--	--	--	--	0.25 U	0.25 U	C016; C017; C032	0.13	0.13 U	0.13 U
C4-Naphthalene	µg/kg	3	3	100	3.7	26	C016	17	20	25	3.7	26	C016	17	20	25
C4-Phenanthrene/anthracene	µg/kg	3	3	100	5.7	20	C016	12	9.7	19	5.7	20	C016	12	9.7	19
Chrysene	µg/kg	3	3	100	29	37	C016	34	36	37	29	37	C016	34	36	37
Dibenzo(a,h)anthracene	µg/kg	3	3	100	4	7.9	C017	6.3	7	7.8	4	7.9	C017	6.3	7	7.8
Dibenzothiophene	µg/kg	3	3	100	0.5 J	3.2	C016	1.6	1.2 J	3 J	0.5 J	3.2	C016	1.6	1.2 J	3 J
Fluoranthene	µg/kg	3	3	100	42	79	C016	54	42	75	42	79	C016	54	42	75
Fluorene	µg/kg	3	3	100	1.1 J	6.4	C016	3.7	3.7	6.1	1.1 J	6.4	C016	3.7	3.7	6.1
Total HPAHs	µg/kg	3	3	100	230 T	404 T	C016	317	317 T	395	230 T	404 T	C016	317	317 T	395
Indeno(1,2,3-cd)pyrene	µg/kg	3	3	100	14	33	C016	26	32	33	14	33	C016	26	32	33
Total LPAHs	µg/kg	3	3	100	23.2 T	129 T	C016	67.1	49.1 T	121	23.2 T	129 T	C016	67.1	49.1 T	121
Naphthalene	µg/kg	3	3	100	4.2	36	C016	16	8.9	33	4.2	36	C016	16	8.9	33
Perylene	µg/kg	3	3	100	18	51	C016	38	46	51	18	51	C016	38	46	51
Phenanthrene	µg/kg	3	3	100	12	55	C016	29	21	52	12	55	C016	29	21	52
Pyrene	µg/kg	3	3	100	41	91	C016	60	49	87	41	91	C016	60	49	87
Total BaPEq	µg/kg	3	3	100	31.1 T	51.7 T	C016	44.4	50.4 T	51.6	31.1 T	51.7 T	C016	44.4	50.4 T	51.6
Total cPAHs	µg/kg	3	3	100	130 T	200 T	C016	170	190 T	200	130 T	200 T	C016	170	190 T	200
Total PAHs	µg/kg	3	3	100	253 T	533 T	C016	384	366 T	516	253 T	533 T	C016	384	366 T	516
Phthalates																
Bis(2-ethylhexyl) phthalate	µg/kg	3	3	100	20 J	3800	C032	1300	110	3400	20 J	3800	C032	1300	110	3400
Butylbenzyl phthalate	µg/kg	3	1	33.3	16	16	C016	16	16	16	3.2 U	16	C016	6.4	1.6 U	15
Dibutyl phthalate	µg/kg	3	3	100	9.9	17	C017	13	12	17	9.9	17	C017	13	12	17
Diethyl phthalate	µg/kg	3	0	0	--	--	--	--	--	--	3.6 U	5.3 U	C017	2.2	2 U	2.6 U
Dimethyl phthalate	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1 U	C016; C017; C032	0.5	0.5 U	0.5 U
Di-n-octyl phthalate	µg/kg	3	0	0	--	--	--	--	--	--	1.7 U	1.7 U	C016; C017; C032	0.85	0.85 U	0.85 U
Semivolatile Organic Compounds																
1,2,4-Trichlorobenzene	µg/kg	3	0	0	--	--	--	--	--	--	2.6 U	2.6 U	C016; C017; C032	1.3	1.3 U	1.3 U
1,2-Dichlorobenzene	µg/kg	3	0	0	--	--	--	--	--	--	2.9 U	2.9 U	C016; C017; C032	1.5	1.5 U	1.5 U
1,3-Dichlorobenzene	µg/kg	3	0	0	--	--	--	--	--	--	3 U	3 U	C016; C017; C032	2	2 U	2 U
1,4-Dichlorobenzene	µg/kg	3	0	0	--	--	--	--	--	--	2.9 U	2.9 U	C016; C017; C032	1.5	1.5 U	1.5 U
2,4-Dinitrotoluene	µg/kg	3	0	0	--	--	--	--	--	--	1.5 U	1.5 U	C016; C017; C032	0.75	0.75 U	0.75 U
2,6-Dinitrotoluene	µg/kg	3	0	0	--	--	--	--	--	--	2 U	2 U	C016; C017; C032	1	1 U	1 U
2-Chloronaphthalene	µg/kg	3	0	0	--	--	--	--	--	--	1.6 U	1.6 U	C016; C017; C032	0.8	0.8 U	0.8 U
2-Nitroaniline	µg/kg	3	0	0	--	--	--	--	--	--	3.2 U	3.2 U	C016; C017; C032	1.6	1.6 U	1.6 U
3,3'-Dichlorobenzidine	µg/kg	3	0	0	--	--	--	--	--	--	3.7 U	3.7 U	C016; C017; C032	1.9	1.9 U	1.9 U
3-Nitroaniline	µg/kg	3	0	0	--	--	--	--	--	--	2.5 U	2.5 U	C016; C017; C032	1.3	1.3 U	1.3 U
4-Bromophenyl phenyl ether	µg/kg	3	0	0	--	--	--	--	--	--	1.6 U	1.6 U	C016; C017; C032	0.8	0.8 U	0.8 U
4-Chloroaniline	µg/kg	3	0	0	--	--	--	--	--	--	1.9 U	1.9 U	C016; C017; C032	0.95	0.95 U	0.95 U
4-Chlorophenyl phenyl ether	µg/kg	3	0	0	--	--	--	--	--	--	1.4 U	1.4 U	C016; C017; C032	0.7	0.7 U	0.7 U
4-Nitroaniline	µg/kg	3	0	0	--	--	--	--	--	--	1.8 U	1.8 U	C016; C017; C032	0.9	0.9 U	0.9 U
Aniline	µg/kg	3	1	33.3	28	28	C032	28	28	28	1.5 U	28	C032	9.8	0.75 U	25
Azobenzene	µg/kg	3	0	0	--	--	--	--	--	--	1.1 U	1.1 U	C016; C017; C032	0.55	0.55 U	0.55 U

Table D1.3-5. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Benzoic acid	µg/kg	3	0	0	--	--	--	--	--	--	96 U	96 U	C016; C017; C032	48	48 U	48 U
Benzyl alcohol	µg/kg	3	0	0	--	--	--	--	--	--	2.1 U	2.1 U	C016; C017; C032	1.1	1.1 U	1.1 U
Bis(2-chloroethoxy) methane	µg/kg	3	0	0	--	--	--	--	--	--	1.5 U	1.5 U	C016; C017; C032	0.75	0.75 U	0.75 U
Bis(2-chloroethyl) ether	µg/kg	3	0	0	--	--	--	--	--	--	1.9 U	1.9 U	C016; C017; C032	0.95	0.95 U	0.95 U
Bis(2-chloroisopropyl) ether	µg/kg	3	0	0	--	--	--	--	--	--	2.6 U	2.6 U	C016; C017; C032	1.3	1.3 U	1.3 U
Carbazole	µg/kg	3	3	100	1.8 J	2.7 J	C016	2.2	2.2 J	2.7 J	1.8 J	2.7 J	C016	2.2	2.2 J	2.7 J
Dibenzofuran	µg/kg	3	3	100	0.61 J	4.6	C016	2.5	2.3 J	4.4 J	0.61 J	4.6	C016	2.5	2.3 J	4.4 J
Hexachlorobenzene	µg/kg	3	1	33.3	0.28	0.28	C016	0.28	0.28	0.28	0.12 U	0.28	C016	0.13	0.06 U	0.26
Hexachlorobutadiene	µg/kg	3	0	0	--	--	--	--	--	--	0.065 U	0.065 U	C016; C017; C032	0.0325	0.0325 U	0.0325 U
Hexachlorocyclopentadiene	µg/kg	3	0	0	--	--	--	--	--	--	29 U	29 U	C016; C017; C032	15	15 U	15 U
Hexachloroethane	µg/kg	3	0	0	--	--	--	--	--	--	0.079 U	0.079 U	C016; C017; C032	0.0395	0.0395 U	0.0395 U
Isophorone	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1 U	C016; C017; C032	0.5	0.5 U	0.5 U
Nitrobenzene	µg/kg	3	0	0	--	--	--	--	--	--	2.2 U	2.2 U	C016; C017; C032	1.1	1.1 U	1.1 U
N-Nitrosodimethylamine	µg/kg	3	0	0	--	--	--	--	--	--	6.1 U	6.1 U	C016; C017; C032	3.1	3.1 U	3.1 U
N-Nitrosodiphenylamine	µg/kg	3	0	0	--	--	--	--	--	--	1.6 U	1.6 U	C016; C017; C032	0.8	0.8 U	0.8 U
N-Nitrosodipropylamine	µg/kg	3	0	0	--	--	--	--	--	--	2.4 U	2.4 U	C016; C017; C032	1.2	1.2 U	1.2 U
Phenols																
2,3,4,5-Tetrachlorophenol	µg/kg	3	0	0	--	--	--	--	--	--	4.6 U	5 U	C016; C032	2.4	2.5 U	2.5 U
2,3,5,6-Tetrachlorophenol	µg/kg	3	0	0	--	--	--	--	--	--	5.7 U	6.2 U	C016	3	3.1 U	3.1 U
2,4,5-Trichlorophenol	µg/kg	3	0	0	--	--	--	--	--	--	4 U	4.3 U	C016; C032	2.1	2.2 U	2.2 U
2,4,6-Trichlorophenol	µg/kg	3	0	0	--	--	--	--	--	--	4.2 U	4.5 U	C016; C032	2.2	2.3 U	2.3 U
2,4-Dichlorophenol	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1 U	C016; C017; C032	0.5	0.5 U	0.5 U
2,4-Dimethylphenol	µg/kg	3	0	0	--	--	--	--	--	--	5.5 U	5.5 U	C016; C017; C032	2.8	2.8 U	2.8 U
2,4-Dinitrophenol	µg/kg	3	0	0	--	--	--	--	--	--	17 U	17 U	C016; C017; C032	8.5	8.5 U	8.5 U
2-Chlorophenol	µg/kg	3	0	0	--	--	--	--	--	--	2 U	2 U	C016; C017; C032	1	1 U	1 U
2-Methylphenol	µg/kg	3	0	0	--	--	--	--	--	--	1.5 U	1.5 U	C016; C017; C032	0.75	0.75 U	0.75 U
2-Nitrophenol	µg/kg	3	0	0	--	--	--	--	--	--	1.5 U	1.5 U	C016; C017; C032	0.75	0.75 U	0.75 U
4,6-Dinitro-2-methylphenol	µg/kg	3	0	0	--	--	--	--	--	--	1.4 U	1.4 U	C016; C017; C032	0.7	0.7 U	0.7 U
4-Chloro-3-methylphenol	µg/kg	3	0	0	--	--	--	--	--	--	1.4 U	1.4 U	C016; C017; C032	0.7	0.7 U	0.7 U
4-Methylphenol	µg/kg	3	2	66.7	42	80	C016	61	61	78	1.5 U	80	C016	41	42	76
4-Nitrophenol	µg/kg	3	0	0	--	--	--	--	--	--	18 U	18 U	C016; C017; C032	9	9 U	9 U
Pentachlorophenol	µg/kg	3	0	0	--	--	--	--	--	--	5.4 U	5.8 U	C016; C032	2.8	2.9 U	2.9 U
Phenol	µg/kg	3	2	66.7	3.4 J	8.6 J	C032	6	6 J	8.3 J	2 U	8.6 J	C032	4.3	3.4 J	8.1 J
Petroleum																
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	3	3	100	21 J	58 J	C016	42	46 J	57 J	21 J	58 J	C016	42	46 J	57 J
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	3	3	100	130 J	290 J	C016	190	160 J	280 J	130 J	290 J	C016	190	160 J	280 J
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	3	3	100	176 T	348 T	C016	235	181 T	331	176 T	348 T	C016	235	181 T	331

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

[c] Total PCBs are total PCB congeners whenever available and total Aroclors if not.

-- data not available.
BaPEq - benzo(a)pyrene equivalent
BTEX - benzene, toluene, ethylbenzene, and xylene
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PAH - polycyclic aromatic hydrocarbon
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Grain Size																
>10 Phi clay	percent	7	7	100	0.27 T	4.8	G102-2	2.02	0.83 T	4.63	0.27 T	4.8	G102-2	2.02	0.83 T	4.63
>9 Phi clay	percent	90	90	100	0 T	14.6	G015	1.9	1.04	5.07	0 T	14.6	G015	1.9	1.04	5.07
8-9 Phi clay	percent	97	97	100	0	5.78	G015	1.269	0.9	3.854	0	5.78	G015	1.269	0.9	3.854
9-10 Phi clay	percent	7	7	100	0.4 T	3.19	G102-2	1.65	1.81	3.03	0.4 T	3.19	G102-2	1.65	1.81	3.03
Clay	percent	29	29	100	0.23	29.7	WRS38	10.4	5.61	26	0.23	29.7	WRS38	10.4	5.61	26
Coarse sand	percent	111	111	100	0.17 JT	46.5	PGC-02	8.33	5.71	29.7	0.17 JT	46.5	PGC-02	8.33	5.71	29.7
Coarse silt	percent	97	97	100	0.07	43.5	G009	7.4	3.95	23.2	0.07	43.5	G009	7.4	3.95	23.2
Fine gravel	percent	102	102	100	0	27.9	G064	5.71	2.7	22.1	0	27.9	G064	5.71	2.7	22.1
Fine sand	percent	111	111	100	1.27	54.9	UG04-2	18.7	15.3 T	48.6	1.27	54.9	UG04-2	18.7	15.3 T	48.6
Fine silt	percent	97	97	100	0	16.4	G011	2.66	1.63 T	9.4	0	16.4	G011	2.66	1.63 T	9.4
Fines	percent	135	135	100	0.3 T	89.4 T	WRS38	21.9	14.4 T	67.2	0.3 T	89.4 T	WRS38	21.9	14.4 T	67.2
Gravel	percent	31	31	100	0 T	86	WRS30	23	0.05	81	0 T	86	WRS30	23	0.05	81
Medium gravel	percent	102	102	100	0 T	80	PGC-12	23.01	6.3	70.46	0 T	80	PGC-12	23.01	6.3	70.46
Medium sand	percent	111	111	100	0.98	58.7 T	C099	13.3	11.2 T	36.7	0.98	58.7 T	C099	13.3	11.2 T	36.7
Medium silt	percent	97	97	100	0 T	15.7	G022	4.06	2.77	13.2	0 T	15.7	G022	4.06	2.77	13.2
Sand	percent	24	24	100	10.6	97.2	WRS24	41.3	31	91	10.6	97.2	WRS24	41.3	31	91
Silt	percent	29	29	100	0.83	59.7	WRS38	27	26.1	55.4	0.83	59.7	WRS38	27	26.1	55.4
Very coarse sand	percent	111	111	100	0 T	29.8	PGC-02	4.27	2.46	13.8	0 T	29.8	PGC-02	4.27	2.46	13.8
Very fine sand	percent	111	111	100	0.03	41.9	G051	11.2	7.52	32.8	0.03	41.9	G051	11.2	7.52	32.8
Very fine silt	percent	97	97	100	0.01	8.61	G013	1.778	1.19	5.084	0.01	8.61	G013	1.778	1.19	5.084
Conventionals																
Ammonia	mg/kg	14	14	100	0.64 T	179	G102-2	50.8	45.3	135	0.64 T	179	G102-2	50.8	45.3	135
Cyanide	mg/kg	12	3	25	0.12 J	0.24 J	PGC-12	0.17	0.16 J	0.23 J	0.12 J	0.45 UJ	PGC-08	0.17	0.17 UJ	0.23 J
Phosphorus	mg/kg	4	4	100	803	1020	WRS07	915	919	1010	803	1020	WRS07	915	919	1010
Specific Gravity	NA	10	10	100	1.38	2.43	C782	1.64	1.59	2.11	1.38	2.43	C782	1.64	1.59	2.11
Sulfide	mg/kg	25	23	92	0.55 J	71	G102-2	12.8	6.1 J	55.4 J	0.55 J	71	G102-2	11.8	3.86 T	53 J
Total organic carbon	percent	208	208	100	0.033	13.1	G045	1.066	0.8475	2.327	0.033	13.1	G045	1.066	0.8475	2.327
Total solids	percent	207	207	100	30.8	98.5 T	G115	67.18	65.4 T	90.14	30.8	98.5 T	G115	67.18	65.4 T	90.14
Metals																
Aluminum	mg/kg	141	141	100	3940	32200	UG07	13500	11700	26400 T	3940	32200	UG07	13500	11700	26400 T
Antimony	mg/kg	249	190	76.3	0.05	873 J	R12	12.7955	0.2465 J	45.87 J	0.00913 UJ	873 J	R12	10.5889	0.28	29.54 J
Arsenic	mg/kg	233	201	86.3	1.07	126	G006	6.2	3.05	16.4	1.07	126	G006	5.54	2.79	14.4 J
Barium	mg/kg	36	36	100	30.4 J	1610 J	R31	229	160	432 J	30.4 J	1610 J	R31	229	160	432 J
Beryllium	mg/kg	44	32	72.7	0.347	2.25	R45	1.04	0.942	1.99	0.347	2.25	R45	0.939	0.893	1.87
Cadmium	mg/kg	269	218	81	0.03 J	132 J	R12	1.476	0.217	5.745	0.03 J	132 J	R12	1.242	0.213	4.22 J
Chromium	mg/kg	265	265	100	1.24 J	758 J	R50	34.564	20.8 JT	103.22	1.24 J	758 J	R50	34.564	20.8 JT	103.22
Copper	mg/kg	269	264	98.1	5.51	2150 J	R38	98.603	27 J	371.1 J	0.184 UJ	2150 J	R38	96.831	26.8	369.6 J
Iron	mg/kg	12	12	100	20100	34300	PGC-03	29800	30500	34100	20100	34300	PGC-03	29800	30500	34100
Lead	mg/kg	269	256	95.2	1.57 J	20800 J	R12	214.1	23.6	625 J	0.576 U	20800 J	R12	203.9	22.9 J	592.6 J
Manganese	mg/kg	5	5	100	326	482	GCR12W	430	470	481	326	482	GCR12W	430	470	481
Mercury	mg/kg	263	227	86.3	0.005 J	29.2 J	C029	0.43785	0.055	1.1379 J	0.00172 U	29.2 J	C029	0.38312	0.052 T	0.9245 J
Nickel	mg/kg	243	242	99.6	3.89 J	11500 J	R50	77.73	19 J	81.65	0.0508 U	11500 J	R50	77.41	19 J	81.3
Selenium	mg/kg	149	110	73.8	0.02 J	0.7 J	O33-S006	0.126	0.08	0.4 J	0.02 J	1 U	WRS05; WRS06; WRS07; WRS08; WRS11; WRS12; WRS13; WRS15; WRS18; WRS19; WRS20; WRS21	0.139	0.08	0.5 U
Silver	mg/kg	203	166	81.8	0.013 J	9.95	R47	0.6007	0.172	2.375	0.013 J	9.95	R47	0.6128	0.208 JT	2 U
Thallium	mg/kg	17	5	29.4	0.04 J	0.081 J	GCRSP12E	0.066	0.07	0.0804 J	0.04 J	1 U	WRS05; WRS06; WRS07; WRS08; WRS11; WRS12; WRS13; WRS15; WRS18; WRS19; WRS20; WRS21	0.372	0.5 U	0.5 U
Zinc	mg/kg	269	269	100	3.27 J	6480 J	R50	293.9	90.5 T	1218 J	3.27 J	6480 J	R50	293.9	90.5 T	1218 J
Butyltins																
Butyltin ion	µg/kg	162	65	40.1	0.27 J	1140	WRS15	25.56	2	69.88	0.0013 U	1140	WRS15	10.33	0.2725 J	7.595
Dibutyltin ion	µg/kg	162	76	46.9	0.15 NJ	1300 T	G005	33.67	2.025 J	132.3	0.0017 U	1300 T	G005	15.86	0.4925 U	16.95
Tetrabutyltin	µg/kg	183	1	0.5	39	39	G005	39	39	39	0.00088 U	150 U	WRS20	0.83894	0.065 U	1.5 U

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Tributyltin	µg/kg	17	0	0	--	--	--	--	--	--	0.1 U	0.1 U	R05; R09; R12; R14; R16; R20; R22; R24; R26; R30; R34; R36; R38; R41; R43; R44; R45	0.05	0.05 U	0.05 U
Tributyltin ion	µg/kg	174	62	35.6	0.4 J	1990	WRS20	74.61	4.1	174.6	0.0013 U	1990	WRS20	26.67	0.29 U	39.35
PCB Aroclors																
Aroclor 1016	µg/kg	262	5	1.9	4	4740	R50	958	7.77	3800	0.24 U	4740	R50	26.6	0.94 U	55 U
Aroclor 1221	µg/kg	262	0	0	--	--	--	--	--	--	0.24 U	200 U	WRS34	8.16	0.9 U	55 U
Aroclor 1232	µg/kg	262	0	0	--	--	--	--	--	--	0.24 U	200 U	WRS34	8.12	0.97 U	55 U
Aroclor 1242	µg/kg	262	13	5	5.4	220	G030	42.6	19	154	0.24 U	220	G030	10.2	1.05 U	55 U
Aroclor 1248	µg/kg	262	4	1.5	1.8 J	130	C090	61.2	56.5 J	120 J	0.24 U	200 U	WRS34	8.92	0.918 U	55 U
Aroclor 1254	µg/kg	262	129	49.2	1.27	12300	R49	347	29 J	1440 J	0.24 U	12300	R49	177	6.89 J	514
Aroclor 1260	µg/kg	262	173	66	2.2 J	12900	WRS-75	389.4	24	2434	0.24 U	12900	WRS-75	263.7	13.8	633.3
Aroclor 1262	µg/kg	160	1	0.6	70	70	O33-S004	70	70	70	0.24 U	180 U	WRS35	3.88	0.65 U	3.62 U
Aroclor 1268	µg/kg	160	7	4.4	2.6	101 T	WRS-95	26.1	14	81.8	0.24 U	180 U	WRS35	4.54	0.65 UJ	16.1
Aroclors	µg/kg	262	192	73.3	1.27 T	19700 T	R50	614	44	3170	0.24 UT	19700 T	R50	456	28	1120
PCB Congeners																
PCB001	pg/g	8	5	62.5	5.4 J	633	GCRSP12E	217	9.26	593	5.01 U	633	GCRSP12E	138	6.39 J	563
PCB002	pg/g	8	5	62.5	5.19	44.4	GCRSP12E	20.6	14.1	41.4	2.3 U	44.4	GCRSP12E	14.5	7.91	39.2
PCB003	pg/g	8	5	62.5	4.98 J	186 T	PGC-01	75.3	10.9	182	4.98 J	186 T	PGC-01	48.9	8.5 J	178
PCB004	pg/g	3	1	33.3	289 T	289 T	PGC-01	289	289 T	289 T	115 U	289 T	PGC-01	140	72.5 U	267
PCB004 & 010	pg/g	5	2	40	35.3	14500	GCRSP12E	7270	7270	13800	10 U	14500	GCRSP12E	2910	12.5 U	11600
PCB005	pg/g	3	0	0	--	--	--	--	--	--	10.5 UT	14.5 U	PGC-10	6.08	5.75 U	7.1 U
PCB005 & 008	pg/g	5	3	60	14.6	3640	GCRSP12E	1250	86.7	3280	14.6	3640	GCRSP12E	753	14.6	2930
PCB006	pg/g	8	3	37.5	21.5	799	GCRSP12E	299	75.4 T	727	10 U	799	GCRSP12E	117	12.1 U	546
PCB007	pg/g	3	1	33.3	24.3 T	24.3 T	PGC-01	24.3	24.3 T	24.3 T	11.5 U	24.3 T	PGC-01	12.4	7.25 U	22.6
PCB007 & 009	pg/g	5	2	40	10.8	400	GCRSP12E	205	205	381	10 U	400	GCRSP12E	88	11.8 UT	322
PCB008	pg/g	3	1	33.3	205 T	205 T	PGC-01	205	205 T	205 T	30 U	205 T	PGC-01	97.5	72.5 U	192
PCB009	pg/g	3	1	33.3	26.5 T	26.5 T	PGC-01	26.5	26.5 T	26.5 T	11.5 U	26.5 T	PGC-01	13.2	7.25 U	24.6
PCB010	pg/g	3	1	33.3	16.6 T	16.6 T	PGC-01	16.6	16.6 T	16.6 T	11.5 U	16.6 T	PGC-01	9.87	7.25 U	15.7
PCB011	pg/g	8	4	50	35.1 T	94.1	GCR12W	67	69.5	90.7	35.1 T	274 UT	PGC-01	86	82.9	136 U
PCB012 & 013	pg/g	8	3	37.5	16.1	295	GCRSP12E	114	29.9 T	268	10 U	295	GCRSP12E	49.5	13.5 U	202
PCB014	pg/g	8	0	0	--	--	--	--	--	--	9.44 U	50 U	GCRSP12E	11.9	11.6 U	21.3 U
PCB015	pg/g	8	6	75	13.1	1240	GCRSP12E	250	61.5	954 J	13.1	1240	GCRSP12E	198	61.5	840 J
PCB016	pg/g	3	1	33.3	105 T	105 T	PGC-01	105	105 T	105 T	19.9 U	105 T	PGC-01	44	17.2 U	96.2
PCB016 & 032	pg/g	5	5	100	19.9	14100	GCRSP12E	2920	67.7 JT	11400	19.9	14100	GCRSP12E	2920	67.7 JT	11400
PCB017	pg/g	8	6	75	14.4	23300	GCRSP12E	3930	60.5	17500	10.3 U	23300	GCRSP12E	2950	30.6 J	15200
PCB018	pg/g	5	5	100	26.9	4630	GCRSP12E	985	56.9	3740	26.9	4630	GCRSP12E	985	56.9	3740
PCB018 & 030	pg/g	3	1	33.3	164 T	164 T	PGC-01	164	164 T	164 T	20.9 U	164 T	PGC-01	66.1	23.7 U	150
PCB019	pg/g	8	6	75	3.93 J	30700	GCRSP12E	5130	15.4 J	23000	3.93 J	30700	GCRSP12E	3850	6.33 J	20000
PCB020	pg/g	3	3	100	7.66 J	447 T	PGC-01	166	44 J	407 J	7.66 J	447 T	PGC-01	166	44 J	407 J
PCB020 & 021 & 033	pg/g	5	5	100	17.7	2470	GCRSP12E	557	75.7 JT	2010	17.7	2470	GCRSP12E	557	75.7 JT	2010
PCB020 & 028	pg/g	3	1	33.3	507 T	507 T	PGC-01	507	507 T	507 T	64.5 U	507 T	PGC-01	210	90 U	465
PCB021 & 033	pg/g	3	1	33.3	210 T	210 T	PGC-01	210	210 T	210 T	32.2 U	210 T	PGC-01	89.5	42.3 U	193
PCB022	pg/g	8	6	75	12.5	2300	GCRSP12E	465	112 J	1780	12.5	2300	GCRSP12E	354	63.1 J	1570
PCB023	pg/g	8	0	0	--	--	--	--	--	--	4.72 U	58.1 U	PGC-10	12.8	9.35 U	26.9 U
PCB024	pg/g	3	1	33.3	1.89 JT	1.89 JT	PGC-01	1.89	1.89 JT	1.89 JT	1.89 JT	58.1 U	PGC-10	18	23 U	28.4 U
PCB024 & 027	pg/g	5	2	40	19.9	4510	GCRSP12E	2260	2260	4290	5.01 U	4510	GCRSP12E	909	6.2 U	3610
PCB025	pg/g	8	7	87.5	4.2 J	1390	GCRSP12E	218	24.8	987 J	4.2 J	1390	GCRSP12E	192	21 J	920 J
PCB026	pg/g	5	4	80	10.3	2280	GCRSP12E	593	41.7	1950	10.3	2280	GCRSP12E	476	32	1830
PCB026 & 029	pg/g	3	1	33.3	57.1 JT	57.1 JT	PGC-01	57.1	57.1 JT	57.1 JT	9.34 U	57.1 JT	PGC-01	25.1	13.6 U	52.8 J
PCB027	pg/g	3	2	66.7	3.35 J	17.2 JT	PGC-01	10.3	10.3 J	16.5 J	3.35 J	58.1 U	PGC-10	16.5	17.2 JT	27.9 J
PCB028	pg/g	5	5	100	43.1	6770	GCRSP12E	1470	93.8	5490	43.1	6770	GCRSP12E	1470	93.8	5490
PCB029	pg/g	5	0	0	--	--	--	--	--	--	4.72 U	25 U	GCRSP12E	5.88	5.85 UT	11.2 U
PCB030	pg/g	5	1	20	48.5	48.5	GCRSP12E	48.5	48.5	48.5	4.72 U	48.5	GCRSP12E	13.1	5.85 UT	40
PCB031	pg/g	8	6	75	30.4 JT	3870	GCRSP12E	773	158	3000	30.4 JT	3870	GCRSP12E	591	73.3	2650
PCB032	pg/g	3	2	66.7	58.5	231 T	PGC-01	145	145	222	58.1 U	231 T	PGC-01	106	58.5	214
PCB034	pg/g	8	3	37.5	2.54 JT	154	GCRSP12E	53.9	5.08	139	2.54 JT	154	GCRSP12E	28.5	6.03 U	110
PCB035	pg/g	8	3	37.5	3.66 J	33.5	GCRSP12E	15	7.7	30.9	3.66 J	58.1 U	PGC-10	11.4	6.03 U	31.9
PCB036	pg/g	8	1	12.5	11.5 J	11.5 J	GCRSP12E	11.5	11.5 J	11.5 J	4.72 U	58.1 U	PGC-10	12.7	8.85 J	26.9 U

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	Units	# Analyzed	# Detected	% Detected	Minimum[a]	Maximum[a]	Maximum Location(s)	Mean	Median[b]	95th[b]	Minimum (full DL)[a]	Maximum (full DL)[a]	Maximum Location(s)	Mean (half DL)	Median (half DL)[b]	95th (half DL)[b]
PCB037	pg/g	8	6	75	15.6	356	GCRSP12E	99.8	55.1 J	291	15.6	356	GCRSP12E	78.7	25	265
PCB038	pg/g	8	3	37.5	99.4 JT	1290	GCRSP12E	537	222	1180	5.01 U	1290	GCRSP12E	212	26 U	916
PCB039	pg/g	8	1	12.5	87.5	87.5	GCRSP12E	87.5	87.5	87.5	4.72 U	87.5	GCRSP12E	22.2	13.6 U	67
PCB040	pg/g	5	4	80	10.9	332	GCRSP12E	105	39.1	291	10.9	332	GCRSP12E	85.4	19.8	277
PCB040 & 041 & 071	pg/g	3	2	66.7	167	600 T	PGC-01	384	384	578	30.9 U	600 T	PGC-01	261	167	557
PCB041 & 064 & 071 & 072	pg/g	5	5	100	54.2	9230	GCRSP12E	2040	146 JT	7520	54.2	9230	GCRSP12E	2040	146 JT	7520
PCB042	pg/g	3	2	66.7	49.3	176 T	PGC-01	113	113	170	11.5 U	176 T	PGC-01	77	49.3	163
PCB042 & 059	pg/g	5	5	100	18.9	2110	GCRSP12E	471	64.2 JT	1710	18.9	2110	GCRSP12E	471	64.2 JT	1710
PCB043 & 049	pg/g	5	5	100	76.5	52900	GCRSP12E	11200	379 JT	42800	76.5	52900	GCRSP12E	11200	379 JT	42800
PCB043 & 073	pg/g	3	2	66.7	24.6 J	152 T	PGC-01	88.3	88.3 J	146 J	24.6 J	152 T	PGC-01	83	72.5 U	144
PCB044	pg/g	5	5	100	33.8 T	5250	GCRSP12E	1180	131	4270	33.8 T	5250	GCRSP12E	1180	131	4270
PCB044 & 047 & 065	pg/g	3	2	66.7	1050	5710 T	PGC-01	3380	3380	5480	107 U	5710 T	PGC-01	2270	1050	5240
PCB045	pg/g	5	5	100	7.34	442	GCRSP12E	105	15.9 T	363	7.34	442	GCRSP12E	105	15.9 T	363
PCB045 & 051	pg/g	3	3	100	20.9 J	2260 T	PGC-01	910	450	2080	20.9 J	2260 T	PGC-01	910	450	2080
PCB046	pg/g	8	5	62.5	18.3 J	2660	GCRSP12E	573	69.8	2150	5.01 U	2660	GCRSP12E	363	31.2	1760
PCB047	pg/g	5	5	100	43.6	84900	GCRSP12E	18400	637 JT	69200	43.6	84900	GCRSP12E	18400	637 JT	69200
PCB048	pg/g	3	1	33.3	44.2 JT	44.2 JT	PGC-01	44.2	44.2 JT	44.2 JT	12 U	44.2 JT	PGC-01	20.7	12 U	41 J
PCB048 & 075	pg/g	5	5	100	10.4	2550	GCRSP12E	549	48.2 JT	2060	10.4	2550	GCRSP12E	549	48.2 JT	2060
PCB049 & 069	pg/g	3	2	66.7	499	2430 T	PGC-01	1460	1460	2330	47.5 U	2430 T	PGC-01	984	499	2240
PCB050	pg/g	5	1	20	1460	1460	GCRSP12E	1460	1460	1460	4.72 U	1460	GCRSP12E	295	5.85 UT	1170
PCB050 & 053	pg/g	3	3	100	11 J	1140 T	PGC-01	469	257	1050	11 J	1140 T	PGC-01	469	257	1050
PCB051	pg/g	5	5	100	11.8	57900	GCRSP12E	12300	333 JT	46900	11.8	57900	GCRSP12E	12300	333 JT	46900
PCB052	pg/g	3	1	33.3	984 T	984 T	PGC-01	984	984 T	984 T	164 U	984 T	PGC-01	403	143 U	900
PCB052 & 069	pg/g	5	5	100	114	47000	GCRSP12E	9700	190 JT	37800	114	47000	GCRSP12E	9700	190 JT	37800
PCB053	pg/g	5	5	100	17.2	51200	GCRSP12E	10500	205 JT	41200	17.2	51200	GCRSP12E	10500	205 JT	41200
PCB054	pg/g	8	5	62.5	36.6 J	10200	GCRSP12E	2130	179 T	8200	5.01 U	10200	GCRSP12E	1340	61.8 J	6700
PCB055	pg/g	8	3	37.5	18.9 T	511	GCRSP12E	203	80.5	468	5.01 U	511	GCRSP12E	100	55 U	360
PCB056	pg/g	3	2	66.7	70.4	151 T	PGC-01	111	111	147	28.2 U	151 T	PGC-01	78.5	70.4	143
PCB056 & 060	pg/g	5	5	100	40.2	785	GCRSP12E	246	76.8 JT	684	40.2	785	GCRSP12E	246	76.8 JT	684
PCB057	pg/g	8	2	25	25.4	149	GCRSP12E	87.2	87.2	143	5.01 U	149	GCRSP12E	46.4	39	122
PCB058	pg/g	8	1	12.5	24.6 J	24.6 J	GCRSP12E	24.6	24.6 J	24.6 J	4.72 U	145 U	PGC-10	28	15.4 J	67.3 U
PCB059 & 062 & 075	pg/g	3	3	100	5.13 J	106 T	PGC-01	44	21 J	97.5 J	5.13 J	106 T	PGC-01	44	21 J	97.5 J
PCB060	pg/g	3	2	66.7	39 J	62.6 JT	PGC-01	50.8	50.8 J	61.4 J	14.9 U	62.6 JT	PGC-01	36.4	39 J	60.2 J
PCB061 & 070	pg/g	5	5	100	103	3470	GCRSP12E	884	136	2890	103	3470	GCRSP12E	884	136	2890
PCB061 & 070 & 074 & 076	pg/g	3	2	66.7	308	791 T	PGC-01	550	550	767	138 U	791 T	PGC-01	389	308	743
PCB062	pg/g	5	0	0	--	--	--	--	--	--	4.72 U	25 U	GCRSP12E	5.88	5.85 UT	11.2 U
PCB063	pg/g	8	5	62.5	12.1 J	240	GCRSP12E	74.2	43.4	204 J	5.01 U	240	GCRSP12E	56.6	28.5	181
PCB064	pg/g	3	1	33.3	175 T	175 T	PGC-01	175	175 T	175 T	30.4 U	175 T	PGC-01	73.7	31 U	161
PCB065	pg/g	5	0	0	--	--	--	--	--	--	4.72 U	25 U	GCRSP12E	5.88	5.85 UT	11.2 U
PCB066	pg/g	3	2	66.7	171	494 T	PGC-01	333	333	478	50.8 U	494 T	PGC-01	230	171	462
PCB066 & 076	pg/g	5	5	100	71.1	3380	GCRSP12E	824	118 JT	2800	71.1	3380	GCRSP12E	824	118 JT	2800
PCB067	pg/g	8	4	50	3.52 J	357	GCRSP12E	115	48.9 J	315	3.52 J	357	GCRSP12E	68.2	14.9 J	258
PCB068	pg/g	8	4	50	11.1 J	845	GCRSP12E	250	71.9 J	731 J	5.01 U	845	GCRSP12E	136	34.6 J	579 J
PCB072	pg/g	3	2	66.7	2.28 J	15.9 JT	PGC-01	9.09	9.09 J	15.2 J	2.28 J	145 U	PGC-10	30.2	15.9 JT	66.8 J
PCB073	pg/g	5	3	60	38.9 JT	3320	GCRSP12E	1170	162	3000	5.01 U	3320	GCRSP12E	706	38.9 JT	2690
PCB074	pg/g	5	5	100	34	756	GCRSP12E	227	82.4 JT	649	34	756	GCRSP12E	227	82.4 JT	649
PCB077	pg/g	8	8	100	6.56 J	140	GCRSP12E	37.5	15.5 J	113	6.56 J	140	GCRSP12E	37.5	15.5 J	113
PCB078	pg/g	8	1	12.5	21.7 J	21.7 J	GCRSP12E	21.7	21.7 J	21.7 J	4.72 U	145 U	PGC-10	27.6	14 J	67.3 U
PCB079	pg/g	8	4	50	2.92 J	247	GCRSP12E	79	33.1 J	218	2.92 J	247	GCRSP12E	50.4	10.9 J	186
PCB080	pg/g	8	1	12.5	19.1 JT	19.1 JT	PGC-01	19.1	19.1 JT	19.1 JT	4.72 U	145 U	PGC-10	22.3	9.35 U	67.3 U
PCB081	pg/g	8	2	25	21.7	25.7	GCRSP12E	23.7	23.7	25.5	1.21 U	145 U	PGC-10	29.1	23.7	67.3 U
PCB082	pg/g	8	6	75	41.1	558	GCRSP12E	168	93.9	461	24 U	558	GCRSP12E	130	53.3 J	423
PCB083	pg/g	5	0	0	--	--	--	--	--	--	4.72 U	25 U	GCRSP12E	5.88	5.85 UT	11.2 U
PCB083 & 099	pg/g	3	2	66.7	441	2290 T	PGC-01	1370	1370	2200	116 U	2290 T	PGC-01	930	441	2110
PCB084	pg/g	3	1	33.3	430 T	430 T	PGC-01	430	430 T	430 T	59.5 U	430 T	PGC-01	172	57 U	393
PCB084 & 092	pg/g	5	5	100	121	7600	GCRSP12E	2130	174 JT	6610	121	7600	GCRSP12E	2130	174 JT	6610
PCB085 & 116	pg/g	8	7	87.5	40.2 JT	757	GCRSP12E	204	85.2	598	29.7 U	757	GCRSP12E	180	74.1	572
PCB086	pg/g	5	1	20	25.2	25.2	GCRSP12E	25.2	25.2	25.2	4.72 U	25.2	GCRSP12E	8.42	5.85 UT	21.4
PCB086 & 087 & 097 & 109 & 119 & 125	pg/g	3	2	66.7	458	1830 T	PGC-01	1140	1140	1760	162 U	1830 T	PGC-01	790	458	1690
PCB087 & 117 & 125	pg/g	5	5	100	114 JT	3370	GCRSP12E	1090	167	3030	114 JT	3370	GCRSP12E	1090	167	3030

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB088 & 091	pg/g	8	7	87.5	49.6	21200	GCRSP12E	3680	357	15500	31.4 U	21200	GCRSP12E	3230	286 J	14500
PCB089	pg/g	8	4	50	3.07 J	45.6	GCRSP12E	18.6	12.8 J	41.2	3.07 J	145 U	PGC-10	20.2	7.85 J	63.1
PCB090 & 101	pg/g	5	5	100	344	20100	GCRSP12E	7520	525 JT	19300	344	20100	GCRSP12E	7520	525 JT	19300
PCB090 & 101 & 113	pg/g	3	2	66.7	1140	5250 T	PGC-01	3200	3200	5040	286 U	5250 T	PGC-01	2180	1140	4840
PCB092	pg/g	3	2	66.7	224	1100 T	PGC-01	662	662	1060	43.9 U	1100 T	PGC-01	449	224	1010
PCB093	pg/g	5	0	0	--	--	--	--	--	--	4.72 U	25 U	GCRSP12E	5.88	5.85 UT	11.2 U
PCB093 & 100	pg/g	3	2	66.7	72.8 J	774 T	PGC-01	423	423 J	739 J	72.8 J	774 T	PGC-01	306	72.8 J	704 J
PCB094	pg/g	8	5	62.5	53.7 J	2210	GCRSP12E	637	389 T	1860	5.01 U	2210	GCRSP12E	408	77.8 J	1590
PCB095	pg/g	3	2	66.7	640	2610 T	PGC-01	1630	1630	2510	191 U	2610 T	PGC-01	1120	640	2410
PCB095 & 098 & 102	pg/g	5	5	100	248	24300	GCRSP12E	7230	427 JT	21600	248	24300	GCRSP12E	7230	427 JT	21600
PCB096	pg/g	8	5	62.5	39.4 J	3380	GCRSP12E	796	208 T	2760	5.01 U	3380	GCRSP12E	508	65.7 J	2300
PCB097	pg/g	5	5	100	78.9 JT	1720	GCRSP12E	519	132	1490	78.9 JT	1720	GCRSP12E	519	132	1490
PCB098 & 102	pg/g	3	3	100	4.58 J	280 T	PGC-01	112	50.6 J	257 J	4.58 J	280 T	PGC-01	112	50.6 J	257 J
PCB099	pg/g	5	5	100	164	9810	GCRSP12E	2450	324 JT	8190	164	9810	GCRSP12E	2450	324 JT	8190
PCB100	pg/g	5	3	60	115 JT	10700	GCRSP12E	4100	1490	9780	5.01 U	10700	GCRSP12E	2460	115 JT	8860
PCB103	pg/g	8	6	75	2.68 J	4170	GCRSP12E	859	215 J	3250	2.68 J	4170	GCRSP12E	645	57.7 J	2880
PCB104	pg/g	8	4	50	3.7 J	1030	GCRSP12E	292	66.5 J	889	3.7 J	1030	GCRSP12E	157	23.6 J	702
PCB105	pg/g	8	7	87.5	82.5 JT	1540	GCRSP12E	526	202	1390	81.1 UJ	1540	GCRSP12E	465	194 J	1370
PCB106	pg/g	3	0	0	--	--	--	--	--	--	105 UT	145 U	PGC-10	60.8	57.5 U	71 U
PCB106 & 118	pg/g	5	5	100	229 JT	5720	GCRSP12E	2200	472	5440	229 JT	5720	GCRSP12E	2200	472	5440
PCB107	pg/g	3	2	66.7	53.5 J	225 JT	PGC-01	139	139 J	216 J	17.6 U	225 JT	PGC-01	95.8	53.5 J	208 J
PCB107 & 109	pg/g	5	5	100	22.6	1110	GCRSP12E	289	34.1 T	938	22.6	1110	GCRSP12E	289	34.1 T	938
PCB108 & 112	pg/g	5	5	100	14.6	411	GCRSP12E	110	25.3 T	345	14.6	411	GCRSP12E	110	25.3 T	345
PCB108 & 124	pg/g	3	2	66.7	22.5 J	66.5 JT	PGC-01	44.5	44.5 J	64.3 J	7.92 U	66.5 JT	PGC-01	31	22.5 J	62.1 J
PCB110	pg/g	5	5	100	411 JT	12700	GCRSP12E	4180	592	11500	411 JT	12700	GCRSP12E	4180	592	11500
PCB110 & 115	pg/g	3	2	66.7	816	3010 T	PGC-01	1910	1910	2900	288 U	3010 T	PGC-01	1320	816	2790
PCB111	pg/g	3	1	33.3	14.1 JT	14.1 JT	PGC-01	14.1	14.1 JT	14.1 JT	14.1 JT	290 U	PGC-10	91.4	115 U	142 U
PCB111 & 115	pg/g	5	3	60	7.86	165	GCRSP12E	70.5	38.7	152	7.86	165	GCRSP12E	44.7	7.86	140
PCB112	pg/g	3	0	0	--	--	--	--	--	--	211 UT	290 U	PGC-10	122	115 U	142 U
PCB113	pg/g	5	2	40	26.3	477	GCRSP12E	252	252	454	5.01 U	477	GCRSP12E	104	6.2 U	387
PCB114	pg/g	8	7	87.5	3.39 J	96.9	GCRSP12E	27.2	11.9 J	77.4 J	3.39 J	96.9	GCRSP12E	24	11.4 J	74.2 J
PCB117	pg/g	3	3	100	4.31 J	266 T	PGC-01	99.2	27.4 J	242 J	4.31 J	266 T	PGC-01	99.2	27.4 J	242 J
PCB118	pg/g	3	2	66.7	512 J	1760 JT	PGC-01	1140	1140 J	1700 J	203 UJ	1760 JT	PGC-01	791	512 J	1640 J
PCB119	pg/g	5	4	80	7.96	3690	GCRSP12E	1040	230 J	3200	7.96	3690	GCRSP12E	833	48.7 JT	3030
PCB120	pg/g	8	4	50	2.76 J	157	GCRSP12E	58.3	36.8 J	141	2.76 J	157	GCRSP12E	40	14.4 J	127
PCB121	pg/g	8	3	37.5	11.4 JT	566	GCRSP12E	204	33.3	513	5.01 U	566	GCRSP12E	94.4	22.4 J	393
PCB122	pg/g	8	5	62.5	6.03 J	55	GCRSP12E	20	14.7 JT	47.5	6.03 J	145 U	PGC-10	23.1	10.9 J	66.4
PCB123	pg/g	8	7	87.5	4.09 JT	69.2	GCRSP12E	19.6	7.35	55.9	4.09 JT	145 U	PGC-10	26.2	13.2 J	71.3
PCB124	pg/g	5	5	100	13.9	166	GCA12E	75.9	26.9 T	163	13.9	166	GCA12E	75.9	26.9 T	163
PCB126	pg/g	8	5	62.5	2.61 J	42	GCA12E	16.3	4.54 JT	39.3	2.61 J	145 U	PGC-10	26.7	16.5 J	67.3 U
PCB127	pg/g	8	1	12.5	3.99 JT	3.99 JT	PGC-01	3.99	3.99 JT	3.99 JT	3.99 JT	290 U	PGC-10	36.7	6.03 U	135 U
PCB128 & 162	pg/g	5	5	100	47 JT	2090	GCA12E	724	105	1930	47 JT	2090	GCA12E	724	105	1930
PCB128 & 166	pg/g	3	2	66.7	194	1170 T	PGC-01	682	682	1120	63.1 U	1170 T	PGC-01	465	194	1070
PCB129	pg/g	5	5	100	18.4	562	GCA12E	197	28	520	18.4	562	GCA12E	197	28	520
PCB129 & 138 & 163	pg/g	3	2	66.7	2190	16000 JT	PGC-01	9100	9100 J	15300 J	486 U	16000 JT	PGC-01	6140	2190	14600 J
PCB130	pg/g	8	7	87.5	27.4	1290	GCA12E	437	83.4 J	1220	27.4	1290	GCA12E	384	67 J	1200
PCB131	pg/g	8	3	37.5	4.71 J	68.5 JT	PGC-01	28.8	13.3 J	63 J	4.71 J	68.5 JT	PGC-01	14.5	6.03 U	49.2 J
PCB132	pg/g	3	2	66.7	615	3600 T	PGC-01	2110	2110	3450	147 U	3600 T	PGC-01	1430	615	3300
PCB132 & 161	pg/g	5	5	100	107	10800	GCA12E	3150	224	9530	107	10800	GCA12E	3150	224	9530
PCB133	pg/g	3	3	100	8.56 J	274 T	PGC-01	106	36.1 J	250 J	8.56 J	274 T	PGC-01	106	36.1 J	250 J
PCB133 & 142	pg/g	5	4	80	20.7	2130	GCRSP12E	783	491	1950	12.4 U	2130	GCRSP12E	628	30.3 T	1890
PCB134	pg/g	3	2	66.7	99.6 J	608 T	PGC-01	354	354 J	583 J	22.9 U	608 T	PGC-01	240	99.6 J	557 J
PCB134 & 143	pg/g	5	5	100	22.4	1770	GCA12E	629	66.2 JT	1670	22.4	1770	GCA12E	629	66.2 JT	1670
PCB135	pg/g	5	5	100	53.9	6150	GCA12E	2390	159	6020	53.9	6150	GCA12E	2390	159	6020
PCB135 & 151	pg/g	3	2	66.7	852	5340 T	PGC-01	3100	3100	5120	140 U	5340 T	PGC-01	2090	852	4890
PCB136	pg/g	8	7	87.5	49.4	8070	GCRSP12E	2490	273	7790	49.4	8070	GCRSP12E	2180	233	7740
PCB137	pg/g	8	7	87.5	21.5 T	632	GCRSP12E	158	44.3 J	497 J	14.9 U	632	GCRSP12E	139	42.6 J	475 J
PCB138 & 163 & 164	pg/g	5	5	100	407	43600	GCA12E	12900	1040	38600	407	43600	GCA12E	12900	1040	38600
PCB139 & 140	pg/g	3	3	100	6.49 J	80.8 JT	PGC-01	34	14.6 J	74.2 J	6.49 J	80.8 JT	PGC-01	34	14.6 J	74.2 J
PCB139 & 149	pg/g	5	5	100	287	43400	GCA12E	13800	1390	39300	287	43400	GCA12E	13800	1390	39300

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	Units	# Analyzed	# Detected	% Detected	Minimum[a]	Maximum[a]	Maximum Location(s)	Mean	Median[b]	95th[b]	Minimum (full DL)[a]	Maximum (full DL)[a]	Maximum Location(s)	Mean (half DL)	Median (half DL)[b]	95th (half DL)[b]
PCB140	pg/g	5	2	40	78.8	551	GCRSP12E	315	315	527	5.01 U	551	GCRSP12E	129	6.2 U	457
PCB141	pg/g	8	7	87.5	87.5	13300	GCA12E	3060	469	10400	87.5	13300	GCA12E	2680	431	9920
PCB142	pg/g	3	0	0	--	--	--	--	--	--	211 UT	290 U	PGC-10	122	115 U	142 U
PCB143	pg/g	3	0	0	--	--	--	--	--	--	105 UT	145 U	PGC-10	60.8	57.5 U	71 U
PCB144	pg/g	8	7	87.5	16.6	2930	GCA12E	647	99.8 J	2260	16.6	2930	GCA12E	567	90.1 J	2150
PCB145	pg/g	8	0	0	--	--	--	--	--	--	4.72 U	290 U	PGC-10	49.4	9.35 U	135 U
PCB146	pg/g	3	2	66.7	284	2060 T	PGC-01	1170	1170	1970	145 U	2060 T	PGC-01	806	284	1880
PCB146 & 165	pg/g	5	5	100	65.9	7290	GCRSP12E	2800	134	7120	65.9	7290	GCRSP12E	2800	134	7120
PCB147	pg/g	5	4	80	15.8	11000	GCRSP12E	3240	970 J	9630	12.4 U	11000	GCRSP12E	2590	89.1 JT	9170
PCB147 & 149	pg/g	3	2	66.7	1890	12600 JT	PGC-01	7250	7250 J	12100 J	269 U	12600 JT	PGC-01	4870	1890	11500 J
PCB148	pg/g	8	4	50	4.83 J	1030	GCRSP12E	304	90.7 J	893	4.83 J	1030	GCRSP12E	172	36.8 J	720
PCB150	pg/g	8	4	50	16.7 J	1940	GCRSP12E	589	199 J	1680	5.01 U	1940	GCRSP12E	314	80.9 J	1340
PCB151	pg/g	5	5	100	90.5	17000	GCA12E	5560	695	15600	90.5	17000	GCA12E	5560	695	15600
PCB152	pg/g	8	4	50	12.9 J	647	GCRSP12E	239	148 J	579	5.01 U	647	GCRSP12E	139	57.5 J	488
PCB153	pg/g	5	5	100	414	54300	GCA12E	17200	2270	49100	414	54300	GCA12E	17200	2270	49100
PCB153 & 168	pg/g	3	2	66.7	1980	14700 JT	PGC-01	8340	8340 J	14100 J	400 U	14700 JT	PGC-01	5630	1980	13400 J
PCB154	pg/g	8	7	87.5	5.47 J	4740	GCRSP12E	816	37 J	3500	5.47 J	4740	GCRSP12E	715	30.3 J	3290
PCB155	pg/g	8	3	37.5	5.44 JT	194	GCRSP12E	75.8	28	177	5.01 U	290 U	PGC-10	62.7	17.1	177
PCB156	pg/g	5	5	100	35.6 JT	2640	GCA12E	781	77.3	2330	35.6 JT	2640	GCA12E	781	77.3	2330
PCB156 & 157	pg/g	3	2	66.7	165	1200 T	PGC-01	683	683	1150	38.7 U	1200 T	PGC-01	461	165	1100
PCB157	pg/g	5	5	100	9.11 J	207	GCRSP12E	73.6	26.6	189	9.11 J	207	GCRSP12E	73.6	26.6	189
PCB158	pg/g	3	2	66.7	182	1260 T	PGC-01	721	721	1210	58.1 U	1260 T	PGC-01	490	182	1150
PCB158 & 160	pg/g	5	5	100	46.2	3900	GCA12E	1110	101 JT	3400	46.2	3900	GCA12E	1110	101 JT	3400
PCB159	pg/g	8	4	50	13.8 T	452	GCRSP12E	172	111 J	415	4.72 U	452	GCRSP12E	106	16.8 J	365
PCB160	pg/g	3	1	33.3	51.1 J	51.1 J	PGC-10	51.1	51.1 J	51.1 J	51.1 J	115 U	PGC-04	53.7	52.5 UT	57 U
PCB161	pg/g	3	0	0	--	--	--	--	--	--	211 UT	290 U	PGC-10	122	115 U	142 U
PCB162	pg/g	3	2	66.7	3.63 J	18.3 JT	PGC-01	11	11 J	17.6 J	3.63 J	290 U	PGC-10	55.6	18.3 JT	132 J
PCB164	pg/g	3	2	66.7	150	1090 T	PGC-01	620	620	1040	32.9 U	1090 T	PGC-01	419	150	996
PCB165	pg/g	3	3	100	3.97 J	67.1 J	PGC-10	30.9	21.5 JT	62.5 J	3.97 J	67.1 J	PGC-10	30.9	21.5 JT	62.5 J
PCB166	pg/g	5	1	20	19 J	19 J	GCRSP12E	19	19 J	19 J	4.72 U	19 J	GCRSP12E	7.18	5.85 UT	16.4 J
PCB167	pg/g	8	7	87.5	15.3 JT	947	GCA12E	284	57.5 J	804	11.7 U	947	GCA12E	249	41.9 J	780
PCB168	pg/g	5	2	40	75.5	253	GCRSP12E	164	164	244	5.01 U	253	GCRSP12E	68.6	6.2 U	218
PCB169	pg/g	8	2	25	3.56 J	35.5 JT	PGC-01	19.5	19.5 J	33.9 J	0.475 U	145 U	PGC-10	14.7	1.65 U	59.6 J
PCB170	pg/g	8	7	87.5	95.3	25000	GCA12E	6450	942	20400 J	95.3	25000	GCA12E	5650	873	19600 J
PCB171	pg/g	5	4	80	78.9 JT	6240	GCA12E	2210	1260	5640	23.9 UJ	6240	GCA12E	1770	264	5440
PCB171 & 173	pg/g	3	2	66.7	245	2740 T	PGC-01	1490	1490	2620	32.8 U	2740 T	PGC-01	1000	245	2490
PCB172	pg/g	8	6	75	16.2	4150	GCA12E	1270	857	3520	11.8 UT	4150	GCA12E	956	167 J	3260
PCB173	pg/g	5	3	60	14.1	581	GCA12E	250	154	538	11.7 UT	581	GCA12E	152	14.1	496
PCB174	pg/g	8	7	87.5	116	30600	GCA12E	7340	2880	24200	105 U	30600	GCA12E	6430	1810	23100
PCB175	pg/g	8	7	87.5	4.49 J	1500	GCA12E	350	98.4	1190	4.49 J	1500	GCA12E	307	64.3 J	1140
PCB176	pg/g	8	7	87.5	17.2	3970	GCA12E	1010	360	3270	15.2 U	3970	GCA12E	882	227 J	3150
PCB177	pg/g	8	7	87.5	68.2	16200	GCA12E	4210	1130	13700	46 U	16200	GCA12E	3690	738	13300
PCB178	pg/g	8	7	87.5	28.8	6180	GCA12E	1960	637	5890	22.8 U	6180	GCA12E	1720	393	5840
PCB179	pg/g	8	7	87.5	59.6	14100	GCA12E	3950	1870	12400	45.7 U	14100	GCA12E	3460	1090	12100
PCB180	pg/g	5	5	100	254	66600	GCA12E	19500	6880	58000	254	66600	GCA12E	19500	6880	58000
PCB180 & 193	pg/g	3	3	100	229	19500 JT	PGC-01	7150	1720	17700 J	229	19500 JT	PGC-01	7150	1720	17700 J
PCB181	pg/g	8	4	50	2.63 J	135	GCRSP12E	62.3	55.7 J	129	2.63 J	290 U	PGC-10	51.1	12.7 J	142
PCB182	pg/g	3	2	66.7	1.27 J	21.6 JT	PGC-01	11.4	11.4 J	20.6 J	1.27 J	290 U	PGC-10	56	21.6 JT	133 J
PCB182 & 187	pg/g	5	5	100	173	37400	GCA12E	14000	5780	35200	173	37400	GCA12E	14000	5780	35200
PCB183	pg/g	8	7	87.5	75.6	16700	GCA12E	4520	2000	13800	58.4 U	16700	GCA12E	3960	1230	13400
PCB184	pg/g	8	2	25	6.11	50.4	GCRSP12E	28.3	28.3	48.2	5.01 U	290 U	PGC-10	54.6	28.3	135 U
PCB185	pg/g	8	7	87.5	6.62 J	3340	GCA12E	796	519	2620	6.62 J	3340	GCA12E	698	284 J	2500
PCB186	pg/g	8	0	0	--	--	--	--	--	--	4.72 U	290 U	PGC-10	49.4	9.35 U	135 U
PCB187	pg/g	3	2	66.7	859	8370 T	PGC-01	4610	4610	7990	135 U	8370 T	PGC-01	3100	859	7620
PCB188	pg/g	8	4	50	1.67 J	642	GCRSP12E	185	49 J	558	1.67 J	642	GCRSP12E	104	12.4 J	445
PCB189	pg/g	8	8	100	3.15 J	842	GCA12E	214	22.7 J	691	3.15 J	842	GCA12E	214	22.7 J	691
PCB190	pg/g	8	8	100	19.5 J	5450	GCA12E	1260	238	4270	19.5 J	5450	GCA12E	1260	238	4270
PCB191	pg/g	8	7	87.5	3.58 J	1040	GCA12E	269	39.9	842	3.58 J	1040	GCA12E	236	36.2 J	809
PCB192	pg/g	8	0	0	--	--	--	--	--	--	4.72 U	290 U	PGC-10	49.4	9.35 U	135 U
PCB193	pg/g	5	5	100	12.4	3170	GCA12E	1100	218	2950	12.4	3170	GCA12E	1100	218	2950

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB194	pg/g	8	8	100	53.3 J	15000	GCA12E; GCRSP12E	4890	2240	15000	53.3 J	15000	GCA12E; GCRSP12E	4890	2240	15000
PCB195	pg/g	8	6	75	18.6 J	7100	GCA12E	2880	1710	6970	11.8 UT	7100	GCA12E	2160	839 J	6910
PCB196	pg/g	3	3	100	31.5 J	2190 T	PGC-01	803	186 J	1990 J	31.5 J	2190 T	PGC-01	803	186 J	1990 J
PCB196 & 203	pg/g	5	5	100	82.5	19700	GCA12E	8300	6840	18700	82.5	19700	GCA12E	8300	6840	18700
PCB197	pg/g	8	6	75	1.72 J	598	GCRSP12E	251	162 J	592	1.72 J	598	GCRSP12E	190	83.9 J	589
PCB198	pg/g	5	3	60	265	1270	GCA12E	696	552	1200	11.7 UT	1270	GCA12E	420	265	1130
PCB198 & 199	pg/g	3	3	100	71.9 J	3760 T	PGC-01	1410	399	3420	71.9 J	3760 T	PGC-01	1410	399	3420
PCB199	pg/g	5	5	100	94.2	17100	GCA12E	7600	7180	16400	94.2	17100	GCA12E	7600	7180	16400
PCB200	pg/g	5	3	60	921	2240	GCA12E	1460	1230	2140	11.8 UT	2240	GCA12E	881	921	2040
PCB201	pg/g	8	7	87.5	6.42 J	1870	GCA12E	717	422 T	1830	6.42 J	1870	GCA12E	628	234 J	1830
PCB202	pg/g	8	8	100	15.9 J	2300	GCA12E	797	293 J	2220	15.9 J	2300	GCA12E	797	293 J	2220
PCB203	pg/g	3	3	100	40.4 J	2560 T	PGC-01	957	271	2330	40.4 J	2560 T	PGC-01	957	271	2330
PCB204	pg/g	8	1	12.5	7.92 J	7.92 J	GCRSP12E	7.92	7.92 J	7.92 J	4.72 U	290 U	PGC-10	48.8	7.06 J	135 U
PCB205	pg/g	8	6	75	1.6 J	772	GCRSP12E	300	188 J	738	1.6 J	772	GCRSP12E	227	83.9 J	724
PCB206	pg/g	8	7	87.5	27.3 JT	4480	GCRSP12E	1540	693 T	3960	27.3 JT	4480	GCRSP12E	1350	427 J	3870
PCB207	pg/g	8	6	75	5.74 J	552	GCRSP12E	230	223 J	504	5.74 J	552	GCRSP12E	174	57.2 J	484
PCB208	pg/g	8	7	87.5	11.1 J	596	GCA12W	250	121 JT	592	11.1 J	596	GCA12W	219	80.9 J	591
PCB209	pg/g	8	8	100	15.2 T	207	GCRSP12E	68.8	44.9	172	15.2 T	207	GCRSP12E	68.8	44.9	172
Total PCB Congeners	pg/g	8	8	100	798 JT	912000 JT	GCRSP12E	228000	44500 J	806000 J	798 JT	912000 JT	GCRSP12E	228000	44500 J	806000 J
PCBs[c]																
Total PCBs	µg/kg	265	195	73.6	0.798 JT	19700 T	--	612	45 T	3060	0.24 UT	19700 T	--	456	28 T	1120
PCB Homologs																
Dichlorobiphenyl homologs	pg/g	8	7	87.5	26 JT	20900 T	GCRSP12E	3180	147 T	14900 J	26 JT	20900 T	GCRSP12E	2800	141	13900 J
Heptachlorobiphenyl homologs	pg/g	8	8	100	267 JT	243000 T	GCA12E	56600	15200 J	196000	267 JT	243000 T	GCA12E	56600	15200 J	196000
Hexachlorobiphenyl homologs	pg/g	8	8	100	143 JT	223000 T	GCA12E	56600	8450 J	194000 J	143 JT	223000 T	GCA12E	56600	8450 J	194000 J
Monochlorobiphenyl homologs	pg/g	8	6	75	5.19 T	841 T	GCRSP12E	261	30.1 J	793	5.19 T	841 T	GCRSP12E	197	20.7 J	774
Nonachlorobiphenyl homologs	pg/g	8	8	100	16.8 JT	5620 T	GCRSP12E	1740	565 J	4950	16.8 JT	5620 T	GCRSP12E	1740	565 J	4950
Octachlorobiphenyl homologs	pg/g	8	8	100	241 JT	67800 T	GCA12E	20800	8810 J	63900 J	241 JT	67800 T	GCA12E	20800	8810 J	63900 J
Pentachlorobiphenyl homologs	pg/g	8	8	100	15 JT	138000 T	GCRSP12E	28400	4190 J	108000	15 JT	138000 T	GCRSP12E	28400	4190 J	108000
Tetrachlorobiphenyl homologs	pg/g	8	8	100	43.6 JT	342000 JT	GCRSP12E	47900	2920 J	229000 J	43.6 JT	342000 JT	GCRSP12E	47900	2920 J	229000 J
Trichlorobiphenyl homologs	pg/g	8	8	100	15.8 JT	98300 JT	GCRSP12E	13000	514 J	64800 J	15.8 JT	98300 JT	GCRSP12E	13000	514 J	64800 J
PCDD/Fs Homologs																
Heptachlorodibenzofuran homologs	pg/g	57	54	94.7	0.484 J	779	G030	54.9	15.1	190	0.37 U	779	G030	52	14 J	188
Heptachlorodibenzo-p-dioxin homologs	pg/g	57	55	96.5	1.73 J	1830	G030	157	58.7 J	728 J	1.5 U	1830	G030	152	49.8	698 J
Hexachlorodibenzofuran homologs	pg/g	57	54	94.7	0.0977 J	246	G044	24.4	10.85 J	87.92	0.0276 U	246	G044	23.12	9.41	85.64
Hexachlorodibenzo-p-dioxin homologs	pg/g	57	55	96.5	0.0828 J	86.7	G045	15.56	7.79 J	59.11	0.0617 U	86.7	G045	15.01	7.6 T	58.24
Octachlorodibenzofuran	pg/g	67	55	82.1	0.874 J	2210 J	G030	87.1	20.5 JT	215	0.238 U	2210 J	G030	72.1	11.8 J	197
Octachlorodibenzo-p-dioxin	pg/g	67	61	91	7.04 J	10400	G030	819	312	2710 T	7.04 J	10400	G030	746	259 J	2460
Pentachlorodibenzofuran homologs	pg/g	57	52	91.2	0.0356 J	132	G049	15.13	8.63 J	51.01	0.0189 U	132	G049	13.81	6.65 T	50.28
Pentachlorodibenzo-p-dioxin homologs	pg/g	57	41	71.9	0.0896 T	7.64 J	G057	1.83	1.08 J	5.51 J	0.016 U	7.64 J	G057	1.323	0.485 J	5.302 J
Tetrachlorodibenzofuran homologs	pg/g	57	46	80.7	0.103 J	95.2	G049	7.093	3.64	22.03	0.0178 U	95.2	G049	5.729	2.1	19
Tetrachlorodibenzo-p-dioxin homologs	pg/g	57	40	70.2	0.0766 J	4.23	G060	1.38	1.045 J	3.96	0.0115 U	4.23	G060	0.9752	0.47 J	3.67 J
Total PCDD/F	pg/g	67	62	92.5	9.45 JT	15400 JT	G030	1130	444 J	3590 J	9.45 JT	15400 JT	G030	1040	387 JT	3360 J
PCDD/Fs																
1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/g	67	61	91	0.163 J	121	G030	13.7	4.72 J	52.1	0.116 U	121	G030	12.6	4.21 J	52.1
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/g	67	61	91	0.842 J	1040	G030	76.8	33.4	215 T	0.842 J	1040	G030	70.1	25.6	211
1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/g	67	43	64.2	0.0764 J	9.06 J	G044	1.334	0.653 J	3.948 J	0.0239 U	9.06 J	G044	0.9829	0.2875 U	3.485 J
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	67	53	79.1	0.0329 J	13.7	G044	1.938	0.926 J	8.802 J	0.0183 U	13.7	G044	1.546	0.617 J	7.875 J
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/g	67	47	70.1	0.0449 J	3.35 J	G057	0.6928	0.471 J	2.09 J	0.0228 U	3.35 J	G057	0.4998	0.296 J	1.8 J
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	67	49	73.1	0.0588 J	10.2 J	G044	1.006	0.495 J	3.11 J	0.0195 U	10.2 J	G044	0.8227	0.429 JT	3.13 J
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/g	67	56	83.6	0.109 J	28.4	G045	3.256	2.085 J	10.33 J	0.0316 U	28.4	G045	2.829	1.56 J	9.623
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	67	16	23.9	0.0381 J	0.471 J	G037	0.2003	0.1625 J	0.4088 J	0.0182 U	2.03 U	O33-S010	0.1025	0.0505 U	0.3277 J
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/g	67	49	73.1	0.0881 J	6.5 J	G057	1.729	1.09 J	5.32 J	0.0217 U	6.5 J	G057	1.282	0.78 J	4.36 J
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	67	36	53.7	0.07 T	2.8 J	G049	0.44087	0.282 J	0.97075 J	0.00812 U	2.8 J	G049	0.25968	0.141 J	0.872 J
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/g	67	40	59.7	0.0367 J	2.02 J	G057	0.4695	0.368 J	1.073 J	0.016 U	2.02 J	G057	0.301	0.234 J	0.8731 J
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	67	48	71.6	0.0632 J	35.4	G044	1.9	0.74 J	5.17 J	0.0181 U	35.4	G044	1.386	0.474 JT	4.546 J
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	67	47	70.1	0.0515 J	9.25 J	G049	0.7048	0.431 J	1.638 J	0.0116 U	9.25 J	G049	0.5108	0.268 J	1.34 J
2,3,7,8-Tetrachlorodibenzofuran	pg/g	67	29	43.3	0.116 T	8.58	G049	0.82648	0.462 J	1.114 J	0.00463 U	8.58	G049	0.41246	0.149 T	1.0095 J
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	67	27	40.3	0.0483 J	0.605 J	G061	0.21647	0.168 J	0.4599 J	0.00896 U	0.605 J	G061	0.11623	0.0615 U	0.3613 J

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
TCDD TEQ (ND = 0)	pg/g	67	63	94	0.0112 JT	19.2 JT	G030	2.606	1.43 JT	9.224 J	0.0112 JT	19.2 JT	G030	2.454	1.26 JT	9.132 J
Total TCDD TEQ (ND = 0)	pg/g	70	66	94.3	0.000879 JA	19.2 JT	G030	2.64139	1.41 J	9.155 J	0.000879 JA	19.2 JT	G030	2.49406	1.21 J	9.063 J
PCB TEQ																
Total PCB TEQ (ND=0)	pg/g	8	8	100	0.000879 JT	4.51 T	GCA12E	1.27123	0.354 J	4.034	0.000879 JT	4.51 T	GCA12E	1.27123	0.354 J	4.034
PBDE Congeners																
PBDE028	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1 U	G783; GCRSP12E; GSP12W-ALT	0.5	0.5 U	0.5 U
PBDE047	µg/kg	3	3	100	0.31 J	1.2	GCRSP12E	0.61	0.33 J	1.1 J	0.31 J	1.2	GCRSP12E	0.61	0.33 J	1.1 J
PBDE099	µg/kg	3	3	100	0.3 J	1.1	GCRSP12E	0.58	0.33 J	1 J	0.3 J	1.1	GCRSP12E	0.58	0.33 J	1 J
PBDE100	µg/kg	3	1	33.3	0.15 J	0.15 J	GCRSP12E	0.15	0.15 J	0.15 J	0.15 J	1 U	G783; GSP12W-ALT	0.38	0.5 U	0.5 U
PBDE153	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1 U	G783; GCRSP12E; GSP12W-ALT	0.5	0.5 U	0.5 U
PBDE154	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1 U	G783; GCRSP12E; GSP12W-ALT	0.5	0.5 U	0.5 U
PBDE183	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1 U	G783; GCRSP12E; GSP12W-ALT	0.5	0.5 U	0.5 U
PBDE209	µg/kg	3	0	0	--	--	--	--	--	--	9.9 U	10 U	GCRSP12E; GSP12W-ALT	5	5 U	5 U
Pesticides																
2,4'-DDD	µg/kg	143	56	39.2	0.095 J	14 J	G048	2.19	1.35 J	7.33 J	0.032 U	14 J	G048	0.984	0.24 U	3.75 J
2,4'-DDE	µg/kg	143	5	3.5	0.0094 J	0.77 J	G059	0.2259	0.14 J	0.652 J	0.0094 J	5.8 U	G030	0.1782	0.08 U	0.595 U
2,4'-DDT	µg/kg	143	78	54.5	0.0069 J	17 J	G030	1.677	0.9 J	5.58 J	0.0069 J	17 J	G030	1.047	0.39 J	4.07 J
4,4'-DDD	µg/kg	149	106	71.1	0.086 J	57 J	G048	1.64	0.64 J	4.08	0.047 U	57 J	G048	1.23	0.43	2.8
4,4'-DDE	µg/kg	149	115	77.2	0.039 J	15	C090	1.26	0.76 J	4.62 J	0.027 U	15	C090	1.03	0.57 J	3.78 J
4,4'-DDT	µg/kg	149	77	51.7	0.044 J	38	C090	3.67	2 J	12.4	0.044 J	38	C090	2.24	0.82 J	8.46 J
Aldrin	µg/kg	145	22	15.2	0.0735 JT	0.7 NJ	UG08	0.2624	0.215 J	0.615 J	0.012 UJ	2 U	PA03; PA04	0.1064	0.07 U	0.381 J
alpha-Endosulfan	µg/kg	145	24	16.6	0.04 J	0.83	G007	0.249	0.175 J	0.658 J	0.025 U	2 U	PA03; PA04	0.111	0.0405 U	0.414 J
alpha-Hexachlorocyclohexane	µg/kg	145	5	3.4	0.056 J	0.3 J	GCR12W	0.1528	0.13 J	0.28 J	0.0069 UJ	2 U	PA03; PA04	0.0609	0.029 U	0.218 U
beta-Endosulfan	µg/kg	145	20	13.8	0.083 J	1.8 J	O33-S010	0.405	0.245 J	1.14 J	0.031 U	3.6 U	G007	0.171	0.07 U	0.792 J
beta-Hexachlorocyclohexane	µg/kg	145	5	3.4	0.094 J	1.2 J	O33-S006	0.545	0.41 J	1.12 J	0.012 UJ	2 U	PA03; PA04	0.116	0.09 U	0.343 U
Chlordane (technical)	µg/kg	22	0	0	--	--	--	--	--	--	1.9 U	63 U	O33-S004	5.2	2.2 U	26 U
Chlorpyrifos	µg/kg	4	3	75	0.55 J	0.83 J	G058	0.66	0.6 J	0.807 J	0.0072 UJ	0.83 J	G058	0.4959	0.575 J	0.7955 J
cis-Chlordane	µg/kg	145	31	21.4	0.067 J	5.7 J	G054	0.556	0.29	1.65 J	0.031 U	14 U	O33-S004	0.255	0.06 U	0.964 J
cis-Nonachlor	µg/kg	143	13	9.1	0.021 J	2 J	O33-C009	0.575	0.54 J	1.58 J	0.021 J	8.3 U	GCA12E	0.355	0.155 U	1.29
delta-Hexachlorocyclohexane	µg/kg	145	2	1.4	0.12 J	2 J	C025	1.06	1.06 J	1.91 J	0.011 UJ	2 J	C025; PA03; PA04	0.0736	0.035 U	0.167 U
Dieldrin	µg/kg	145	14	9.7	0.042 J	1.1	G062	0.266	0.155 J	0.762 J	0.03 U	2.1 U	O33-S010	0.119	0.07 U	0.466
Endosulfan sulfate	µg/kg	145	4	2.8	0.11 J	0.33 J	G057	0.253	0.285 J	0.326 J	0.017 UJ	13 U	O33-S010	0.165	0.055 UT	0.4 U
Endrin	µg/kg	145	5	3.4	0.051 J	8.8	G061	1.94	0.36	7.12 J	0.045 UJ	8.8	G061	0.149	0.041 U	0.358
Endrin aldehyde	µg/kg	145	7	4.8	0.19 J	1.8 J	IPC-S012	0.706	0.44 NJ	1.59 J	0.042 U	2.1 U	G086	0.146	0.06 U	0.66 U
Endrin ketone	µg/kg	145	12	8.3	0.062 J	8.5 NJ	G783	1.31	0.685 J	4.7 J	0.029 U	8.5 NJ	G783	0.345	0.1 U	1.08 J
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	145	20	13.8	0.059 J	2.3	C090	0.496	0.315 J	1.45 J	0.011 UJ	2.3	C090	0.156	0.055 UJ	0.63 J
Heptachlor	µg/kg	145	7	4.8	0.06 J	0.52 NJ	G780	0.2274	0.17 J	0.46 J	0.0091 UJ	2 U	PA03; PA04	0.08635	0.035 U	0.344 J
Heptachlor epoxide	µg/kg	145	8	5.5	0.058 J	0.64 J	IPC-S014	0.27	0.225 J	0.574 J	0.03 UJ	2.6 U	C090	0.14	0.09 U	0.48 U
Methoxychlor	µg/kg	145	4	2.8	0.35 J	11	G086	3.28	0.89 J	9.53	0.018 UJ	11	G086	0.256	0.095 UT	0.574 J
Mirex	µg/kg	143	4	2.8	0.12 J	0.33 J	IPC-S014	0.23	0.235 J	0.317 J	0.029 UJ	1.1 U	IPC-S012	0.0469	0.0245 U	0.125 J
Oxychlordane	µg/kg	143	9	6.3	0.11 J	0.74 J	C090	0.369	0.33 J	0.66 J	0.038 UJ	8 U	O33-S004	0.135	0.0425 U	0.437 J
Total chlordanes	µg/kg	145	110	75.9	0.039 JT	23.2 JT	G054	1.29	0.55 J	3.97 J	0.039 JT	23.2 JT	G054	1.09	0.4 JT	3.76 J
Total endosulfan	µg/kg	145	41	28.3	0.04 JT	1.8 JT	O33-S010	0.368	0.3 JT	1 T	0.04 JT	2.8 UT	O33-S008	0.213	0.1 UT	0.798 J
Total DDD	µg/kg	149	113	75.8	0.086 JT	71 JT	G048	2.62	0.88 JT	9.42 J	0.047 UT	71 JT	G048	2.05	0.56 JT	5.66 J
Total DDx	µg/kg	149	130	87.2	0.047 JT	73.3 JT	G048	6.59	3.09 J	19.9 J	0.047 JT	73.3 JT	G048	5.85	2.34 T	19 J
Total DDE	µg/kg	149	115	77.2	0.039 JT	15 T	C090	1.27	0.76 JT	4.62 J	0.034 UT	15 T	C090	1.07	0.59 JT	3.78 J
Total DDT	µg/kg	149	104	69.8	0.045 JT	46.4 JT	C090	3.983	1.66 J	14.73 J	0.045 JT	46.4 JT	C090	3.032	1 JA	10.52 J
Total 4,4' DDx	µg/kg	12	8	66.7	0.27 JT	8.4 JT	UG07	2.7	1.8 J	7 J	0.27 JT	8.4 JT	UG07	2.9	2.8	6.3 J
Toxaphene	µg/kg	145	0	0	--	--	--	--	--	--	2.4 U	1800 U	G048	24	11 U	65 U
trans-Chlordane	µg/kg	145	92	63.4	0.045 J	14 J	G030	1.12	0.505 J	3.85 J	0.027 U	14 J	G030	0.772	0.28 J	3.46 J
trans-Nonachlor	µg/kg	143	37	25.9	0.039 J	4.4 J	G054	0.301	0.16 J	0.544 J	0.034 U	4.4 J	G054	0.134	0.06 U	0.34 J
Polycyclic Aromatic Hydrocarbons																
1-Methylnaphthalene	µg/kg	112	88	78.6	0.39 J	610	G003	20.6	2.65 J	61.3	0.31 U	610	G003	16.2	1.7 J	42.4
2-Methylnaphthalene	µg/kg	193	142	73.6	0.41 J	990	G003	25.13	4.55	76.95	0.0088 U	990	G003	19.28	2.7	71.2
Acenaphthene	µg/kg	269	151	56.1	0.27 J	4700	PGC-10	89.96	6.5	220	0.0088 U	4700	PGC-10	51.62	2.5 J	107.6

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Acenaphthylene	µg/kg	269	160	59.5	0.24 J	895	R20	36.35	5.05	146.3	0.0088 U	895	R20	22.62	2.5 J	90.28
Anthracene	µg/kg	269	180	66.9	0.55 J	2700	PGC-10	80.5	11.3	371.8 J	0.0088 U	2700	PGC-10	54.66	4.6	330.4
Benzo(a)anthracene	µg/kg	269	223	82.9	0.011	3830	R20	172	27	743.7	0.011	3830	R20	143.2	18	583.4
Benzo(a)pyrene	µg/kg	269	223	82.9	0.0097	3800	PGC-10	181.73	33.2	736.6	0.0097	3800	PGC-10	151.23	20	659
Benzo(b)fluoranthene	µg/kg	269	221	82.2	0.013	4330	R20	204.21	38	993	0.013	4330	R20	168.36	25 U	904.2
Benzo(b+k)fluoranthene	µg/kg	6	2	33.3	13 T	13 T	PA03; PA04	13	13	13	13 T	50 UT	HC-SS02; HC-SS03; HC-SS04; HC-SS30	21	25 U	25 U
Benzo(e)pyrene	µg/kg	145	134	92.4	0.3 J	2200	C087	99.6	19	281	0.18 U	2200	C087	92.1	18	244
Benzo(g,h,i)perylene	µg/kg	269	216	80.3	0.015	3300	C087	142	35	474.5	0.011 UT	3300	C087	114.6	23	380.4
Benzo(k)fluoranthene	µg/kg	269	213	79.2	0.0097	1500	WRS16	78.99	16.4	370.4	0.0097	1500	WRS16	63.12	10	341.2
C1-Chrysene	µg/kg	112	96	85.7	0.45 J	1900	PGC-10	85.8	32	195	0.25 U	1900	PGC-10	73.7	24.5	179
C1-Dibenzothiophene	µg/kg	100	59	59	0.76 J	870	G003	38.3	9.2	118	0.21 U	870	G003	22.9	2.5 J	74.2
C1-Fluoranthene/pyrene	µg/kg	112	97	86.6	1.4 J	4400	PGC-10	153	32	414	0.61 U	4400	PGC-10	133	25.3 J	368
C1-Fluorene	µg/kg	112	79	70.5	0.58 J	1100	PGC-10	37.5	4.9	130	0.5 U	1100	PGC-10	26.8	2.5 U	79
C1-Phenanthrene/anthracene	µg/kg	112	94	83.9	0.99 J	4300	PGC-10	146	19.5	445	0.75 U	4300	PGC-10	123	14.4 J	367
C2-Chrysene	µg/kg	112	92	82.1	1.7 J	880	PGC-10	76	34	280	0.25 U	880	PGC-10	63	25	260
C2-Dibenzothiophene	µg/kg	100	63	63	1.2 J	970	G003	41.6	13	107	0.21 U	970	G003	26.5	4.63	65.8
C2-Fluoranthene/pyrene	µg/kg	100	83	83	1.6 J	1400	G003	61	27	140	0.61 U	1400	G003	51	21	130
C2-Fluorene	µg/kg	112	89	79.5	0.5 J	1100	G003	47.3	7.5	158	0.5 J	1100	G003	37.9	5.55	96.2
C2-Naphthalene	µg/kg	112	91	81.3	0.44 J	1800	PGC-10	69.8	6.8	275	0.37 U	1800	PGC-10	57	5.1	222
C2-Phenanthrene/anthracene	µg/kg	112	96	85.7	0.78 J	2500	G003	106	31	320	0.75 U	2500	G003	90.8	23	298
C3-Chrysene	µg/kg	112	91	81.3	4.9	540	G003	72.2	33	275	0.25 U	540	G003	59	23.5	248
C3-Dibenzothiophene	µg/kg	100	58	58	1.3 J	660	G003	44.3	16	143	0.21 U	660	G003	25.9	4.8	120
C3-Fluoranthene/pyrene	µg/kg	100	73	73	1.6 J	900	G003	58	31	192	0.61 U	900	G003	42.6	16.5	152
C3-Fluorene	µg/kg	112	76	67.9	1.6 J	1900	G003	75	17	223	0.5 U	1900	G003	51.1	8.5	126
C3-Naphthalene	µg/kg	112	90	80.4	0.46 J	1400	G003	78.5	8	367	0.37 U	1400	G003	63.4	4.6	295
C3-Phenanthrene/anthracene	µg/kg	112	95	84.8	1.6 J	1900	G003	84.2	30	266	0.75 U	1900	G003	71.6	24	230
C4-Chrysene	µg/kg	112	67	59.8	4	320	G019	49	31	178	0.25 U	320	G019	29.9	10	135
C4-Naphthalene	µg/kg	112	84	75	0.48 J	1500	G003	67.4	12.5 J	258	0.37 U	1500	G003	50.8	6.1	190
C4-Phenanthrene/anthracene	µg/kg	112	82	73.2	1.4 J	1100	G003	54.8	20.5	180	0.75 U	1100	G003	40.6	13	154
Chrysene	µg/kg	269	224	83.3	0.015	3300	WRS16	173	30.6	624	0.015	3300	WRS16	144	22	519
Dibenzo(a,h)anthracene	µg/kg	269	174	64.7	0.3 J	660	C087	34.07	9	174.8	0.0088 U	660	C087	22.86	3.9	115.2
Dibenzothiophene	µg/kg	112	80	71.4	0.39 J	1100 J	PGC-10	35.7	2.7 J	115 J	0.21 U	1100 J	PGC-10	25.6	1.5 J	57.5
Fluoranthene	µg/kg	269	234	87	0.31	8900	PGC-10	373.6	53.6	1735	0.0088 U	8900	PGC-10	325.4	37	1644
Fluorene	µg/kg	269	160	59.5	0.53 J	2500	PGC-10	53.48	7.265	190.4	0.0088 U	2500	PGC-10	32.79	3.3	100
Total HPAHs	µg/kg	269	242	90	0.0734 T	38700 T	PGC-10	1740	295.5	6885	0.0734 T	38700 T	PGC-10	1566	215 T	6120
Indeno(1,2,3-cd)pyrene	µg/kg	269	213	79.2	0.12	3500	C087	133	29	570	0.0088 U	3500	C087	105.9	18	372.4
Total LPAHs	µg/kg	269	227	84.4	0.11 T	23800 T	PGC-10	522	69 A	2285	0.0088 UT	23800 T	PGC-10	441.2	41.2 JT	2048
Naphthalene	µg/kg	269	195	72.5	0.57 J	5300	G003	95.27	12	165	0.0088 U	5300	G003	70.02	6.4	136
Perylene	µg/kg	145	138	95.2	0.34 J	940	C087	50.3	17.3 J	96.5	0.32 U	940	C087	47.9	17	94
Phenanthrene	µg/kg	269	214	79.6	0.11	11000	PGC-10	251	36.5	1214	0.0088 U	11000	PGC-10	200.3	23	856.4
Pyrene	µg/kg	269	237	88.1	0.31	10000	PGC-10	376	55	1260	0.0088 U	10000	PGC-10	331.7	40	1138
Total BaPEq	µg/kg	269	232	86.2	0.004 T	4970 T	PGC-10	249	46.5	1090	0.004 T	4970 T	PGC-10	215	28.5 T	961
Total cPAHs	µg/kg	269	232	86.2	0.058 T	18400 T	C087	922	164	3840	0.058 T	18400 T	C087	796	110 T	3560
Total PAHs	µg/kg	269	248	92.2	0.0734 T	62500 T	PGC-10	2174	337.5 J	7860	0.0734 T	62500 T	PGC-10	2004	283 JT	7512
Phthalates																
Bis(2-ethylhexyl) phthalate	µg/kg	96	78	81.3	7.6 J	18000	GCRSP12E	418	75.5	623	7 U	18000	GCRSP12E	348	58.5	595
Butylbenzyl phthalate	µg/kg	96	29	30.2	3.6 J	580	G007	54	14	350 J	2.6 U	580	G007	21	1.8 U	50 U
Dibutyl phthalate	µg/kg	96	42	43.8	1 J	130	G045	17	11	46	1 J	400 U	G783	16	8.2 J	50 U
Diethyl phthalate	µg/kg	96	37	38.5	1.3 J	15	G023	3.59	2.4 J	9.4 J	1.3 J	100 U	HC-SS02; HC-SS03; HC-SS04; HC-SS30	4.8	1.83 J	20.5 U
Dimethyl phthalate	µg/kg	96	9	9.4	1.7 J	170	G054	35	5.5 J	130	1 U	170	G054	6.5	0.5 U	50 U
Di-n-octyl phthalate	µg/kg	96	4	4.2	6.2 J	27	G064	15	13	25	1.7 U	100 U	HC-SS02; HC-SS03; HC-SS04; HC-SS30	4.6	0.85 U	31
Semivolatile Organic Compounds																
1,2,4-Trichlorobenzene	µg/kg	96	0	0	--	--	--	--	--	--	2.3 U	130 U	G783	3.3	1.3 U	10 U
1,2-Dichlorobenzene	µg/kg	96	0	0	--	--	--	--	--	--	2 U	150 U	G783	3.5	1.5 U	7.5 U
1,3-Dichlorobenzene	µg/kg	96	0	0	--	--	--	--	--	--	2.5 U	150 U	G783	3.5	1.5 U	7.5 U
1,4-Dichlorobenzene	µg/kg	96	18	18.8	3 J	190	G002	24	11 J	59	0.3 U	190	G002	7.5	1.5 U	27
2,4-Dinitrotoluene	µg/kg	92	0	0	--	--	--	--	--	--	1.5 U	75 U	G783	2	0.75 U	5.4 U

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
2,6-Dinitrotoluene	µg/kg	92	0	0	--	--	--	--	--	--	2 U	100 U	G783	2.4	1 U	5 U
2-Chloronaphthalene	µg/kg	107	1	0.9	20	20	UG07	20	20	20	0.0088 U	80 U	G783	2.067	0.8 U	4 U
2-Nitroaniline	µg/kg	92	0	0	--	--	--	--	--	--	3.2 U	160 U	G783	3.7	1.6 U	8 U
3,3'-Dichlorobenzidine	µg/kg	89	1	1.1	5.1 J	5.1 J	G052	5.1	5.1 J	5.1 J	3.7 U	190 U	G783	4.8	1.9 U	15 U
3-Nitroaniline	µg/kg	92	0	0	--	--	--	--	--	--	2.5 U	200 U	PA03; PA04	5.1	1.3 U	9.2 U
4-Bromophenyl phenyl ether	µg/kg	92	0	0	--	--	--	--	--	--	1.6 U	80 U	G783	1.9	0.8 U	4.5 U
4-Chloroaniline	µg/kg	90	1	1.1	15 J	15 J	G036	15	15 J	15 J	1.9 U	95 U	G783	2.9	0.95 U	13 J
4-Chlorophenyl phenyl ether	µg/kg	92	0	0	--	--	--	--	--	--	1.4 U	70 U	G783	1.7	0.7 U	4.2 U
4-Nitroaniline	µg/kg	92	0	0	--	--	--	--	--	--	1.8 U	90 U	G783	2.3	0.9 U	4.7 U
Aniline	µg/kg	89	9	10.1	4.5 J	64	G065	17	8.6 J	50	1.5 U	200 U	PA03; PA04	5.3	0.75 U	17 J
Azobenzene	µg/kg	90	0	0	--	--	--	--	--	--	1.1 U	55 U	G783	1.4	0.55 U	2.8 U
Benzoic acid	µg/kg	91	6	6.6	100 J	3400	G058	689	133 J	2610	96 UJ	4800 U	G783	162	48 U	365
Benzyl alcohol	µg/kg	96	25	26	2.4 J	1800	G060	100	5.3 J	270	2.1 U	1800	G060	30	2.1 U	63
Bis(2-chloro-1-methylethyl) ether	µg/kg	2	0	0	--	--	--	--	--	--	10 U	10 U	PA03; PA04	5	5 U	5 U
Bis(2-chloroethoxy) methane	µg/kg	92	0	0	--	--	--	--	--	--	1.5 U	75 U	G783	1.8	0.75 U	4.3 U
Bis(2-chloroethyl) ether	µg/kg	92	0	0	--	--	--	--	--	--	1.9 U	95 U	G783	2.3	0.95 U	4.9 U
Bis(2-chloroisopropyl) ether	µg/kg	90	0	0	--	--	--	--	--	--	1.9 U	130 U	G783	3	1.3 U	6.5 U
Carbazole	µg/kg	90	43	47.8	1.4 J	220	G003	12.7	4 J	28.7 J	1.3 U	220	G003	7.03	1.45 J	22.4 J
Dibenzofuran	µg/kg	110	70	63.6	0.52 J	440	WRS16	21.6	3.13	68.9	0.52 J	440	WRS16	15	2.5 U	39.3
Hexachlorobenzene	µg/kg	149	60	40.3	0.094 J	3.4	G100	0.456	0.28 J	1.42	0.068 U	20 U	HC-SS02; HC-SS03; HC-SS04; HC-SS30	0.603	0.11 J	2.56
Hexachlorobutadiene	µg/kg	149	7	4.7	0.065 J	0.52	G086	0.196	0.12 J	0.451 J	0.065 J	20 U	HC-SS02; HC-SS03; HC-SS04; HC-SS30	0.422	0.0435 U	0.508
Hexachlorocyclopentadiene	µg/kg	91	0	0	--	--	--	--	--	--	23 U	730 U	G061	27	15 U	75 U
Hexachloroethane	µg/kg	127	0	0	--	--	--	--	--	--	0.037 UJ	50 U	HC-SS02; HC-SS03; HC-SS04; HC-SS30	1.17	0.0395 U	1.69 U
Isophorone	µg/kg	92	0	0	--	--	--	--	--	--	1 U	50 U	G783	1.3	0.5 U	3.6 U
Nitrobenzene	µg/kg	92	0	0	--	--	--	--	--	--	2.2 U	110 U	G783	2.6	1.1 U	5.5 U
N-Nitrosodimethylamine	µg/kg	92	0	0	--	--	--	--	--	--	6.1 U	310 U	G783	7.2	3.1 U	16 U
N-Nitrosodiphenylamine	µg/kg	96	3	3.1	1.8 J	9.7 J	G019	6.7	8.5 J	9.6 J	1.6 U	80 U	G783	2.5	0.8 U	10 U
N-Nitrosodipropylamine	µg/kg	92	0	0	--	--	--	--	--	--	2.4 U	120 U	G783	2.9	1.2 U	6 U
Octachlorostyrene	µg/kg	4	0	0	--	--	--	--	--	--	0.017 UJ	0.17 UJ	G048; G054	0.0504	0.054 UJ	0.085 UJ
Phenols																
2,3,4,5-Tetrachlorophenol	µg/kg	90	0	0	--	--	--	--	--	--	0.23 U	20 U	G057	2.1	2.2 U	3.2 U
2,3,5,6-Tetrachlorophenol	µg/kg	90	1	1.1	0.78 J	0.78 J	GCA12E	0.78	0.78 J	0.78 J	0.18 U	25 U	G057	2.5	2.6 U	3.9 U
2,4,5-Trichlorophenol	µg/kg	92	0	0	--	--	--	--	--	--	0.73 U	40 U	PA03; PA04	2.3	1.9 U	3.5 U
2,4,6-Trichlorophenol	µg/kg	92	0	0	--	--	--	--	--	--	0.12 U	30 U	PA03; PA04	2.2	2 U	3.4 U
2,4-Dichlorophenol	µg/kg	89	0	0	--	--	--	--	--	--	1 UJ	100 U	PA03; PA04	2.4	0.5 U	5 U
2,4-Dimethylphenol	µg/kg	26	0	0	--	--	--	--	--	--	5.5 UJ	280 UJ	G783	26	5.5 U	100 UJ
2,4-Dinitrophenol	µg/kg	88	0	0	--	--	--	--	--	--	17 UJ	430 U	G061	21	8.5 U	70 U
2-Chlorophenol	µg/kg	89	0	0	--	--	--	--	--	--	2 UJ	100 U	G783	3	1 U	10 U
2-Methylphenol	µg/kg	104	2	1.9	8.1 J	24 J	G007	16	16 J	23 J	1.5 UJ	210 UJ	PGC-10	4.8	0.75 U	19 U
2-Nitrophenol	µg/kg	89	0	0	--	--	--	--	--	--	1.5 UJ	75 U	G783	2.3	0.75 U	7.5 U
3- and 4-Methylphenol Coelution	µg/kg	4	0	0	--	--	--	--	--	--	100 U	100 U	HC-SS02; HC-SS03; HC-SS04; HC-SS30	50	50 U	50 U
3,4-Dichlorophenol	µg/kg	5	0	0	--	--	--	--	--	--	0.88 U	17 U	UG05	3.6	0.48 U	8.4 U
3,5-Dichlorophenol	µg/kg	5	0	0	--	--	--	--	--	--	2.8 U	15 U	UG06	2.7	1.5 U	6.3 U
4,6-Dinitro-2-methylphenol	µg/kg	89	0	0	--	--	--	--	--	--	1.4 UJ	100 U	PA03; PA04	2.8	0.7 U	7 U
4-Chloro-3-methylphenol	µg/kg	89	2	2.2	1.8 J	2.6 J	G031	2.2	2.2 J	2.6 J	1.4 UJ	70 U	G783	2.3	0.7 U	7 U
4-Methylphenol	µg/kg	100	37	37	2 J	360	G048	34.1	15 J	107	1.5 UJ	360	G048	17.3	3.38 UJ	70.5
4-Nitrophenol	µg/kg	89	0	0	--	--	--	--	--	--	18 UJ	900 U	G783	24	9 U	50 U
Pentachlorophenol	µg/kg	107	12	11.2	3.2 NJ	890	G057	130	38 J	510	0.17 U	2100 U	PGC-10	38	2.8 U	150 U
Phenol	µg/kg	104	38	36.5	2.2 J	80	G045	15	9.9 J	40.4 J	2 UJ	620 U	PGC-10	13.9	4.65 J	50 U
Petroleum																
Total Petroleum Hydrocarbons (Diesel)	mg/kg	61	22	36.1	6.4 J	530	PGC-10	142	79.5 J	501 J	0.064 U	530	PGC-10	59.9	14 U	280
Total Petroleum Hydrocarbons (Diesel)(silica gel treated)	mg/kg	128	116	90.6	1.9 JT	760 J	C090	70.1	33.5 J	223 J	1.3 U	760 J	C090	63.9	30.5 J	210 J
Total Petroleum Hydrocarbons (Gasoline)	mg/kg	36	11	30.6	1.2 J	75	PGC-10	24	20	65 J	0.91 U	100 U	WRS11; WRS15; WRS16	14	5 U	51 J
Total Petroleum Hydrocarbons (Heavy Oil)	mg/kg	14	0	0	--	--	--	--	--	--	25 U	250 U	WRS11; WRS15; WRS16	38	13 U	130 U
Jet fuel A	mg/kg	18	0	0	--	--	--	--	--	--	10 U	100 U	WRS11; WRS15; WRS16	10	5 U	50 U

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
JP-4 jet fuel	mg/kg	14	0	0	--	--	--	--	--	--	10 UJ	100 U	WRS11; WRS15; WRS16	20	5 UJ	50 U
Kerosene	mg/kg	18	0	0	--	--	--	--	--	--	10 U	100 U	WRS11; WRS15; WRS16	10	5 U	50 U
Lube Oil	mg/kg	14	10	71.4	78	8600	WRS16	1940	567	6480	25 U	8600	WRS16	1390	359	5550
Mineral spirits	mg/kg	18	0	0	--	--	--	--	--	--	10 U	100 U	WRS11; WRS15; WRS16	10	5 U	50 U
Motor oil	mg/kg	22	14	63.6	0.17	560	WRS22	182	140	485	0.17	560	WRS22	126	34 U	443
Naphtha distillate	mg/kg	14	0	0	--	--	--	--	--	--	10 UJ	100 U	WRS11; WRS15; WRS16	20	5 UJ	50 U
Non-petroleum hydrocarbons	mg/kg	14	0	0	--	--	--	--	--	--	50 U	500 U	WRS11; WRS15; WRS16	80	30 U	300 U
Total Petroleum Hydrocarbons (Residual)	mg/kg	21	20	95.2	10 J	1800 J	UG07	405	300	822 J	10 J	1800 J	UG07	389	280	770
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	128	121	94.5	4.9 JT	1500 J	C090	264	160 J	910	3.1 U	1500 J	C090	250	150 J	875 J
Total Petroleum Hydrocarbons	mg/kg	61	41	67.2	0.17 A	2400 JT	UG07	382	244 A	1130 T	0.17 A	2400 JT	UG07	270	125 U	941 T
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	128	124	96.9	2.2 JA	2260 JA	C090	324	187 J	1020 J	2.2 JA	2260 JA	C090	314	181 J	1010 J
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	µg/kg	8	0	0	--	--	--	--	--	--	0.083 U	10 U	PA03; PA04	1.29	0.0483 UJ	5 U
1,1,1-Trichloroethane	µg/kg	8	0	0	--	--	--	--	--	--	0.12 U	10 U	PA03; PA04	1.3	0.07 UJ	5 U
1,1,2,2-Tetrachloroethane	µg/kg	8	0	0	--	--	--	--	--	--	0.19 U	10 U	PA03; PA04	1.3	0.11 UJ	5 U
1,1,2-Trichloroethane	µg/kg	8	0	0	--	--	--	--	--	--	0.11 U	10 U	PA03; PA04	1.3	0.065 UJ	5 U
1,1-Dichloroethane	µg/kg	8	0	0	--	--	--	--	--	--	0.094 U	10 U	PA03; PA04	1.29	0.055 UJ	5 U
1,1-Dichloroethene	µg/kg	8	0	0	--	--	--	--	--	--	0.13 U	10 U	PA03; PA04	1.3	0.075 UJ	5 U
1,1-Dichloropropene	µg/kg	2	0	0	--	--	--	--	--	--	10 U	10 U	PA03; PA04	5	5 U	5 U
1,2,3-Trichlorobenzene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
1,2,3-Trichloropropane	µg/kg	8	0	0	--	--	--	--	--	--	0.28 U	10 U	PA03; PA04	1.4	0.16 UJ	5 U
1,2,4-Trimethylbenzene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
1,2-Dibromo-3-chloropropane	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
1,2-Dichloroethane	µg/kg	8	0	0	--	--	--	--	--	--	0.15 U	10 U	PA03; PA04	1.3	0.09 UJ	5 U
1,2-Dichloropropane	µg/kg	8	0	0	--	--	--	--	--	--	0.11 U	10 U	PA03; PA04	1.3	0.06 UJ	5 U
1,3,5-Trimethylbenzene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
1,3-Dichloropropane	µg/kg	2	0	0	--	--	--	--	--	--	10 U	10 U	PA03; PA04	5	5 U	5 U
1,4-Dichloro-trans-2-butene	µg/kg	6	0	0	--	--	--	--	--	--	0.51 U	0.66 U	UG07	0.29	0.29 U	0.32 UJ
1-Methyl-4-isopropylbenzene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
2,2-Dichloropropane	µg/kg	2	0	0	--	--	--	--	--	--	10 U	10 U	PA03; PA04	5	5 U	5 U
2-Chloroethyl vinyl ether	µg/kg	6	0	0	--	--	--	--	--	--	0.23 U	0.3 U	UG07	0.13	0.13 U	0.15 UJ
2-Chlorotoluene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
4-Chlorotoluene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
Acetone	µg/kg	8	0	0	--	--	--	--	--	--	9.1 U	100 U	PA03; PA04	16	5.5 UJ	50 U
Acrylonitrile	µg/kg	6	0	0	--	--	--	--	--	--	0.63 U	0.82 U	UG07	0.36	0.36 U	0.4 UJ
Benzene	µg/kg	24	1	4.2	0.15 J	0.15 J	UG07	0.15	0.15 J	0.15 J	0.068 U	10 U	PA03; PA04	2.72	3.23 U	4.98 U
Bromobenzene	µg/kg	2	0	0	--	--	--	--	--	--	10 U	10 U	PA03; PA04	5	5 U	5 U
Bromochloromethane	µg/kg	8	0	0	--	--	--	--	--	--	0.15 U	10 U	PA03; PA04	1.3	0.09 UJ	5 U
Bromodichloromethane	µg/kg	8	0	0	--	--	--	--	--	--	0.062 U	10 U	PA03; PA04	1.28	0.0358 UJ	5 U
Bromoform	µg/kg	8	0	0	--	--	--	--	--	--	0.19 U	10 U	PA03; PA04	1.3	0.11 UJ	5 U
Bromomethane	µg/kg	8	0	0	--	--	--	--	--	--	0.43 U	10 U	PA03; PA04	1.4	0.25 UJ	5 U
BTEX	µg/kg	24	1	4.2	0.15 JT	0.15 JT	UG07	0.15	0.15 JT	0.15 JT	0.15 JT	10 UT	PA03; PA04	2.7	3.2 U	5 U
Carbon disulfide	µg/kg	8	1	12.5	0.16 J	0.16 J	UG07	0.16	0.16 J	0.16 J	0.11 U	10 U	PA03; PA04	1.3	0.06 UJ	5 U
Carbon tetrachloride	µg/kg	8	0	0	--	--	--	--	--	--	0.077 U	10 U	PA03; PA04	1.28	0.0448 UJ	5 U
Chlorobenzene	µg/kg	8	1	12.5	0.12 J	0.12 J	UG07	0.12	0.12 J	0.12 J	0.092 U	10 U	PA03; PA04	1.3	0.055 UJ	5 U
Chlorodibromomethane	µg/kg	8	0	0	--	--	--	--	--	--	0.16 U	10 U	PA03; PA04	1.3	0.09 UJ	5 U
Chloroethane	µg/kg	8	0	0	--	--	--	--	--	--	0.31 U	10 U	PA03; PA04	1.4	0.18 UJ	5 U
Chloroform	µg/kg	8	0	0	--	--	--	--	--	--	0.13 U	10 U	PA03; PA04	1.3	0.075 UJ	5 U
Chloromethane	µg/kg	8	0	0	--	--	--	--	--	--	0.12 U	10 U	PA03; PA04	1.3	0.07 UJ	5 U
cis-1,2-Dichloroethene	µg/kg	8	0	0	--	--	--	--	--	--	0.15 U	10 U	PA03; PA04	1.3	0.09 UJ	5 U
cis-1,3-Dichloropropene	µg/kg	8	0	0	--	--	--	--	--	--	0.095 U	10 U	PA03; PA04	1.29	0.0575 UJ	5 U
Dichlorodifluoromethane	µg/kg	8	0	0	--	--	--	--	--	--	0.091 U	10 U	PA03; PA04	1.29	0.055 UJ	5 U
Ethylbenzene	µg/kg	24	0	0	--	--	--	--	--	--	0.078 U	10 U	PA03; PA04	2.71	3.23 U	4.98 U
Ethylene dibromide	µg/kg	8	0	0	--	--	--	--	--	--	0.094 U	40 U	PA03; PA04	5.04	0.055 UJ	20 U
Isopropylbenzene	µg/kg	8	0	0	--	--	--	--	--	--	0.13 U	40 U	PA03; PA04	5.1	0.08 UJ	20 U
m,p-Xylene	µg/kg	24	0	0	--	--	--	--	--	--	0.2 UJ	10 U	PA03; PA04	2.7	3.2 U	5 U
Methyl iodide	µg/kg	6	0	0	--	--	--	--	--	--	0.51 U	0.66 U	UG07	0.29	0.29 U	0.32 UJ
Methyl isobutyl ketone	µg/kg	8	0	0	--	--	--	--	--	--	0.77 U	40 U	PA03; PA04	5.3	0.45 UJ	20 U
Methyl n-butyl ketone	µg/kg	8	0	0	--	--	--	--	--	--	5.4 U	40 U	PA03; PA04	7.3	3.2 UJ	20 U

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Methyl tert-butyl ether	µg/kg	6	0	0	--	--	--	--	--	--	0.11 U	0.15 U	UG07	0.063	0.063 U	0.073 UJ
Methylene bromide	µg/kg	8	0	0	--	--	--	--	--	--	0.11 U	10 U	PA03; PA04	1.3	0.065 UJ	5 U
Methylene chloride	µg/kg	8	0	0	--	--	--	--	--	--	0.76 U	20 U	PA03; PA04	3.1	0.83 UJ	10 U
Methylethyl ketone	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
n-Butylbenzene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
n-Propylbenzene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
o-Xylene	µg/kg	24	0	0	--	--	--	--	--	--	0.088 U	10 U	PA03; PA04	2.71	3.23 U	4.98 U
Sec-butylbenzene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
Styrene	µg/kg	8	0	0	--	--	--	--	--	--	0.15 U	10 U	PA03; PA04	1.3	0.085 UJ	5 U
tert-Butylbenzene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
Tetrachloroethene	µg/kg	8	0	0	--	--	--	--	--	--	0.13 U	10 U	PA03; PA04	1.3	0.08 UJ	5 U
Toluene	µg/kg	24	0	0	--	--	--	--	--	--	0.11 U	10 U	PA03; PA04	2.7	3.2 U	5 U
trans-1,2-Dichloroethene	µg/kg	8	0	0	--	--	--	--	--	--	0.091 U	10 U	PA03; PA04	1.29	0.055 UJ	5 U
trans-1,3-Dichloropropene	µg/kg	8	0	0	--	--	--	--	--	--	0.1 U	10 U	PA03; PA04	1.3	0.06 UJ	5 U
Trichloroethene	µg/kg	12	0	0	--	--	--	--	--	--	0.13 U	10 U	PA03; PA04	1.7	1.3 U	5 U
Trichlorofluoromethane	µg/kg	8	0	0	--	--	--	--	--	--	0.54 U	10 U	PA03; PA04	1.5	0.32 UJ	5 U
Vinyl chloride	µg/kg	8	0	0	--	--	--	--	--	--	0.22 U	10 U	PA03; PA04	1.3	0.13 UJ	5 U
Xylene	µg/kg	24	0	0	--	--	--	--	--	--	0.2 UJT	10 UT	PA03; PA04	2.7	3.2 U	5 U
Excluding All Zidell Data																
Grain Size																
>10 Phi clay	percent	7	7	100	0.27 T	4.8	G102-2	2.02	0.83 T	4.63	0.27 T	4.8	G102-2	2.02	0.83 T	4.63
>9 Phi clay	percent	90	90	100	0 T	14.6	G015	1.9	1.04	5.07	0 T	14.6	G015	1.9	1.04	5.07
8-9 Phi clay	percent	97	97	100	0	5.78	G015	1.269	0.9	3.854	0	5.78	G015	1.269	0.9	3.854
9-10 Phi clay	percent	7	7	100	0.4 T	3.19	G102-2	1.65	1.81	3.03	0.4 T	3.19	G102-2	1.65	1.81	3.03
Clay	percent	18	18	100	0.23	15	PGC-11	3.98	3.06	13.8	0.23	15	PGC-11	3.98	3.06	13.8
Coarse sand	percent	111	111	100	0.17 JT	46.5	PGC-02	8.33	5.71	29.7	0.17 JT	46.5	PGC-02	8.33	5.71	29.7
Coarse silt	percent	97	97	100	0.07	43.5	G009	7.4	3.95	23.2	0.07	43.5	G009	7.4	3.95	23.2
Fine gravel	percent	102	102	100	0	27.9	G064	5.71	2.7	22.1	0	27.9	G064	5.71	2.7	22.1
Fine sand	percent	111	111	100	1.27	54.9	UG04-2	18.7	15.3 T	48.6	1.27	54.9	UG04-2	18.7	15.3 T	48.6
Fine silt	percent	97	97	100	0	16.4	G011	2.66	1.63 T	9.4	0	16.4	G011	2.66	1.63 T	9.4
Fines	percent	115	115	100	0.3 T	73.5 T	G015	19.8	14.3 T	60.9	0.3 T	73.5 T	G015	19.8	14.3 T	60.9
Gravel	percent	11	11	100	0 T	52	G101	10.2	1.06 JT	50.5	0 T	52	G101	10.2	1.06 JT	50.5
Medium gravel	percent	102	102	100	0 T	80	PGC-12	23.01	6.3	70.46	0 T	80	PGC-12	23.01	6.3	70.46
Medium sand	percent	111	111	100	0.98	58.7 T	C099	13.3	11.2 T	36.7	0.98	58.7 T	C099	13.3	11.2 T	36.7
Medium silt	percent	97	97	100	0 T	15.7	G022	4.06	2.77	13.2	0 T	15.7	G022	4.06	2.77	13.2
Sand	percent	4	4	100	30	91	HC-SS04; HC-SS30	69	78	91	30	91	HC-SS04; HC-SS30	69	78	91
Silt	percent	18	18	100	0.83	47.5	PGC-08	19	20.8	42.6	0.83	47.5	PGC-08	19	20.8	42.6
Very coarse sand	percent	111	111	100	0 T	29.8	PGC-02	4.27	2.46	13.8	0 T	29.8	PGC-02	4.27	2.46	13.8
Very fine sand	percent	111	111	100	0.03	41.9	G051	11.2	7.52	32.8	0.03	41.9	G051	11.2	7.52	32.8
Very fine silt	percent	97	97	100	0.01	8.61	G013	1.778	1.19	5.084	0.01	8.61	G013	1.778	1.19	5.084
Conventionals																
Ammonia	mg/kg	14	14	100	0.64 T	179	G102-2	50.8	45.3	135	0.64 T	179	G102-2	50.8	45.3	135
Cyanide	mg/kg	12	3	25	0.12 J	0.24 J	PGC-12	0.17	0.16 J	0.23 J	0.12 J	0.45 UJ	PGC-08	0.17	0.17 UJ	0.23 J
Specific Gravity	NA	10	10	100	1.38	2.43	C782	1.64	1.59	2.11	1.38	2.43	C782	1.64	1.59	2.11
Sulfide	mg/kg	25	23	92	0.55 J	71	G102-2	12.8	6.1 J	55.4 J	0.55 J	71	G102-2	11.8	3.86 T	53 J
Total organic carbon	percent	165	165	100	0.033	13.1	G045	1.069	0.81	2.292	0.033	13.1	G045	1.069	0.81	2.292
Total solids	percent	164	164	100	30.8	98.5 T	G115	68.5	68.9	91.9	30.8	98.5 T	G115	68.5	68.9	91.9
Metals																
Aluminum	mg/kg	141	141	100	3940	32200	UG07	13500	11700	26400 T	3940	32200	UG07	13500	11700	26400 T
Antimony	mg/kg	147	142	96.6	0.05	11.6 J	G094	0.464	0.17 J	1.26 J	0.04 U	11.6 J	G094	0.481	0.171 J	1.26 J
Arsenic	mg/kg	159	155	97.5	1.07	126	G006	4.71	2.89 T	8.17 J	1.07	126	G006	4.62	2.79	7.94 J
Cadmium	mg/kg	159	154	96.9	0.03 J	1.7	G059	0.2316	0.1635	0.6719	0.03 J	1.7	G059	0.2282	0.156	0.6684
Chromium	mg/kg	155	155	100	4.51	189	G115	19.4	17.2	36	4.51	189	G115	19.4	17.2	36
Copper	mg/kg	159	157	98.7	8.39	366	G094	32.6	23.9	71.4 J	8.39	366	G094	32.3	23.9	70.9 J
Iron	mg/kg	12	12	100	20100	34300	PGC-03	29800	30500	34100	20100	34300	PGC-03	29800	30500	34100
Lead	mg/kg	159	159	100	1.57 J	457	G094	45.9	19.2	189 J	1.57 J	457	G094	45.9	19.2	189 J
Manganese	mg/kg	5	5	100	326	482	GCR12W	430	470	481	326	482	GCR12W	430	470	481
Mercury	mg/kg	159	155	97.5	0.005 J	29.2 J	C029	0.3073	0.041	0.4394	0.005 J	29.2 J	C029	0.302	0.042	0.4338
Nickel	mg/kg	134	134	100	8.07	39.6	G093	17.1	16.8 J	27.7	8.07	39.6	G093	17.1	16.8 J	27.7

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Selenium	mg/kg	137	110	80.3	0.02 J	0.7 J	O33-S006	0.126	0.08	0.4 J	0.02 J	0.7 J	O33-S006	0.107	0.07 J	0.4 J
Silver	mg/kg	159	149	93.7	0.013 J	6.34 J	PGC-06	0.3834	0.135	1.65 J	0.013 J	6.34 J	PGC-06	0.3613	0.125	1.65 J
Thallium	mg/kg	5	5	100	0.04 J	0.081 J	GCRSP12E	0.066	0.07	0.0804 J	0.04 J	0.081 J	GCRSP12E	0.066	0.07	0.0804 J
Zinc	mg/kg	159	159	100	22.8	1450	G094	113	77.7 J	293 J	22.8	1450	G094	113	77.7 J	293 J
Butyltins																
Butyltin ion	µg/kg	94	47	50	0.27 J	81.1 T	G005	3.93	1.5 J	7.91	0.032 U	81.1 T	G005	1.99	0.3 J	5.54
Dibutyltin ion	µg/kg	94	52	55.3	0.15 NJ	1300 T	G005	28.5	1.2 J	17.5	0.03 U	1300 T	G005	15.8	0.508 J	12.1
Tetrabutyltin	µg/kg	94	1	1.1	39	39	G005	39	39	39	0.074 U	39	G005	0.546	0.06 U	0.456 U
Tributyltin ion	µg/kg	94	36	38.3	0.4 J	1700 JT	G005	55	1.3 J	50	0.06 U	1700 JT	G005	21.1	0.29 U	29.8
PCB Aroclors																
Aroclor 1016	µg/kg	151	0	0	--	--	--	--	--	--	0.73 U	10 U	HC-SS02; HC-SS03; HC-SS04; HC-SS30; PA03; PA04; UG08	1	0.65 UT	3.3 UJ
Aroclor 1221	µg/kg	151	0	0	--	--	--	--	--	--	0.73 U	20 U	HC-SS02; HC-SS03; HC-SS04; HC-SS30; PA03; PA04	1.2	0.65 U	3.8 U
Aroclor 1232	µg/kg	151	0	0	--	--	--	--	--	--	0.73 U	15 U	G013	1.1	0.65 UJ	5 U
Aroclor 1242	µg/kg	151	13	8.6	5.4	220	G030	42.6	19	154	0.73 U	220	G030	4.8	0.65 U	13.8
Aroclor 1248	µg/kg	151	4	2.6	1.8 J	130	C090	61	57 J	120 J	0.73 U	130	C090	2.5	0.65 U	5 U
Aroclor 1254	µg/kg	151	75	49.7	1.3 J	1600 J	G048	57.7	19	113	0.73 U	1600 J	G048	29.5	3.2	69
Aroclor 1260	µg/kg	151	96	63.6	2.2 J	2600	G048	58.3	13.1	143	0.73 U	2600	G048	37.8	5 J	83
Aroclor 1262	µg/kg	145	1	0.7	70	70	O33-S004	70	70	70	0.73 U	70	O33-S004	1.2	0.65 U	1.4 U
Aroclor 1268	µg/kg	145	6	4.1	2.6	37	UG07	14	11	32	0.73 U	37	UG07	1.3	0.65 U	2.4
Aroclors	µg/kg	151	111	73.5	1.3 JT	4200 JT	G048	98	21.8 JT	305 J	0.73 UT	4200 JT	G048	72.5	10.9 JT	225
PCB Congeners																
PCB001	pg/g	8	5	62.5	5.4 J	633	GCRSP12E	217	9.26	593	5.01 U	633	GCRSP12E	138	6.39 J	563
PCB002	pg/g	8	5	62.5	5.19	44.4	GCRSP12E	20.6	14.1	41.4	2.3 U	44.4	GCRSP12E	14.5	7.91	39.2
PCB003	pg/g	8	5	62.5	4.98 J	186 T	PGC-01	75.3	10.9	182	4.98 J	186 T	PGC-01	48.9	8.5 J	178
PCB004	pg/g	3	1	33.3	289 T	289 T	PGC-01	289	289 T	289 T	115 U	289 T	PGC-01	140	72.5 U	267
PCB004 & 010	pg/g	5	2	40	35.3	14500	GCRSP12E	7270	7270	13800	10 U	14500	GCRSP12E	2910	12.5 U	11600
PCB005	pg/g	3	0	0	--	--	--	--	--	--	10.5 UT	14.5 U	PGC-10	6.08	5.75 U	7.1 U
PCB005 & 008	pg/g	5	3	60	14.6	3640	GCRSP12E	1250	86.7	3280	14.6	3640	GCRSP12E	753	14.6	2930
PCB006	pg/g	8	3	37.5	21.5	799	GCRSP12E	299	75.4 T	727	10 U	799	GCRSP12E	117	12.1 U	546
PCB007	pg/g	3	1	33.3	24.3 T	24.3 T	PGC-01	24.3	24.3 T	24.3 T	11.5 U	24.3 T	PGC-01	12.4	7.25 U	22.6
PCB007 & 009	pg/g	5	2	40	10.8	400	GCRSP12E	205	205	381	10 U	400	GCRSP12E	88	11.8 UT	322
PCB008	pg/g	3	1	33.3	205 T	205 T	PGC-01	205	205 T	205 T	30 U	205 T	PGC-01	97.5	72.5 U	192
PCB009	pg/g	3	1	33.3	26.5 T	26.5 T	PGC-01	26.5	26.5 T	26.5 T	11.5 U	26.5 T	PGC-01	13.2	7.25 U	24.6
PCB010	pg/g	3	1	33.3	16.6 T	16.6 T	PGC-01	16.6	16.6 T	16.6 T	11.5 U	16.6 T	PGC-01	9.87	7.25 U	15.7
PCB011	pg/g	8	4	50	35.1 T	94.1	GCR12W	67	69.5	90.7	35.1 T	274 UT	PGC-01	86	82.9	136 U
PCB012 & 013	pg/g	8	3	37.5	16.1	295	GCRSP12E	114	29.9 T	268	10 U	295	GCRSP12E	49.5	13.5 U	202
PCB014	pg/g	8	0	0	--	--	--	--	--	--	9.44 U	50 U	GCRSP12E	11.9	11.6 U	21.3 U
PCB015	pg/g	8	6	75	13.1	1240	GCRSP12E	250	61.5	954 J	13.1	1240	GCRSP12E	198	61.5	840 J
PCB016	pg/g	3	1	33.3	105 T	105 T	PGC-01	105	105 T	105 T	19.9 U	105 T	PGC-01	44	17.2 U	96.2
PCB016 & 032	pg/g	5	5	100	19.9	14100	GCRSP12E	2920	67.7 JT	11400	19.9	14100	GCRSP12E	2920	67.7 JT	11400
PCB017	pg/g	8	6	75	14.4	23300	GCRSP12E	3930	60.5	17500	10.3 U	23300	GCRSP12E	2950	30.6 J	15200
PCB018	pg/g	5	5	100	26.9	4630	GCRSP12E	985	56.9	3740	26.9	4630	GCRSP12E	985	56.9	3740
PCB018 & 030	pg/g	3	1	33.3	164 T	164 T	PGC-01	164	164 T	164 T	20.9 U	164 T	PGC-01	66.1	23.7 U	150
PCB019	pg/g	8	6	75	3.93 J	30700	GCRSP12E	5130	15.4 J	23000	3.93 J	30700	GCRSP12E	3850	6.33 J	20000
PCB020	pg/g	3	3	100	7.66 J	447 T	PGC-01	166	44 J	407 J	7.66 J	447 T	PGC-01	166	44 J	407 J
PCB020 & 021 & 033	pg/g	5	5	100	17.7	2470	GCRSP12E	557	75.7 JT	2010	17.7	2470	GCRSP12E	557	75.7 JT	2010
PCB020 & 028	pg/g	3	1	33.3	507 T	507 T	PGC-01	507	507 T	507 T	64.5 U	507 T	PGC-01	210	90 U	465
PCB021 & 033	pg/g	3	1	33.3	210 T	210 T	PGC-01	210	210 T	210 T	32.2 U	210 T	PGC-01	89.5	42.3 U	193
PCB022	pg/g	8	6	75	12.5	2300	GCRSP12E	465	112 J	1780	12.5	2300	GCRSP12E	354	63.1 J	1570
PCB023	pg/g	8	0	0	--	--	--	--	--	--	4.72 U	58.1 U	PGC-10	12.8	9.35 U	26.9 U
PCB024	pg/g	3	1	33.3	1.89 JT	1.89 JT	PGC-01	1.89	1.89 JT	1.89 JT	1.89 JT	58.1 U	PGC-10	18	23 U	28.4 U
PCB024 & 027	pg/g	5	2	40	19.9	4510	GCRSP12E	2260	2260	4290	5.01 U	4510	GCRSP12E	909	6.2 U	3610
PCB025	pg/g	8	7	87.5	4.2 J	1390	GCRSP12E	218	24.8	987 J	4.2 J	1390	GCRSP12E	192	21 J	920 J
PCB026	pg/g	5	4	80	10.3	2280	GCRSP12E	593	41.7	1950	10.3	2280	GCRSP12E	476	32	1830
PCB026 & 029	pg/g	3	1	33.3	57.1 JT	57.1 JT	PGC-01	57.1	57.1 JT	57.1 JT	9.34 U	57.1 JT	PGC-01	25.1	13.6 U	52.8 J
PCB027	pg/g	3	2	66.7	3.35 J	17.2 JT	PGC-01	10.3	10.3 J	16.5 J	3.35 J	58.1 U	PGC-10	16.5	17.2 JT	27.9 J

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB028	pg/g	5	5	100	43.1	6770	GCRSP12E	1470	93.8	5490	43.1	6770	GCRSP12E	1470	93.8	5490
PCB029	pg/g	5	0	0	--	--	--	--	--	--	4.72 U	25 U	GCRSP12E	5.88	5.85 UT	11.2 U
PCB030	pg/g	5	1	20	48.5	48.5	GCRSP12E	48.5	48.5	48.5	4.72 U	48.5	GCRSP12E	13.1	5.85 UT	40
PCB031	pg/g	8	6	75	30.4 JT	3870	GCRSP12E	773	158	3000	30.4 JT	3870	GCRSP12E	591	73.3	2650
PCB032	pg/g	3	2	66.7	58.5	231 T	PGC-01	145	145	222	58.1 U	231 T	PGC-01	106	58.5	214
PCB034	pg/g	8	3	37.5	2.54 JT	154	GCRSP12E	53.9	5.08	139	2.54 JT	154	GCRSP12E	28.5	6.03 U	110
PCB035	pg/g	8	3	37.5	3.66 J	33.5	GCRSP12E	15	7.7	30.9	3.66 J	58.1 U	PGC-10	11.4	6.03 U	31.9
PCB036	pg/g	8	1	12.5	11.5 J	11.5 J	GCRSP12E	11.5	11.5 J	11.5 J	4.72 U	58.1 U	PGC-10	12.7	8.85 J	26.9 U
PCB037	pg/g	8	6	75	15.6	356	GCRSP12E	99.8	55.1 J	291	15.6	356	GCRSP12E	78.7	25	265
PCB038	pg/g	8	3	37.5	99.4 JT	1290	GCRSP12E	537	222	1180	5.01 U	1290	GCRSP12E	212	26 U	916
PCB039	pg/g	8	1	12.5	87.5	87.5	GCRSP12E	87.5	87.5	87.5	4.72 U	87.5	GCRSP12E	22.2	13.6 U	67
PCB040	pg/g	5	4	80	10.9	332	GCRSP12E	105	39.1	291	10.9	332	GCRSP12E	85.4	19.8	277
PCB040 & 041 & 071	pg/g	3	2	66.7	167	600 T	PGC-01	384	384	578	30.9 U	600 T	PGC-01	261	167	557
PCB041 & 064 & 071 & 072	pg/g	5	5	100	54.2	9230	GCRSP12E	2040	146 JT	7520	54.2	9230	GCRSP12E	2040	146 JT	7520
PCB042	pg/g	3	2	66.7	49.3	176 T	PGC-01	113	113	170	11.5 U	176 T	PGC-01	77	49.3	163
PCB042 & 059	pg/g	5	5	100	18.9	2110	GCRSP12E	471	64.2 JT	1710	18.9	2110	GCRSP12E	471	64.2 JT	1710
PCB043 & 049	pg/g	5	5	100	76.5	52900	GCRSP12E	11200	379 JT	42800	76.5	52900	GCRSP12E	11200	379 JT	42800
PCB043 & 073	pg/g	3	2	66.7	24.6 J	152 T	PGC-01	88.3	88.3 J	146 J	24.6 J	152 T	PGC-01	83	72.5 U	144
PCB044	pg/g	5	5	100	33.8 T	5250	GCRSP12E	1180	131	4270	33.8 T	5250	GCRSP12E	1180	131	4270
PCB044 & 047 & 065	pg/g	3	2	66.7	1050	5710 T	PGC-01	3380	3380	5480	107 U	5710 T	PGC-01	2270	1050	5240
PCB045	pg/g	5	5	100	7.34	442	GCRSP12E	105	15.9 T	363	7.34	442	GCRSP12E	105	15.9 T	363
PCB045 & 051	pg/g	3	3	100	20.9 J	2260 T	PGC-01	910	450	2080	20.9 J	2260 T	PGC-01	910	450	2080
PCB046	pg/g	8	5	62.5	18.3 J	2660	GCRSP12E	573	69.8	2150	5.01 U	2660	GCRSP12E	363	31.2	1760
PCB047	pg/g	5	5	100	43.6	84900	GCRSP12E	18400	637 JT	69200	43.6	84900	GCRSP12E	18400	637 JT	69200
PCB048	pg/g	3	1	33.3	44.2 JT	44.2 JT	PGC-01	44.2	44.2 JT	44.2 JT	12 U	44.2 JT	PGC-01	20.7	12 U	41 J
PCB048 & 075	pg/g	5	5	100	10.4	2550	GCRSP12E	549	48.2 JT	2060	10.4	2550	GCRSP12E	549	48.2 JT	2060
PCB049 & 069	pg/g	3	2	66.7	499	2430 T	PGC-01	1460	1460	2330	47.5 U	2430 T	PGC-01	984	499	2240
PCB050	pg/g	5	1	20	1460	1460	GCRSP12E	1460	1460	1460	4.72 U	1460	GCRSP12E	295	5.85 UT	1170
PCB050 & 053	pg/g	3	3	100	11 J	1140 T	PGC-01	469	257	1050	11 J	1140 T	PGC-01	469	257	1050
PCB051	pg/g	5	5	100	11.8	57900	GCRSP12E	12300	333 JT	46900	11.8	57900	GCRSP12E	12300	333 JT	46900
PCB052	pg/g	3	1	33.3	984 T	984 T	PGC-01	984	984 T	984 T	164 U	984 T	PGC-01	403	143 U	900
PCB052 & 069	pg/g	5	5	100	114	47000	GCRSP12E	9700	190 JT	37800	114	47000	GCRSP12E	9700	190 JT	37800
PCB053	pg/g	5	5	100	17.2	51200	GCRSP12E	10500	205 JT	41200	17.2	51200	GCRSP12E	10500	205 JT	41200
PCB054	pg/g	8	5	62.5	36.6 J	10200	GCRSP12E	2130	179 T	8200	5.01 U	10200	GCRSP12E	1340	61.8 J	6700
PCB055	pg/g	8	3	37.5	18.9 T	511	GCRSP12E	203	80.5	468	5.01 U	511	GCRSP12E	100	55 U	360
PCB056	pg/g	3	2	66.7	70.4	151 T	PGC-01	111	111	147	28.2 U	151 T	PGC-01	78.5	70.4	143
PCB056 & 060	pg/g	5	5	100	40.2	785	GCRSP12E	246	76.8 JT	684	40.2	785	GCRSP12E	246	76.8 JT	684
PCB057	pg/g	8	2	25	25.4	149	GCRSP12E	87.2	87.2	143	5.01 U	149	GCRSP12E	46.4	39	122
PCB058	pg/g	8	1	12.5	24.6 J	24.6 J	GCRSP12E	24.6	24.6 J	24.6 J	4.72 U	145 U	PGC-10	28	15.4 J	67.3 U
PCB059 & 062 & 075	pg/g	3	3	100	5.13 J	106 T	PGC-01	44	21 J	97.5 J	5.13 J	106 T	PGC-01	44	21 J	97.5 J
PCB060	pg/g	3	2	66.7	39 J	62.6 JT	PGC-01	50.8	50.8 J	61.4 J	14.9 U	62.6 JT	PGC-01	36.4	39 J	60.2 J
PCB061 & 070	pg/g	5	5	100	103	3470	GCRSP12E	884	136	2890	103	3470	GCRSP12E	884	136	2890
PCB061 & 070 & 074 & 076	pg/g	3	2	66.7	308	791 T	PGC-01	550	550	767	138 U	791 T	PGC-01	389	308	743
PCB062	pg/g	5	0	0	--	--	--	--	--	--	4.72 U	25 U	GCRSP12E	5.88	5.85 UT	11.2 U
PCB063	pg/g	8	5	62.5	12.1 J	240	GCRSP12E	74.2	43.4	204 J	5.01 U	240	GCRSP12E	56.6	28.5	181
PCB064	pg/g	3	1	33.3	175 T	175 T	PGC-01	175	175 T	175 T	30.4 U	175 T	PGC-01	73.7	31 U	161
PCB065	pg/g	5	0	0	--	--	--	--	--	--	4.72 U	25 U	GCRSP12E	5.88	5.85 UT	11.2 U
PCB066	pg/g	3	2	66.7	171	494 T	PGC-01	333	333	478	50.8 U	494 T	PGC-01	230	171	462
PCB066 & 076	pg/g	5	5	100	71.1	3380	GCRSP12E	824	118 JT	2800	71.1	3380	GCRSP12E	824	118 JT	2800
PCB067	pg/g	8	4	50	3.52 J	357	GCRSP12E	115	48.9 J	315	3.52 J	357	GCRSP12E	68.2	14.9 J	258
PCB068	pg/g	8	4	50	11.1 J	845	GCRSP12E	250	71.9 J	731 J	5.01 U	845	GCRSP12E	136	34.6 J	579 J
PCB072	pg/g	3	2	66.7	2.28 J	15.9 JT	PGC-01	9.09	9.09 J	15.2 J	2.28 J	145 U	PGC-10	30.2	15.9 JT	66.8 J
PCB073	pg/g	5	3	60	38.9 JT	3320	GCRSP12E	1170	162	3000	5.01 U	3320	GCRSP12E	706	38.9 JT	2690
PCB074	pg/g	5	5	100	34	756	GCRSP12E	227	82.4 JT	649	34	756	GCRSP12E	227	82.4 JT	649
PCB077	pg/g	8	8	100	6.56 J	140	GCRSP12E	37.5	15.5 J	113	6.56 J	140	GCRSP12E	37.5	15.5 J	113
PCB078	pg/g	8	1	12.5	21.7 J	21.7 J	GCRSP12E	21.7	21.7 J	21.7 J	4.72 U	145 U	PGC-10	27.6	14 J	67.3 U
PCB079	pg/g	8	4	50	2.92 J	247	GCRSP12E	79	33.1 J	218	2.92 J	247	GCRSP12E	50.4	10.9 J	186
PCB080	pg/g	8	1	12.5	19.1 JT	19.1 JT	PGC-01	19.1	19.1 JT	19.1 JT	4.72 U	145 U	PGC-10	22.3	9.35 U	67.3 U
PCB081	pg/g	8	2	25	21.7	25.7	GCRSP12E	23.7	23.7	25.5	1.21 U	145 U	PGC-10	29.1	23.7	67.3 U
PCB082	pg/g	8	6	75	41.1	558	GCRSP12E	168	93.9	461	24 U	558	GCRSP12E	130	53.3 J	423

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB083	pg/g	5	0	0	--	--	--	--	--	--	4.72 U	25 U	GCRSP12E	5.88	5.85 UT	11.2 U
PCB083 & 099	pg/g	3	2	66.7	441	2290 T	PGC-01	1370	1370	2200	116 U	2290 T	PGC-01	930	441	2110
PCB084	pg/g	3	1	33.3	430 T	430 T	PGC-01	430	430 T	430 T	59.5 U	430 T	PGC-01	172	57 U	393
PCB084 & 092	pg/g	5	5	100	121	7600	GCRSP12E	2130	174 JT	6610	121	7600	GCRSP12E	2130	174 JT	6610
PCB085 & 116	pg/g	8	7	87.5	40.2 JT	757	GCRSP12E	204	85.2	598	29.7 U	757	GCRSP12E	180	74.1	572
PCB086	pg/g	5	1	20	25.2	25.2	GCRSP12E	25.2	25.2	25.2	4.72 U	25.2	GCRSP12E	8.42	5.85 UT	21.4
PCB086 & 087 & 097 & 109 & 119 & 125	pg/g	3	2	66.7	458	1830 T	PGC-01	1140	1140	1760	162 U	1830 T	PGC-01	790	458	1690
PCB087 & 117 & 125	pg/g	5	5	100	114 JT	3370	GCRSP12E	1090	167	3030	114 JT	3370	GCRSP12E	1090	167	3030
PCB088 & 091	pg/g	8	7	87.5	49.6	21200	GCRSP12E	3680	357	15500	31.4 U	21200	GCRSP12E	3230	286 J	14500
PCB089	pg/g	8	4	50	3.07 J	45.6	GCRSP12E	18.6	12.8 J	41.2	3.07 J	145 U	PGC-10	20.2	7.85 J	63.1
PCB090 & 101	pg/g	5	5	100	344	20100	GCRSP12E	7520	525 JT	19300	344	20100	GCRSP12E	7520	525 JT	19300
PCB090 & 101 & 113	pg/g	3	2	66.7	1140	5250 T	PGC-01	3200	3200	5040	286 U	5250 T	PGC-01	2180	1140	4840
PCB092	pg/g	3	2	66.7	224	1100 T	PGC-01	662	662	1060	43.9 U	1100 T	PGC-01	449	224	1010
PCB093	pg/g	5	0	0	--	--	--	--	--	--	4.72 U	25 U	GCRSP12E	5.88	5.85 UT	11.2 U
PCB093 & 100	pg/g	3	2	66.7	72.8 J	774 T	PGC-01	423	423 J	739 J	72.8 J	774 T	PGC-01	306	72.8 J	704 J
PCB094	pg/g	8	5	62.5	53.7 J	2210	GCRSP12E	637	389 T	1860	5.01 U	2210	GCRSP12E	408	77.8 J	1590
PCB095	pg/g	3	2	66.7	640	2610 T	PGC-01	1630	1630	2510	191 U	2610 T	PGC-01	1120	640	2410
PCB095 & 098 & 102	pg/g	5	5	100	248	24300	GCRSP12E	7230	427 JT	21600	248	24300	GCRSP12E	7230	427 JT	21600
PCB096	pg/g	8	5	62.5	39.4 J	3380	GCRSP12E	796	208 T	2760	5.01 U	3380	GCRSP12E	508	65.7 J	2300
PCB097	pg/g	5	5	100	78.9 JT	1720	GCRSP12E	519	132	1490	78.9 JT	1720	GCRSP12E	519	132	1490
PCB098 & 102	pg/g	3	3	100	4.58 J	280 T	PGC-01	112	50.6 J	257 J	4.58 J	280 T	PGC-01	112	50.6 J	257 J
PCB099	pg/g	5	5	100	164	9810	GCRSP12E	2450	324 JT	8190	164	9810	GCRSP12E	2450	324 JT	8190
PCB100	pg/g	5	3	60	115 JT	10700	GCRSP12E	4100	1490	9780	5.01 U	10700	GCRSP12E	2460	115 JT	8860
PCB103	pg/g	8	6	75	2.68 J	4170	GCRSP12E	859	215 J	3250	2.68 J	4170	GCRSP12E	645	57.7 J	2880
PCB104	pg/g	8	4	50	3.7 J	1030	GCRSP12E	292	66.5 J	889	3.7 J	1030	GCRSP12E	157	23.6 J	702
PCB105	pg/g	8	7	87.5	82.5 JT	1540	GCRSP12E	526	202	1390	81.1 UJ	1540	GCRSP12E	465	194 J	1370
PCB106	pg/g	3	0	0	--	--	--	--	--	--	105 UT	145 U	PGC-10	60.8	57.5 U	71 U
PCB106 & 118	pg/g	5	5	100	229 JT	5720	GCRSP12E	2200	472	5440	229 JT	5720	GCRSP12E	2200	472	5440
PCB107	pg/g	3	2	66.7	53.5 J	225 JT	PGC-01	139	139 J	216 J	17.6 U	225 JT	PGC-01	95.8	53.5 J	208 J
PCB107 & 109	pg/g	5	5	100	22.6	1110	GCRSP12E	289	34.1 T	938	22.6	1110	GCRSP12E	289	34.1 T	938
PCB108 & 112	pg/g	5	5	100	14.6	411	GCRSP12E	110	25.3 T	345	14.6	411	GCRSP12E	110	25.3 T	345
PCB108 & 124	pg/g	3	2	66.7	22.5 J	66.5 JT	PGC-01	44.5	44.5 J	64.3 J	7.92 U	66.5 JT	PGC-01	31	22.5 J	62.1 J
PCB110	pg/g	5	5	100	411 JT	12700	GCRSP12E	4180	592	11500	411 JT	12700	GCRSP12E	4180	592	11500
PCB110 & 115	pg/g	3	2	66.7	816	3010 T	PGC-01	1910	1910	2900	288 U	3010 T	PGC-01	1320	816	2790
PCB111	pg/g	3	1	33.3	14.1 JT	14.1 JT	PGC-01	14.1	14.1 JT	14.1 JT	14.1 JT	290 U	PGC-10	91.4	115 U	142 U
PCB111 & 115	pg/g	5	3	60	7.86	165	GCRSP12E	70.5	38.7	152	7.86	165	GCRSP12E	44.7	7.86	140
PCB112	pg/g	3	0	0	--	--	--	--	--	--	211 UT	290 U	PGC-10	122	115 U	142 U
PCB113	pg/g	5	2	40	26.3	477	GCRSP12E	252	252	454	5.01 U	477	GCRSP12E	104	6.2 U	387
PCB114	pg/g	8	7	87.5	3.39 J	96.9	GCRSP12E	27.2	11.9 J	77.4 J	3.39 J	96.9	GCRSP12E	24	11.4 J	74.2 J
PCB117	pg/g	3	3	100	4.31 J	266 T	PGC-01	99.2	27.4 J	242 J	4.31 J	266 T	PGC-01	99.2	27.4 J	242 J
PCB118	pg/g	3	2	66.7	512 J	1760 JT	PGC-01	1140	1140 J	1700 J	203 UJ	1760 JT	PGC-01	791	512 J	1640 J
PCB119	pg/g	5	4	80	7.96	3690	GCRSP12E	1040	230 J	3200	7.96	3690	GCRSP12E	833	48.7 JT	3030
PCB120	pg/g	8	4	50	2.76 J	157	GCRSP12E	58.3	36.8 J	141	2.76 J	157	GCRSP12E	40	14.4 J	127
PCB121	pg/g	8	3	37.5	11.4 JT	566	GCRSP12E	204	33.3	513	5.01 U	566	GCRSP12E	94.4	22.4 J	393
PCB122	pg/g	8	5	62.5	6.03 J	55	GCRSP12E	20	14.7 JT	47.5	6.03 J	145 U	PGC-10	23.1	10.9 J	66.4
PCB123	pg/g	8	7	87.5	4.09 JT	69.2	GCRSP12E	19.6	7.35	55.9	4.09 JT	145 U	PGC-10	26.2	13.2 J	71.3
PCB124	pg/g	5	5	100	13.9	166	GCA12E	75.9	26.9 T	163	13.9	166	GCA12E	75.9	26.9 T	163
PCB126	pg/g	8	5	62.5	2.61 J	42	GCA12E	16.3	4.54 JT	39.3	2.61 J	145 U	PGC-10	26.7	16.5 J	67.3 U
PCB127	pg/g	8	1	12.5	3.99 JT	3.99 JT	PGC-01	3.99	3.99 JT	3.99 JT	3.99 JT	290 U	PGC-10	36.7	6.03 U	135 U
PCB128 & 162	pg/g	5	5	100	47 JT	2090	GCA12E	724	105	1930	47 JT	2090	GCA12E	724	105	1930
PCB128 & 166	pg/g	3	2	66.7	194	1170 T	PGC-01	682	682	1120	63.1 U	1170 T	PGC-01	465	194	1070
PCB129	pg/g	5	5	100	18.4	562	GCA12E	197	28	520	18.4	562	GCA12E	197	28	520
PCB129 & 138 & 163	pg/g	3	2	66.7	2190	16000 JT	PGC-01	9100	9100 J	15300 J	486 U	16000 JT	PGC-01	6140	2190	14600 J
PCB130	pg/g	8	7	87.5	27.4	1290	GCA12E	437	83.4 J	1220	27.4	1290	GCA12E	384	67 J	1200
PCB131	pg/g	8	3	37.5	4.71 J	68.5 JT	PGC-01	28.8	13.3 J	63 J	4.71 J	68.5 JT	PGC-01	14.5	6.03 U	49.2 J
PCB132	pg/g	3	2	66.7	615	3600 T	PGC-01	2110	2110	3450	147 U	3600 T	PGC-01	1430	615	3300
PCB132 & 161	pg/g	5	5	100	107	10800	GCA12E	3150	224	9530	107	10800	GCA12E	3150	224	9530
PCB133	pg/g	3	3	100	8.56 J	274 T	PGC-01	106	36.1 J	250 J	8.56 J	274 T	PGC-01	106	36.1 J	250 J
PCB133 & 142	pg/g	5	4	80	20.7	2130	GCRSP12E	783	491	1950	12.4 U	2130	GCRSP12E	628	30.3 T	1890
PCB134	pg/g	3	2	66.7	99.6 J	608 T	PGC-01	354	354 J	583 J	22.9 U	608 T	PGC-01	240	99.6 J	557 J

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB134 & 143	pg/g	5	5	100	22.4	1770	GCA12E	629	66.2 JT	1670	22.4	1770	GCA12E	629	66.2 JT	1670
PCB135	pg/g	5	5	100	53.9	6150	GCA12E	2390	159	6020	53.9	6150	GCA12E	2390	159	6020
PCB135 & 151	pg/g	3	2	66.7	852	5340 T	PGC-01	3100	3100	5120	140 U	5340 T	PGC-01	2090	852	4890
PCB136	pg/g	8	7	87.5	49.4	8070	GCRSP12E	2490	273	7790	49.4	8070	GCRSP12E	2180	233	7740
PCB137	pg/g	8	7	87.5	21.5 T	632	GCRSP12E	158	44.3 J	497 J	14.9 U	632	GCRSP12E	139	42.6 J	475 J
PCB138 & 163 & 164	pg/g	5	5	100	407	43600	GCA12E	12900	1040	38600	407	43600	GCA12E	12900	1040	38600
PCB139 & 140	pg/g	3	3	100	6.49 J	80.8 JT	PGC-01	34	14.6 J	74.2 J	6.49 J	80.8 JT	PGC-01	34	14.6 J	74.2 J
PCB139 & 149	pg/g	5	5	100	287	43400	GCA12E	13800	1390	39300	287	43400	GCA12E	13800	1390	39300
PCB140	pg/g	5	2	40	78.8	551	GCRSP12E	315	315	527	5.01 U	551	GCRSP12E	129	6.2 U	457
PCB141	pg/g	8	7	87.5	87.5	13300	GCA12E	3060	469	10400	87.5	13300	GCA12E	2680	431	9920
PCB142	pg/g	3	0	0	--	--	--	--	--	--	211 UT	290 U	PGC-10	122	115 U	142 U
PCB143	pg/g	3	0	0	--	--	--	--	--	--	105 UT	145 U	PGC-10	60.8	57.5 U	71 U
PCB144	pg/g	8	7	87.5	16.6	2930	GCA12E	647	99.8 J	2260	16.6	2930	GCA12E	567	90.1 J	2150
PCB145	pg/g	8	0	0	--	--	--	--	--	--	4.72 U	290 U	PGC-10	49.4	9.35 U	135 U
PCB146	pg/g	3	2	66.7	284	2060 T	PGC-01	1170	1170	1970	145 U	2060 T	PGC-01	806	284	1880
PCB146 & 165	pg/g	5	5	100	65.9	7290	GCRSP12E	2800	134	7120	65.9	7290	GCRSP12E	2800	134	7120
PCB147	pg/g	5	4	80	15.8	11000	GCRSP12E	3240	970 J	9630	12.4 U	11000	GCRSP12E	2590	89.1 JT	9170
PCB147 & 149	pg/g	3	2	66.7	1890	12600 JT	PGC-01	7250	7250 J	12100 J	269 U	12600 JT	PGC-01	4870	1890	11500 J
PCB148	pg/g	8	4	50	4.83 J	1030	GCRSP12E	304	90.7 J	893	4.83 J	1030	GCRSP12E	172	36.8 J	720
PCB150	pg/g	8	4	50	16.7 J	1940	GCRSP12E	589	199 J	1680	5.01 U	1940	GCRSP12E	314	80.9 J	1340
PCB151	pg/g	5	5	100	90.5	17000	GCA12E	5560	695	15600	90.5	17000	GCA12E	5560	695	15600
PCB152	pg/g	8	4	50	12.9 J	647	GCRSP12E	239	148 J	579	5.01 U	647	GCRSP12E	139	57.5 J	488
PCB153	pg/g	5	5	100	414	54300	GCA12E	17200	2270	49100	414	54300	GCA12E	17200	2270	49100
PCB153 & 168	pg/g	3	2	66.7	1980	14700 JT	PGC-01	8340	8340 J	14100 J	400 U	14700 JT	PGC-01	5630	1980	13400 J
PCB154	pg/g	8	7	87.5	5.47 J	4740	GCRSP12E	816	37 J	3500	5.47 J	4740	GCRSP12E	715	30.3 J	3290
PCB155	pg/g	8	3	37.5	5.44 JT	194	GCRSP12E	75.8	28	177	5.01 U	290 U	PGC-10	62.7	17.1	177
PCB156	pg/g	5	5	100	35.6 JT	2640	GCA12E	781	77.3	2330	35.6 JT	2640	GCA12E	781	77.3	2330
PCB156 & 157	pg/g	3	2	66.7	165	1200 T	PGC-01	683	683	1150	38.7 U	1200 T	PGC-01	461	165	1100
PCB157	pg/g	5	5	100	9.11 J	207	GCRSP12E	73.6	26.6	189	9.11 J	207	GCRSP12E	73.6	26.6	189
PCB158	pg/g	3	2	66.7	182	1260 T	PGC-01	721	721	1210	58.1 U	1260 T	PGC-01	490	182	1150
PCB158 & 160	pg/g	5	5	100	46.2	3900	GCA12E	1110	101 JT	3400	46.2	3900	GCA12E	1110	101 JT	3400
PCB159	pg/g	8	4	50	13.8 T	452	GCRSP12E	172	111 J	415	4.72 U	452	GCRSP12E	106	16.8 J	365
PCB160	pg/g	3	1	33.3	51.1 J	51.1 J	PGC-10	51.1	51.1 J	51.1 J	51.1 J	115 U	PGC-04	53.7	52.5 UT	57 U
PCB161	pg/g	3	0	0	--	--	--	--	--	--	211 UT	290 U	PGC-10	122	115 U	142 U
PCB162	pg/g	3	2	66.7	3.63 J	18.3 JT	PGC-01	11	11 J	17.6 J	3.63 J	290 U	PGC-10	55.6	18.3 JT	132 J
PCB164	pg/g	3	2	66.7	150	1090 T	PGC-01	620	620	1040	32.9 U	1090 T	PGC-01	419	150	996
PCB165	pg/g	3	3	100	3.97 J	67.1 J	PGC-10	30.9	21.5 JT	62.5 J	3.97 J	67.1 J	PGC-10	30.9	21.5 JT	62.5 J
PCB166	pg/g	5	1	20	19 J	19 J	GCRSP12E	19	19 J	19 J	4.72 U	19 J	GCRSP12E	7.18	5.85 UT	16.4 J
PCB167	pg/g	8	7	87.5	15.3 JT	947	GCA12E	284	57.5 J	804	11.7 U	947	GCA12E	249	41.9 J	780
PCB168	pg/g	5	2	40	75.5	253	GCRSP12E	164	164	244	5.01 U	253	GCRSP12E	68.6	6.2 U	218
PCB169	pg/g	8	2	25	3.56 J	35.5 JT	PGC-01	19.5	19.5 J	33.9 J	0.475 U	145 U	PGC-10	14.7	1.65 U	59.6 J
PCB170	pg/g	8	7	87.5	95.3	25000	GCA12E	6450	942	20400 J	95.3	25000	GCA12E	5650	873	19600 J
PCB171	pg/g	5	4	80	78.9 JT	6240	GCA12E	2210	1260	5640	23.9 UJ	6240	GCA12E	1770	264	5440
PCB171 & 173	pg/g	3	2	66.7	245	2740 T	PGC-01	1490	1490	2620	32.8 U	2740 T	PGC-01	1000	245	2490
PCB172	pg/g	8	6	75	16.2	4150	GCA12E	1270	857	3520	11.8 UT	4150	GCA12E	956	167 J	3260
PCB173	pg/g	5	3	60	14.1	581	GCA12E	250	154	538	11.7 UT	581	GCA12E	152	14.1	496
PCB174	pg/g	8	7	87.5	116	30600	GCA12E	7340	2880	24200	105 U	30600	GCA12E	6430	1810	23100
PCB175	pg/g	8	7	87.5	4.49 J	1500	GCA12E	350	98.4	1190	4.49 J	1500	GCA12E	307	64.3 J	1140
PCB176	pg/g	8	7	87.5	17.2	3970	GCA12E	1010	360	3270	15.2 U	3970	GCA12E	882	227 J	3150
PCB177	pg/g	8	7	87.5	68.2	16200	GCA12E	4210	1130	13700	46 U	16200	GCA12E	3690	738	13300
PCB178	pg/g	8	7	87.5	28.8	6180	GCA12E	1960	637	5890	22.8 U	6180	GCA12E	1720	393	5840
PCB179	pg/g	8	7	87.5	59.6	14100	GCA12E	3950	1870	12400	45.7 U	14100	GCA12E	3460	1090	12100
PCB180	pg/g	5	5	100	254	66600	GCA12E	19500	6880	58000	254	66600	GCA12E	19500	6880	58000
PCB180 & 193	pg/g	3	3	100	229	19500 JT	PGC-01	7150	1720	17700 J	229	19500 JT	PGC-01	7150	1720	17700 J
PCB181	pg/g	8	4	50	2.63 J	135	GCRSP12E	62.3	55.7 J	129	2.63 J	290 U	PGC-10	51.1	12.7 J	142
PCB182	pg/g	3	2	66.7	1.27 J	21.6 JT	PGC-01	11.4	11.4 J	20.6 J	1.27 J	290 U	PGC-10	56	21.6 JT	133 J
PCB182 & 187	pg/g	5	5	100	173	37400	GCA12E	14000	5780	35200	173	37400	GCA12E	14000	5780	35200
PCB183	pg/g	8	7	87.5	75.6	16700	GCA12E	4520	2000	13800	58.4 U	16700	GCA12E	3960	1230	13400
PCB184	pg/g	8	2	25	6.11	50.4	GCRSP12E	28.3	28.3	48.2	5.01 U	290 U	PGC-10	54.6	28.3	135 U
PCB185	pg/g	8	7	87.5	6.62 J	3340	GCA12E	796	519	2620	6.62 J	3340	GCA12E	698	284 J	2500

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB186	pg/g	8	0	0	--	--	--	--	--	--	4.72 U	290 U	PGC-10	49.4	9.35 U	135 U
PCB187	pg/g	3	2	66.7	859	8370 T	PGC-01	4610	4610	7990	135 U	8370 T	PGC-01	3100	859	7620
PCB188	pg/g	8	4	50	1.67 J	642	GCRSP12E	185	49 J	558	1.67 J	642	GCRSP12E	104	12.4 J	445
PCB189	pg/g	8	8	100	3.15 J	842	GCA12E	214	22.7 J	691	3.15 J	842	GCA12E	214	22.7 J	691
PCB190	pg/g	8	8	100	19.5 J	5450	GCA12E	1260	238	4270	19.5 J	5450	GCA12E	1260	238	4270
PCB191	pg/g	8	7	87.5	3.58 J	1040	GCA12E	269	39.9	842	3.58 J	1040	GCA12E	236	36.2 J	809
PCB192	pg/g	8	0	0	--	--	--	--	--	--	4.72 U	290 U	PGC-10	49.4	9.35 U	135 U
PCB193	pg/g	5	5	100	12.4	3170	GCA12E	1100	218	2950	12.4	3170	GCA12E	1100	218	2950
PCB194	pg/g	8	8	100	53.3 J	15000	GCA12E; GCRSP12E	4890	2240	15000	53.3 J	15000	GCA12E; GCRSP12E	4890	2240	15000
PCB195	pg/g	8	6	75	18.6 J	7100	GCA12E	2880	1710	6970	11.8 UT	7100	GCA12E	2160	839 J	6910
PCB196	pg/g	3	3	100	31.5 J	2190 T	PGC-01	803	186 J	1990 J	31.5 J	2190 T	PGC-01	803	186 J	1990 J
PCB196 & 203	pg/g	5	5	100	82.5	19700	GCA12E	8300	6840	18700	82.5	19700	GCA12E	8300	6840	18700
PCB197	pg/g	8	6	75	1.72 J	598	GCRSP12E	251	162 J	592	1.72 J	598	GCRSP12E	190	83.9 J	589
PCB198	pg/g	5	3	60	265	1270	GCA12E	696	552	1200	11.7 UT	1270	GCA12E	420	265	1130
PCB198 & 199	pg/g	3	3	100	71.9 J	3760 T	PGC-01	1410	399	3420	71.9 J	3760 T	PGC-01	1410	399	3420
PCB199	pg/g	5	5	100	94.2	17100	GCA12E	7600	7180	16400	94.2	17100	GCA12E	7600	7180	16400
PCB200	pg/g	5	3	60	921	2240	GCA12E	1460	1230	2140	11.8 UT	2240	GCA12E	881	921	2040
PCB201	pg/g	8	7	87.5	6.42 J	1870	GCA12E	717	422 T	1830	6.42 J	1870	GCA12E	628	234 J	1830
PCB202	pg/g	8	8	100	15.9 J	2300	GCA12E	797	293 J	2220	15.9 J	2300	GCA12E	797	293 J	2220
PCB203	pg/g	3	3	100	40.4 J	2560 T	PGC-01	957	271	2330	40.4 J	2560 T	PGC-01	957	271	2330
PCB204	pg/g	8	1	12.5	7.92 J	7.92 J	GCRSP12E	7.92	7.92 J	7.92 J	4.72 U	290 U	PGC-10	48.8	7.06 J	135 U
PCB205	pg/g	8	6	75	1.6 J	772	GCRSP12E	300	188 J	738	1.6 J	772	GCRSP12E	227	83.9 J	724
PCB206	pg/g	8	7	87.5	27.3 JT	4480	GCRSP12E	1540	693 T	3960	27.3 JT	4480	GCRSP12E	1350	427 J	3870
PCB207	pg/g	8	6	75	5.74 J	552	GCRSP12E	230	223 J	504	5.74 J	552	GCRSP12E	174	57.2 J	484
PCB208	pg/g	8	7	87.5	11.1 J	596	GCA12W	250	121 JT	592	11.1 J	596	GCA12W	219	80.9 J	591
PCB209	pg/g	8	8	100	15.2 T	207	GCRSP12E	68.8	44.9	172	15.2 T	207	GCRSP12E	68.8	44.9	172
Total PCB Congeners	pg/g	8	8	100	798 JT	912000 JT	GCRSP12E	228000	44500 J	806000 J	798 JT	912000 JT	GCRSP12E	228000	44500 J	806000 J
PCBs[c]																
Total PCBs	µg/kg	154	114	74	0.798 JT	4200 JT	--	108	21.9 J	371 J	0.73 UT	4200 JT	--	80.6	11 J	297 J
PCB Homologs																
Dichlorobiphenyl homologs	pg/g	8	7	87.5	26 JT	20900 T	GCRSP12E	3180	147 T	14900 J	26 JT	20900 T	GCRSP12E	2800	141	13900 J
Heptachlorobiphenyl homologs	pg/g	8	8	100	267 JT	243000 T	GCA12E	56600	15200 J	196000	267 JT	243000 T	GCA12E	56600	15200 J	196000
Hexachlorobiphenyl homologs	pg/g	8	8	100	143 JT	223000 T	GCA12E	56600	8450 J	194000 J	143 JT	223000 T	GCA12E	56600	8450 J	194000 J
Monochlorobiphenyl homologs	pg/g	8	6	75	5.19 T	841 T	GCRSP12E	261	30.1 J	793	5.19 T	841 T	GCRSP12E	197	20.7 J	774
Nonachlorobiphenyl homologs	pg/g	8	8	100	16.8 JT	5620 T	GCRSP12E	1740	565 J	4950	16.8 JT	5620 T	GCRSP12E	1740	565 J	4950
Octachlorobiphenyl homologs	pg/g	8	8	100	241 JT	67800 T	GCA12E	20800	8810 J	63900 J	241 JT	67800 T	GCA12E	20800	8810 J	63900 J
Pentachlorobiphenyl homologs	pg/g	8	8	100	15 JT	138000 T	GCRSP12E	28400	4190 J	108000	15 JT	138000 T	GCRSP12E	28400	4190 J	108000
Tetrachlorobiphenyl homologs	pg/g	8	8	100	43.6 JT	342000 JT	GCRSP12E	47900	2920 J	229000 J	43.6 JT	342000 JT	GCRSP12E	47900	2920 J	229000 J
Trichlorobiphenyl homologs	pg/g	8	8	100	15.8 JT	98300 JT	GCRSP12E	13000	514 J	64800 J	15.8 JT	98300 JT	GCRSP12E	13000	514 J	64800 J
PCDD/Fs Homologs																
Heptachlorodibenzofuran homologs	pg/g	57	54	94.7	0.484 J	779	G030	54.9	15.1	190	0.37 U	779	G030	52	14 J	188
Heptachlorodibenzo-p-dioxin homologs	pg/g	57	55	96.5	1.73 J	1830	G030	157	58.7 J	728 J	1.5 U	1830	G030	152	49.8	698 J
Hexachlorodibenzofuran homologs	pg/g	57	54	94.7	0.0977 J	246	G044	24.4	10.85 J	87.92	0.0276 U	246	G044	23.12	9.41	85.64
Hexachlorodibenzo-p-dioxin homologs	pg/g	57	55	96.5	0.0828 J	86.7	G045	15.56	7.79 J	59.11	0.0617 U	86.7	G045	15.01	7.6 T	58.24
Octachlorodibenzofuran	pg/g	67	55	82.1	0.874 J	2210 J	G030	87.1	20.5 JT	215	0.238 U	2210 J	G030	72.1	11.8 J	197
Octachlorodibenzo-p-dioxin	pg/g	67	61	91	7.04 J	10400	G030	819	312	2710 T	7.04 J	10400	G030	746	259 J	2460
Pentachlorodibenzofuran homologs	pg/g	57	52	91.2	0.0356 J	132	G049	15.13	8.63 J	51.01	0.0189 U	132	G049	13.81	6.65 T	50.28
Pentachlorodibenzo-p-dioxin homologs	pg/g	57	41	71.9	0.0896 T	7.64 J	G057	1.83	1.08 J	5.51 J	0.016 U	7.64 J	G057	1.323	0.485 J	5.302 J
Tetrachlorodibenzofuran homologs	pg/g	57	46	80.7	0.103 J	95.2	G049	7.093	3.64	22.03	0.0178 U	95.2	G049	5.729	2.1	19
Tetrachlorodibenzo-p-dioxin homologs	pg/g	57	40	70.2	0.0766 J	4.23	G060	1.38	1.045 J	3.96	0.0115 U	4.23	G060	0.9752	0.47 J	3.67 J
Total PCDD/F	pg/g	67	62	92.5	9.45 JT	15400 JT	G030	1130	444 J	3590 J	9.45 JT	15400 JT	G030	1040	387 JT	3360 J
PCDD/Fs																
1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/g	67	61	91	0.163 J	121	G030	13.7	4.72 J	52.1	0.116 U	121	G030	12.6	4.21 J	52.1
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/g	67	61	91	0.842 J	1040	G030	76.8	33.4	215 T	0.842 J	1040	G030	70.1	25.6	211
1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/g	67	43	64.2	0.0764 J	9.06 J	G044	1.334	0.653 J	3.948 J	0.0239 U	9.06 J	G044	0.9829	0.2875 U	3.485 J
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	67	53	79.1	0.0329 J	13.7	G044	1.938	0.926 J	8.802 J	0.0183 U	13.7	G044	1.546	0.617 J	7.875 J
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/g	67	47	70.1	0.0449 J	3.35 J	G057	0.6928	0.471 J	2.09 J	0.0228 U	3.35 J	G057	0.4998	0.296 J	1.8 J
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	67	49	73.1	0.0588 J	10.2 J	G044	1.006	0.495 J	3.11 J	0.0195 U	10.2 J	G044	0.8227	0.429 JT	3.13 J
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/g	67	56	83.6	0.109 J	28.4	G045	3.256	2.085 J	10.33 J	0.0316 U	28.4	G045	2.829	1.56 J	9.623

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	67	16	23.9	0.0381 J	0.471 J	G037	0.2003	0.1625 J	0.4088 J	0.0182 U	2.03 U	O33-S010	0.1025	0.0505 U	0.3277 J
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/g	67	49	73.1	0.0881 J	6.5 J	G057	1.729	1.09 J	5.32 J	0.0217 U	6.5 J	G057	1.282	0.78 J	4.36 J
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	67	36	53.7	0.07 T	2.8 J	G049	0.44087	0.282 J	0.97075 J	0.00812 U	2.8 J	G049	0.25968	0.141 J	0.872 J
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/g	67	40	59.7	0.0367 J	2.02 J	G057	0.4695	0.368 J	1.073 J	0.016 U	2.02 J	G057	0.301	0.234 J	0.8731 J
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	67	48	71.6	0.0632 J	35.4	G044	1.9	0.74 J	5.17 J	0.0181 U	35.4	G044	1.386	0.474 JT	4.546 J
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	67	47	70.1	0.0515 J	9.25 J	G049	0.7048	0.431 J	1.638 J	0.0116 U	9.25 J	G049	0.5108	0.268 J	1.34 J
2,3,7,8-Tetrachlorodibenzofuran	pg/g	67	29	43.3	0.116 T	8.58	G049	0.82648	0.462 J	1.114 J	0.00463 U	8.58	G049	0.41246	0.149 T	1.0095 J
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	67	27	40.3	0.0483 J	0.605 J	G061	0.21647	0.168 J	0.4599 J	0.00896 U	0.605 J	G061	0.11623	0.0615 U	0.3613 J
TCDD TEQ (ND = 0)	pg/g	67	63	94	0.0112 JT	19.2 JT	G030	2.606	1.43 JT	9.224 J	0.0112 JT	19.2 JT	G030	2.454	1.26 JT	9.132 J
Total TCDD TEQ (ND = 0)	pg/g	70	66	94.3	0.000879 JA	19.2 JT	G030	2.64139	1.41 J	9.155 J	0.000879 JA	19.2 JT	G030	2.49406	1.21 J	9.063 J
PCB TEQ																
Total PCB TEQ (ND=0)	pg/g	8	8	100	0.000879 JT	4.51 T	GCA12E	1.27123	0.354 J	4.034	0.000879 JT	4.51 T	GCA12E	1.27123	0.354 J	4.034
PBDE Congeners																
PBDE028	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1 U	G783; GCRSP12E; GSP12W-ALT	0.5	0.5 U	0.5 U
PBDE047	µg/kg	3	3	100	0.31 J	1.2	GCRSP12E	0.61	0.33 J	1.1 J	0.31 J	1.2	GCRSP12E	0.61	0.33 J	1.1 J
PBDE099	µg/kg	3	3	100	0.3 J	1.1	GCRSP12E	0.58	0.33 J	1 J	0.3 J	1.1	GCRSP12E	0.58	0.33 J	1 J
PBDE100	µg/kg	3	1	33.3	0.15 J	0.15 J	GCRSP12E	0.15	0.15 J	0.15 J	0.15 J	1 U	G783; GSP12W-ALT	0.38	0.5 U	0.5 U
PBDE153	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1 U	G783; GCRSP12E; GSP12W-ALT	0.5	0.5 U	0.5 U
PBDE154	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1 U	G783; GCRSP12E; GSP12W-ALT	0.5	0.5 U	0.5 U
PBDE183	µg/kg	3	0	0	--	--	--	--	--	--	1 U	1 U	G783; GCRSP12E; GSP12W-ALT	0.5	0.5 U	0.5 U
PBDE209	µg/kg	3	0	0	--	--	--	--	--	--	9.9 U	10 U	GCRSP12E; GSP12W-ALT	5	5 U	5 U
Pesticides																
2,4'-DDD	µg/kg	143	56	39.2	0.095 J	14 J	G048	2.19	1.35 J	7.33 J	0.032 U	14 J	G048	0.984	0.24 U	3.75 J
2,4'-DDE	µg/kg	143	5	3.5	0.0094 J	0.77 J	G059	0.2259	0.14 J	0.652 J	0.0094 J	5.8 U	G030	0.1782	0.08 U	0.595 U
2,4'-DDT	µg/kg	143	78	54.5	0.0069 J	17 J	G030	1.677	0.9 J	5.58 J	0.0069 J	17 J	G030	1.047	0.39 J	4.07 J
4,4'-DDD	µg/kg	149	106	71.1	0.086 J	57 J	G048	1.64	0.64 J	4.08	0.047 U	57 J	G048	1.23	0.43	2.8
4,4'-DDE	µg/kg	149	115	77.2	0.039 J	15	C090	1.26	0.76 J	4.62 J	0.027 U	15	C090	1.03	0.57 J	3.78 J
4,4'-DDT	µg/kg	149	77	51.7	0.044 J	38	C090	3.67	2 J	12.4	0.044 J	38	C090	2.24	0.82 J	8.46 J
Aldrin	µg/kg	145	22	15.2	0.0735 JT	0.7 NJ	UG08	0.2624	0.215 J	0.615 J	0.012 UJ	2 U	PA03; PA04	0.1064	0.07 U	0.381 J
alpha-Endosulfan	µg/kg	145	24	16.6	0.04 J	0.83	G007	0.249	0.175 J	0.658 J	0.025 U	2 U	PA03; PA04	0.111	0.0405 U	0.414 J
alpha-Hexachlorocyclohexane	µg/kg	145	5	3.4	0.056 J	0.3 J	GCR12W	0.1528	0.13 J	0.28 J	0.0069 UJ	2 U	PA03; PA04	0.0609	0.029 U	0.218 U
beta-Endosulfan	µg/kg	145	20	13.8	0.083 J	1.8 J	O33-S010	0.405	0.245 J	1.14 J	0.031 U	3.6 U	G007	0.171	0.07 U	0.792 J
beta-Hexachlorocyclohexane	µg/kg	145	5	3.4	0.094 J	1.2 J	O33-S006	0.545	0.41 J	1.12 J	0.012 UJ	2 U	PA03; PA04	0.116	0.09 U	0.343 U
Chlordane (technical)	µg/kg	22	0	0	--	--	--	--	--	--	1.9 U	63 U	O33-S004	5.2	2.2 U	26 U
Chlorpyrifos	µg/kg	4	3	75	0.55 J	0.83 J	G058	0.66	0.6 J	0.807 J	0.0072 UJ	0.83 J	G058	0.4959	0.575 J	0.7955 J
cis-Chlordane	µg/kg	145	31	21.4	0.067 J	5.7 J	G054	0.556	0.29	1.65 J	0.031 U	14 U	O33-S004	0.255	0.06 U	0.964 J
cis-Nonachlor	µg/kg	143	13	9.1	0.021 J	2 J	O33-C009	0.575	0.54 J	1.58 J	0.021 J	8.3 U	GCA12E	0.355	0.155 U	1.29
delta-Hexachlorocyclohexane	µg/kg	145	2	1.4	0.12 J	2 J	C025	1.06	1.06 J	1.91 J	0.011 UJ	2 J	C025; PA03; PA04	0.0736	0.035 U	0.167 U
Dieldrin	µg/kg	145	14	9.7	0.042 J	1.1	G062	0.266	0.155 J	0.762 J	0.03 U	2.1 U	O33-S010	0.119	0.07 U	0.466
Endosulfan sulfate	µg/kg	145	4	2.8	0.11 J	0.33 J	G057	0.253	0.285 J	0.326 J	0.017 UJ	13 U	O33-S010	0.165	0.055 UT	0.4 U
Endrin	µg/kg	145	5	3.4	0.051 J	8.8	G061	1.94	0.36	7.12 J	0.045 UJ	8.8	G061	0.149	0.041 U	0.358
Endrin aldehyde	µg/kg	145	7	4.8	0.19 J	1.8 J	IPC-S012	0.706	0.44 NJ	1.59 J	0.042 U	2.1 U	G086	0.146	0.06 U	0.66 U
Endrin ketone	µg/kg	145	12	8.3	0.062 J	8.5 NJ	G783	1.31	0.685 J	4.7 J	0.029 U	8.5 NJ	G783	0.345	0.1 U	1.08 J
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	145	20	13.8	0.059 J	2.3	C090	0.496	0.315 J	1.45 J	0.011 UJ	2.3	C090	0.156	0.055 UJ	0.63 J
Heptachlor	µg/kg	145	7	4.8	0.06 J	0.52 NJ	G780	0.2274	0.17 J	0.46 J	0.0091 UJ	2 U	PA03; PA04	0.08635	0.035 U	0.344 J
Heptachlor epoxide	µg/kg	145	8	5.5	0.058 J	0.64 J	IPC-S014	0.27	0.225 J	0.574 J	0.03 UJ	2.6 U	C090	0.14	0.09 U	0.48 U
Methoxychlor	µg/kg	145	4	2.8	0.35 J	11	G086	3.28	0.89 J	9.53	0.018 UJ	11	G086	0.256	0.095 UT	0.574 J
Mirex	µg/kg	143	4	2.8	0.12 J	0.33 J	IPC-S014	0.23	0.235 J	0.317 J	0.029 UJ	1.1 U	IPC-S012	0.0469	0.0245 U	0.125 J
Oxychlordane	µg/kg	143	9	6.3	0.11 J	0.74 J	C090	0.369	0.33 J	0.66 J	0.038 UJ	8 U	O33-S004	0.135	0.0425 U	0.437 J
Total chlordanes	µg/kg	145	110	75.9	0.039 JT	23.2 JT	G054	1.29	0.55 J	3.97 J	0.039 JT	23.2 JT	G054	1.09	0.4 JT	3.76 J
Total Endosulfan	µg/kg	145	41	28.3	0.04 JT	1.8 JT	O33-S010	0.368	0.3 JT	1 T	0.04 JT	2.8 UT	O33-S008	0.213	0.1 UT	0.798 J
Total DDD	µg/kg	149	113	75.8	0.086 JT	71 JT	G048	2.62	0.88 JT	9.42 J	0.047 UT	71 JT	G048	2.05	0.56 JT	5.66 J
Total DDx	µg/kg	149	130	87.2	0.047 JT	73.3 JT	G048	6.59	3.09 J	19.9 J	0.047 JT	73.3 JT	G048	5.85	2.34 T	19 J
Total DDE	µg/kg	149	115	77.2	0.039 JT	15 T	C090	1.27	0.76 JT	4.62 J	0.034 UT	15 T	C090	1.07	0.59 JT	3.78 J
Total DDT	µg/kg	149	104	69.8	0.045 JT	46.4 JT	C090	3.983	1.66 J	14.73 J	0.045 JT	46.4 JT	C090	3.032	1 JA	10.52 J
Total 4,4' DDx	µg/kg	12	8	66.7	0.27 JT	8.4 JT	UG07	2.7	1.8 J	7 J	0.27 JT	8.4 JT	UG07	2.9	2.8	6.3 J

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Toxaphene	µg/kg	145	0	0	--	--	--	--	--	--	2.4 U	1800 U	G048	24	11 U	65 U
trans-Chlordane	µg/kg	145	92	63.4	0.045 J	14 J	G030	1.12	0.505 J	3.85 J	0.027 U	14 J	G030	0.772	0.28 J	3.46 J
trans-Nonachlor	µg/kg	143	37	25.9	0.039 J	4.4 J	G054	0.301	0.16 J	0.544 J	0.034 U	4.4 J	G054	0.134	0.06 U	0.34 J
Polycyclic Aromatic Hydrocarbons																
1-Methylnaphthalene	µg/kg	112	88	78.6	0.39 J	610	G003	20.6	2.65 J	61.3	0.31 U	610	G003	16.2	1.7 J	42.4
2-Methylnaphthalene	µg/kg	157	129	82.2	0.41 J	990	G003	23.4	3.5 J	63.2	0.39 U	990	G003	19.9	2.7	48.8
Acenaphthene	µg/kg	157	118	75.2	0.27 J	4700	PGC-10	83	3.7 J	192	0.23 U	4700	PGC-10	63.2	2.1	86.6
Acenaphthylene	µg/kg	157	120	76.4	0.24 J	720	G045	25.4	2.7	102	0.24 J	720	G045	20.2	2 JT	39.6
Anthracene	µg/kg	157	125	79.6	0.55 J	2700	PGC-10	60.8	5.6	292	0.47 U	2700	PGC-10	49.1	4.1 J	100
Benzo(a)anthracene	µg/kg	157	140	89.2	0.72 J	3100	C087	113	16 J	254	0.48 U	3100	C087	101	15	210
Benzo(a)pyrene	µg/kg	157	140	89.2	0.17 J	3800	PGC-10	149	19	292	0.14 U	3800	PGC-10	133	18	266
Benzo(b)fluoranthene	µg/kg	157	139	88.5	0.33 J	3900	C087	149	26	452	0.25 U	3900	C087	133	23	330
Benzo(b+k)fluoranthene	µg/kg	6	2	33.3	13 T	13 T	PA03; PA04	13	13	13	13 T	50 UT	HC-SS02; HC-SS03; HC-SS04; HC-SS30	21	25 U	25 U
Benzo(e)pyrene	µg/kg	145	134	92.4	0.3 J	2200	C087	99.6	19	281	0.18 U	2200	C087	92.1	18	244
Benzo(g,h,i)perylene	µg/kg	157	138	87.9	0.79 J	3300	C087	139	25	365	0.64 U	3300	C087	123	21	224
Benzo(k)fluoranthene	µg/kg	157	134	85.4	0.16 J	1200	C087	51.3	9.53 J	157	0.15 U	1200	C087	44.4	7.9	118
C1-Chrysene	µg/kg	112	96	85.7	0.45 J	1900	PGC-10	85.8	32	195	0.25 U	1900	PGC-10	73.7	24.5	179
C1-Dibenzothiophene	µg/kg	100	59	59	0.76 J	870	G003	38.3	9.2	118	0.21 U	870	G003	22.9	2.5 J	74.2
C1-Fluoranthene/pyrene	µg/kg	112	97	86.6	1.4 J	4400	PGC-10	153	32	414	0.61 U	4400	PGC-10	133	25.3 J	368
C1-Fluorene	µg/kg	112	79	70.5	0.58 J	1100	PGC-10	37.5	4.9	130	0.5 U	1100	PGC-10	26.8	2.5 U	79
C1-Phenanthrene/anthracene	µg/kg	112	94	83.9	0.99 J	4300	PGC-10	146	19.5	445	0.75 U	4300	PGC-10	123	14.4 J	367
C2-Chrysene	µg/kg	112	92	82.1	1.7 J	880	PGC-10	76	34	280	0.25 U	880	PGC-10	63	25	260
C2-Dibenzothiophene	µg/kg	100	63	63	1.2 J	970	G003	41.6	13	107	0.21 U	970	G003	26.5	4.63	65.8
C2-Fluoranthene/pyrene	µg/kg	100	83	83	1.6 J	1400	G003	61	27	140	0.61 U	1400	G003	51	21	130
C2-Fluorene	µg/kg	112	89	79.5	0.5 J	1100	G003	47.3	7.5	158	0.5 J	1100	G003	37.9	5.55	96.2
C2-Naphthalene	µg/kg	112	91	81.3	0.44 J	1800	PGC-10	69.8	6.8	275	0.37 U	1800	PGC-10	57	5.1	222
C2-Phenanthrene/anthracene	µg/kg	112	96	85.7	0.78 J	2500	G003	106	31	320	0.75 U	2500	G003	90.8	23	298
C3-Chrysene	µg/kg	112	91	81.3	4.9	540	G003	72.2	33	275	0.25 U	540	G003	59	23.5	248
C3-Dibenzothiophene	µg/kg	100	58	58	1.3 J	660	G003	44.3	16	143	0.21 U	660	G003	25.9	4.8	120
C3-Fluoranthene/pyrene	µg/kg	100	73	73	1.6 J	900	G003	58	31	192	0.61 U	900	G003	42.6	16.5	152
C3-Fluorene	µg/kg	112	76	67.9	1.6 J	1900	G003	75	17	223	0.5 U	1900	G003	51.1	8.5	126
C3-Naphthalene	µg/kg	112	90	80.4	0.46 J	1400	G003	78.5	8	367	0.37 U	1400	G003	63.4	4.6	295
C3-Phenanthrene/anthracene	µg/kg	112	95	84.8	1.6 J	1900	G003	84.2	30	266	0.75 U	1900	G003	71.6	24	230
C4-Chrysene	µg/kg	112	67	59.8	4	320	G019	49	31	178	0.25 U	320	G019	29.9	10	135
C4-Naphthalene	µg/kg	112	84	75	0.48 J	1500	G003	67.4	12.5 J	258	0.37 U	1500	G003	50.8	6.1	190
C4-Phenanthrene/anthracene	µg/kg	112	82	73.2	1.4 J	1100	G003	54.8	20.5	180	0.75 U	1100	G003	40.6	13	154
Chrysene	µg/kg	157	140	89.2	0.25 J	3100	PGC-10	128	21	374	0.25 J	3100	PGC-10	115	20	306
Dibenzo(a,h)anthracene	µg/kg	157	120	76.4	0.3 J	660	C087	21.3	5.35	57.7	0.28 U	660	C087	17	3.5	45.2
Dibenzothiophene	µg/kg	112	80	71.4	0.39 J	1100 J	PGC-10	35.7	2.7 J	115 J	0.21 U	1100 J	PGC-10	25.6	1.5 J	57.5
Fluoranthene	µg/kg	157	143	91.1	0.62 J	8900	PGC-10	299	37	832	0.61 U	8900	PGC-10	273	34	636
Fluorene	µg/kg	157	117	74.5	0.53 J	2500	PGC-10	47.9	4 J	100	0.5 U	2500	PGC-10	36.4	3.1 J	79.2
Total HPAHs	µg/kg	157	144	91.7	2.02 JT	38700 T	PGC-10	1480	216	3710	0.64 UT	38700 T	PGC-10	1360	200 JT	3190
Indeno(1,2,3-cd)pyrene	µg/kg	157	140	89.2	0.22 J	3500	C087	124	18	303	0.16 U	3500	C087	112	16 T	236
Total LPAHs	µg/kg	157	149	94.9	0.57 JT	23800 T	PGC-10	520	47 T	1460 J	0.57 JT	23800 T	PGC-10	494	41 JT	1290 J
Naphthalene	µg/kg	157	139	88.5	0.57 J	5300	G003	111	7.9	146	0.57 J	5300	G003	98.8	6.4	140
Perylene	µg/kg	145	138	95.2	0.34 J	940	C087	50.3	17.3 J	96.5	0.32 U	940	C087	47.9	17	94
Phenanthrene	µg/kg	157	136	86.6	0.95 J	11000	PGC-10	243	24	595	0.75 U	11000	PGC-10	211	20	502
Pyrene	µg/kg	157	144	91.7	0.58 J	10000	PGC-10	339	39.5	827	0.37 U	10000	PGC-10	311	37	814
Total BaPEq	µg/kg	157	142	90.4	0.089 JT	4970 T	PGC-10	203	28.9	403	0.089 JT	4970 T	PGC-10	184	25.8 JT	395
Total cPAHs	µg/kg	157	142	90.4	0.8 JT	18400 T	C087	718	111	1810	0.48 UT	18400 T	C087	650	99.6 JT	1530
Total PAHs	µg/kg	157	150	95.5	0.57 JT	62500 T	PGC-10	1940	259 J	4910	0.57 JT	62500 T	PGC-10	1850	246 JT	4640
Phthalates																
Bis(2-ethylhexyl) phthalate	µg/kg	96	78	81.3	7.6 J	18000	GCRSP12E	418	75.5	623	7 U	18000	GCRSP12E	348	58.5	595
Butylbenzyl phthalate	µg/kg	96	29	30.2	3.6 J	580	G007	54	14	350 J	2.6 U	580	G007	21	1.8 U	50 U
Dibutyl phthalate	µg/kg	96	42	43.8	1 J	130	G045	17	11	46	1 J	400 U	G783	16	8.2 J	50 U
Diethyl phthalate	µg/kg	96	37	38.5	1.3 J	15	G023	3.59	2.4 J	9.4 J	1.3 J	100 U	HC-SS02; HC-SS03; HC-SS04; HC-SS30	4.8	1.83 J	20.5 U
Dimethyl phthalate	µg/kg	96	9	9.4	1.7 J	170	G054	35	5.5 J	130	1 U	170	G054	6.5	0.5 U	50 U

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Di-n-octyl phthalate	µg/kg	96	4	4.2	6.2 J	27	G064	15	13	25	1.7 U	100 U	HC-SS02; HC-SS03; HC-SS04; HC-SS30	4.6	0.85 U	31
Semivolatile Organic Compounds																
1,2,4-Trichlorobenzene	µg/kg	96	0	0	--	--	--	--	--	--	2.3 U	130 U	G783	3.3	1.3 U	10 U
1,2-Dichlorobenzene	µg/kg	96	0	0	--	--	--	--	--	--	2 U	150 U	G783	3.5	1.5 U	7.5 U
1,3-Dichlorobenzene	µg/kg	96	0	0	--	--	--	--	--	--	2.5 U	150 U	G783	3.5	1.5 U	7.5 U
1,4-Dichlorobenzene	µg/kg	96	18	18.8	3 J	190	G002	24	11 J	59	0.3 U	190	G002	7.5	1.5 U	27
2,4-Dinitrotoluene	µg/kg	92	0	0	--	--	--	--	--	--	1.5 U	75 U	G783	2	0.75 U	5.4 U
2,6-Dinitrotoluene	µg/kg	92	0	0	--	--	--	--	--	--	2 U	100 U	G783	2.4	1 U	5 U
2-Chloronaphthalene	µg/kg	92	1	1.1	20	20	UG07	20	20	20	1.6 U	80 U	G783	2.2	0.8 U	4 U
2-Nitroaniline	µg/kg	92	0	0	--	--	--	--	--	--	3.2 U	160 U	G783	3.7	1.6 U	8 U
3,3'-Dichlorobenzidine	µg/kg	89	1	1.1	5.1 J	5.1 J	G052	5.1	5.1 J	5.1 J	3.7 U	190 U	G783	4.8	1.9 U	15 U
3-Nitroaniline	µg/kg	92	0	0	--	--	--	--	--	--	2.5 U	200 U	PA03; PA04	5.1	1.3 U	9.2 U
4-Bromophenyl phenyl ether	µg/kg	92	0	0	--	--	--	--	--	--	1.6 U	80 U	G783	1.9	0.8 U	4.5 U
4-Chloroaniline	µg/kg	90	1	1.1	15 J	15 J	G036	15	15 J	15 J	1.9 U	95 U	G783	2.9	0.95 U	13 J
4-Chlorophenyl phenyl ether	µg/kg	92	0	0	--	--	--	--	--	--	1.4 U	70 U	G783	1.7	0.7 U	4.2 U
4-Nitroaniline	µg/kg	92	0	0	--	--	--	--	--	--	1.8 U	90 U	G783	2.3	0.9 U	4.7 U
Aniline	µg/kg	89	9	10.1	4.5 J	64	G065	17	8.6 J	50	1.5 U	200 U	PA03; PA04	5.3	0.75 U	17 J
Azobenzene	µg/kg	90	0	0	--	--	--	--	--	--	1.1 U	55 U	G783	1.4	0.55 U	2.8 U
Benzoic acid	µg/kg	91	6	6.6	100 J	3400	G058	689	133 J	2610	96 UJ	4800 U	G783	162	48 U	365
Benzyl alcohol	µg/kg	96	25	26	2.4 J	1800	G060	100	5.3 J	270	2.1 U	1800	G060	30	2.1 U	63
Bis(2-chloro-1-methylethyl) ether	µg/kg	2	0	0	--	--	--	--	--	--	10 U	10 U	PA03; PA04	5	5 U	5 U
Bis(2-chloroethoxy) methane	µg/kg	92	0	0	--	--	--	--	--	--	1.5 U	75 U	G783	1.8	0.75 U	4.3 U
Bis(2-chloroethyl) ether	µg/kg	92	0	0	--	--	--	--	--	--	1.9 U	95 U	G783	2.3	0.95 U	4.9 U
Bis(2-chloroisopropyl) ether	µg/kg	90	0	0	--	--	--	--	--	--	1.9 U	130 U	G783	3	1.3 U	6.5 U
Carbazole	µg/kg	90	43	47.8	1.4 J	220	G003	12.7	4 J	28.7 J	1.3 U	220	G003	7.03	1.45 J	22.4 J
Dibenzofuran	µg/kg	96	64	66.7	0.52 J	290	G003	11.6	2.9	46.6	0.52 J	290	G003	8.92	1.75 J	25 U
Hexachlorobenzene	µg/kg	149	60	40.3	0.094 J	3.4	G100	0.456	0.28 J	1.42	0.068 U	20 U	HC-SS02; HC-SS03; HC-SS04; HC-SS30	0.603	0.11 J	2.56
Hexachlorobutadiene	µg/kg	149	7	4.7	0.065 J	0.52	G086	0.196	0.12 J	0.451 J	0.065 J	20 U	HC-SS02; HC-SS03; HC-SS04; HC-SS30	0.422	0.0435 U	0.508
Hexachlorocyclopentadiene	µg/kg	91	0	0	--	--	--	--	--	--	23 U	730 U	G061	27	15 U	75 U
Hexachloroethane	µg/kg	127	0	0	--	--	--	--	--	--	0.037 UJ	50 U	HC-SS02; HC-SS03; HC-SS04; HC-SS30	1.17	0.0395 U	1.69 U
Isophorone	µg/kg	92	0	0	--	--	--	--	--	--	1 U	50 U	G783	1.3	0.5 U	3.6 U
Nitrobenzene	µg/kg	92	0	0	--	--	--	--	--	--	2.2 U	110 U	G783	2.6	1.1 U	5.5 U
N-Nitrosodimethylamine	µg/kg	92	0	0	--	--	--	--	--	--	6.1 U	310 U	G783	7.2	3.1 U	16 U
N-Nitrosodiphenylamine	µg/kg	96	3	3.1	1.8 J	9.7 J	G019	6.7	8.5 J	9.6 J	1.6 U	80 U	G783	2.5	0.8 U	10 U
N-Nitrosodipropylamine	µg/kg	92	0	0	--	--	--	--	--	--	2.4 U	120 U	G783	2.9	1.2 U	6 U
Octachlorostyrene	µg/kg	4	0	0	--	--	--	--	--	--	0.017 UJ	0.17 UJ	G048; G054	0.0504	0.054 UJ	0.085 UJ
Phenols																
2,3,4,5-Tetrachlorophenol	µg/kg	90	0	0	--	--	--	--	--	--	0.23 U	20 U	G057	2.1	2.2 U	3.2 U
2,3,5,6-Tetrachlorophenol	µg/kg	90	1	1.1	0.78 J	0.78 J	GCA12E	0.78	0.78 J	0.78 J	0.18 U	25 U	G057	2.5	2.6 U	3.9 U
2,4,5-Trichlorophenol	µg/kg	92	0	0	--	--	--	--	--	--	0.73 U	40 U	PA03; PA04	2.3	1.9 U	3.5 U
2,4,6-Trichlorophenol	µg/kg	92	0	0	--	--	--	--	--	--	0.12 U	30 U	PA03; PA04	2.2	2 U	3.4 U
2,4-Dichlorophenol	µg/kg	89	0	0	--	--	--	--	--	--	1 UJ	100 U	PA03; PA04	2.4	0.5 U	5 U
2,4-Dimethylphenol	µg/kg	26	0	0	--	--	--	--	--	--	5.5 UJ	280 UJ	G783	26	5.5 U	100 UJ
2,4-Dinitrophenol	µg/kg	88	0	0	--	--	--	--	--	--	17 UJ	430 U	G061	21	8.5 U	70 U
2-Chlorophenol	µg/kg	89	0	0	--	--	--	--	--	--	2 UJ	100 U	G783	3	1 U	10 U
2-Methylphenol	µg/kg	104	2	1.9	8.1 J	24 J	G007	16	16 J	23 J	1.5 UJ	210 UJ	PGC-10	4.8	0.75 U	19 U
2-Nitrophenol	µg/kg	89	0	0	--	--	--	--	--	--	1.5 UJ	75 U	G783	2.3	0.75 U	7.5 U
3- and 4-Methylphenol Coelution	µg/kg	4	0	0	--	--	--	--	--	--	100 U	100 U	HC-SS02; HC-SS03; HC-SS04; HC-SS30	50	50 U	50 U
3,4-Dichlorophenol	µg/kg	5	0	0	--	--	--	--	--	--	0.88 U	17 U	UG05	3.6	0.48 U	8.4 U
3,5-Dichlorophenol	µg/kg	5	0	0	--	--	--	--	--	--	2.8 U	15 U	UG06	2.7	1.5 U	6.3 U
4,6-Dinitro-2-methylphenol	µg/kg	89	0	0	--	--	--	--	--	--	1.4 UJ	100 U	PA03; PA04	2.8	0.7 U	7 U
4-Chloro-3-methylphenol	µg/kg	89	2	2.2	1.8 J	2.6 J	G031	2.2	2.2 J	2.6 J	1.4 UJ	70 U	G783	2.3	0.7 U	7 U
4-Methylphenol	µg/kg	100	37	37	2 J	360	G048	34.1	15 J	107	1.5 UJ	360	G048	17.3	3.38 UJ	70.5
4-Nitrophenol	µg/kg	89	0	0	--	--	--	--	--	--	18 UJ	900 U	G783	24	9 U	50 U
Pentachlorophenol	µg/kg	107	12	11.2	3.2 NJ	890	G057	130	38 J	510	0.17 U	2100 U	PGC-10	38	2.8 U	150 U

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Phenol	µg/kg	104	38	36.5	2.2 J	80	G045	15	9.9 J	40.4 J	2 UJ	620 U	PGC-10	13.9	4.65 J	50 U
Petroleum																
Total Petroleum Hydrocarbons (Diesel)	mg/kg	25	19	76	6.4 J	530	PGC-10	156	97	512 J	1.3 U	530	PGC-10	119	61	474 J
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	128	116	90.6	1.9 JT	760 J	C090	70.1	33.5 J	223 J	1.3 U	760 J	C090	63.9	30.5 J	210 J
Total Petroleum Hydrocarbons (Gasoline)	mg/kg	22	11	50	1.2 J	75	PGC-10	24	20	65 J	0.91 U	75	PGC-10	14	5 UJ	54 J
Total Petroleum Hydrocarbons (Heavy Oil)	mg/kg	4	0	0	--	--	--	--	--	--	25 U	50 U	HC-SS03	16	13 U	23 U
Jet fuel A	mg/kg	4	0	0	--	--	--	--	--	--	10 U	20 U	HC-SS03	6	5 U	9 U
JP-4 jet fuel	mg/kg	4	0	0	--	--	--	--	--	--	10 UJ	20 UJ	HC-SS03	6	5 UJ	9 UJ
Kerosene	mg/kg	4	0	0	--	--	--	--	--	--	10 U	20 U	HC-SS03	6	5 U	9 U
Lube Oil	mg/kg	4	0	0	--	--	--	--	--	--	25 U	50 U	HC-SS03	16	13 U	23 U
Mineral spirits	mg/kg	4	0	0	--	--	--	--	--	--	10 U	20 U	HC-SS03	6	5 U	9 U
Naphtha distillate	mg/kg	4	0	0	--	--	--	--	--	--	10 UJ	20 UJ	HC-SS03	6	5 UJ	9 UJ
Non-petroleum hydrocarbons	mg/kg	4	0	0	--	--	--	--	--	--	50 U	100 U	HC-SS03	30	30 U	50 U
Total Petroleum Hydrocarbons (Residual)	mg/kg	21	20	95.2	10 J	1800 J	UG07	405	300	822 J	10 J	1800 J	UG07	389	280	770
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	128	121	94.5	4.9 JT	1500 J	C090	264	160 J	910	3.1 U	1500 J	C090	250	150 J	875 J
Total Petroleum Hydrocarbons	mg/kg	25	23	92	10 JA	2400 JT	UG07	504	314 T	1290	10 JA	2400 JT	UG07	467	280 JT	1270
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	128	124	96.9	2.2 JA	2260 JA	C090	324	187 J	1020 J	2.2 JA	2260 JA	C090	314	181 J	1010 J
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	µg/kg	8	0	0	--	--	--	--	--	--	0.083 U	10 U	PA03; PA04	1.29	0.0483 UJ	5 U
1,1,1-Trichloroethane	µg/kg	8	0	0	--	--	--	--	--	--	0.12 U	10 U	PA03; PA04	1.3	0.07 UJ	5 U
1,1,2,2-Tetrachloroethane	µg/kg	8	0	0	--	--	--	--	--	--	0.19 U	10 U	PA03; PA04	1.3	0.11 UJ	5 U
1,1,2-Trichloroethane	µg/kg	8	0	0	--	--	--	--	--	--	0.11 U	10 U	PA03; PA04	1.3	0.065 UJ	5 U
1,1-Dichloroethane	µg/kg	8	0	0	--	--	--	--	--	--	0.094 U	10 U	PA03; PA04	1.29	0.055 UJ	5 U
1,1-Dichloroethene	µg/kg	8	0	0	--	--	--	--	--	--	0.13 U	10 U	PA03; PA04	1.3	0.075 UJ	5 U
1,1-Dichloropropene	µg/kg	2	0	0	--	--	--	--	--	--	10 U	10 U	PA03; PA04	5	5 U	5 U
1,2,3-Trichlorobenzene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
1,2,3-Trichloropropane	µg/kg	8	0	0	--	--	--	--	--	--	0.28 U	10 U	PA03; PA04	1.4	0.16 UJ	5 U
1,2,4-Trimethylbenzene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
1,2-Dibromo-3-chloropropane	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
1,2-Dichloroethane	µg/kg	8	0	0	--	--	--	--	--	--	0.15 U	10 U	PA03; PA04	1.3	0.09 UJ	5 U
1,2-Dichloropropane	µg/kg	8	0	0	--	--	--	--	--	--	0.11 U	10 U	PA03; PA04	1.3	0.06 UJ	5 U
1,3,5-Trimethylbenzene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
1,3-Dichloropropane	µg/kg	2	0	0	--	--	--	--	--	--	10 U	10 U	PA03; PA04	5	5 U	5 U
1,4-Dichloro-trans-2-butene	µg/kg	6	0	0	--	--	--	--	--	--	0.51 U	0.66 U	UG07	0.29	0.29 U	0.32 UJ
1-Methyl-4-isopropylbenzene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
2,2-Dichloropropane	µg/kg	2	0	0	--	--	--	--	--	--	10 U	10 U	PA03; PA04	5	5 U	5 U
2-Chloroethyl vinyl ether	µg/kg	6	0	0	--	--	--	--	--	--	0.23 U	0.3 U	UG07	0.13	0.13 U	0.15 UJ
2-Chlorotoluene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
4-Chlorotoluene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
Acetone	µg/kg	8	0	0	--	--	--	--	--	--	9.1 U	100 U	PA03; PA04	16	5.5 UJ	50 U
Acrylonitrile	µg/kg	6	0	0	--	--	--	--	--	--	0.63 U	0.82 U	UG07	0.36	0.36 U	0.4 UJ
Benzene	µg/kg	24	1	4.2	0.15 J	0.15 J	UG07	0.15	0.15 J	0.15 J	0.068 U	10 U	PA03; PA04	2.72	3.23 U	4.98 U
Bromobenzene	µg/kg	2	0	0	--	--	--	--	--	--	10 U	10 U	PA03; PA04	5	5 U	5 U
Bromochloromethane	µg/kg	8	0	0	--	--	--	--	--	--	0.15 U	10 U	PA03; PA04	1.3	0.09 UJ	5 U
Bromodichloromethane	µg/kg	8	0	0	--	--	--	--	--	--	0.062 U	10 U	PA03; PA04	1.28	0.0358 UJ	5 U
Bromoform	µg/kg	8	0	0	--	--	--	--	--	--	0.19 U	10 U	PA03; PA04	1.3	0.11 UJ	5 U
Bromomethane	µg/kg	8	0	0	--	--	--	--	--	--	0.43 U	10 U	PA03; PA04	1.4	0.25 UJ	5 U
BTEX	µg/kg	24	1	4.2	0.15 JT	0.15 JT	UG07	0.15	0.15 JT	0.15 JT	0.15 JT	10 UT	PA03; PA04	2.7	3.2 U	5 U
Carbon disulfide	µg/kg	8	1	12.5	0.16 J	0.16 J	UG07	0.16	0.16 J	0.16 J	0.11 U	10 U	PA03; PA04	1.3	0.06 UJ	5 U
Carbon tetrachloride	µg/kg	8	0	0	--	--	--	--	--	--	0.077 U	10 U	PA03; PA04	1.28	0.0448 UJ	5 U
Chlorobenzene	µg/kg	8	1	12.5	0.12 J	0.12 J	UG07	0.12	0.12 J	0.12 J	0.092 U	10 U	PA03; PA04	1.3	0.055 UJ	5 U
Chlorodibromomethane	µg/kg	8	0	0	--	--	--	--	--	--	0.16 U	10 U	PA03; PA04	1.3	0.09 UJ	5 U
Chloroethane	µg/kg	8	0	0	--	--	--	--	--	--	0.31 U	10 U	PA03; PA04	1.4	0.18 UJ	5 U
Chloroform	µg/kg	8	0	0	--	--	--	--	--	--	0.13 U	10 U	PA03; PA04	1.3	0.075 UJ	5 U
Chloromethane	µg/kg	8	0	0	--	--	--	--	--	--	0.12 U	10 U	PA03; PA04	1.3	0.07 UJ	5 U
cis-1,2-Dichloroethene	µg/kg	8	0	0	--	--	--	--	--	--	0.15 U	10 U	PA03; PA04	1.3	0.09 UJ	5 U
cis-1,3-Dichloropropene	µg/kg	8	0	0	--	--	--	--	--	--	0.095 U	10 U	PA03; PA04	1.29	0.0575 UJ	5 U
Dichlorodifluoromethane	µg/kg	8	0	0	--	--	--	--	--	--	0.091 U	10 U	PA03; PA04	1.29	0.055 UJ	5 U

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Ethylbenzene	µg/kg	24	0	0	--	--	--	--	--	--	0.078 U	10 U	PA03; PA04	2.71	3.23 U	4.98 U
Ethylene dibromide	µg/kg	8	0	0	--	--	--	--	--	--	0.094 U	40 U	PA03; PA04	5.04	0.055 UJ	20 U
Isopropylbenzene	µg/kg	8	0	0	--	--	--	--	--	--	0.13 U	40 U	PA03; PA04	5.1	0.08 UJ	20 U
m,p-Xylene	µg/kg	24	0	0	--	--	--	--	--	--	0.2 UJ	10 U	PA03; PA04	2.7	3.2 U	5 U
Methyl iodide	µg/kg	6	0	0	--	--	--	--	--	--	0.51 U	0.66 U	UG07	0.29	0.29 U	0.32 UJ
Methyl isobutyl ketone	µg/kg	8	0	0	--	--	--	--	--	--	0.77 U	40 U	PA03; PA04	5.3	0.45 UJ	20 U
Methyl n-butyl ketone	µg/kg	8	0	0	--	--	--	--	--	--	5.4 U	40 U	PA03; PA04	7.3	3.2 UJ	20 U
Methyl tert-butyl ether	µg/kg	6	0	0	--	--	--	--	--	--	0.11 U	0.15 U	UG07	0.063	0.063 U	0.073 UJ
Methylene bromide	µg/kg	8	0	0	--	--	--	--	--	--	0.11 U	10 U	PA03; PA04	1.3	0.065 UJ	5 U
Methylene chloride	µg/kg	8	0	0	--	--	--	--	--	--	0.76 U	20 U	PA03; PA04	3.1	0.83 UJ	10 U
Methylethyl ketone	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
n-Butylbenzene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
n-Propylbenzene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
o-Xylene	µg/kg	24	0	0	--	--	--	--	--	--	0.088 U	10 U	PA03; PA04	2.71	3.23 U	4.98 U
Sec-butylbenzene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
Styrene	µg/kg	8	0	0	--	--	--	--	--	--	0.15 U	10 U	PA03; PA04	1.3	0.085 UJ	5 U
tert-Butylbenzene	µg/kg	2	0	0	--	--	--	--	--	--	40 U	40 U	PA03; PA04	20	20 U	20 U
Tetrachloroethene	µg/kg	8	0	0	--	--	--	--	--	--	0.13 U	10 U	PA03; PA04	1.3	0.08 UJ	5 U
Toluene	µg/kg	24	0	0	--	--	--	--	--	--	0.11 U	10 U	PA03; PA04	2.7	3.2 U	5 U
trans-1,2-Dichloroethene	µg/kg	8	0	0	--	--	--	--	--	--	0.091 U	10 U	PA03; PA04	1.29	0.055 UJ	5 U
trans-1,3-Dichloropropene	µg/kg	8	0	0	--	--	--	--	--	--	0.1 U	10 U	PA03; PA04	1.3	0.06 UJ	5 U
Trichloroethene	µg/kg	12	0	0	--	--	--	--	--	--	0.13 U	10 U	PA03; PA04	1.7	1.3 U	5 U
Trichlorofluoromethane	µg/kg	8	0	0	--	--	--	--	--	--	0.54 U	10 U	PA03; PA04	1.5	0.32 UJ	5 U
Vinyl chloride	µg/kg	8	0	0	--	--	--	--	--	--	0.22 U	10 U	PA03; PA04	1.3	0.13 UJ	5 U
Xylene	µg/kg	24	0	0	--	--	--	--	--	--	0.2 UJT	10 UT	PA03; PA04	2.7	3.2 U	5 U
Zidell Data Only																
Grain Size																
Clay	percent	11	11	100	12.6	29.7	WRS38	20.8	20.2	27.9	12.6	29.7	WRS38	20.8	20.2	27.9
Fines	percent	20	20	100	0.5	89.4 T	WRS38	34.3	26.8	80.5	0.5	89.4 T	WRS38	34.3	26.8	80.5
Gravel	percent	20	20	100	0	86	WRS30	30	0	84.4	0	86	WRS30	30	0	84.4
Sand	percent	20	20	100	10.6	97.2	WRS24	35.7	28	83.8	10.6	97.2	WRS24	35.7	28	83.8
Silt	percent	11	11	100	1.5	59.7	WRS38	40.2	45.6	58.7	1.5	59.7	WRS38	40.2	45.6	58.7
Conventionals																
Phosphorus	mg/kg	4	4	100	803	1020	WRS07	915	919	1010	803	1020	WRS07	915	919	1010
Total organic carbon	percent	43	43	100	0.229	2.59	WRS-96	1.053	0.932	2.504	0.229	2.59	WRS-96	1.053	0.932	2.504
Total solids	percent	43	43	100	41.6	89.14	WRS-60	62.04	56.49	83.44	41.6	89.14	WRS-60	62.04	56.49	83.44
Metals																
Antimony	mg/kg	102	48	47.1	0.108 J	873 J	R12	49.2761	9.245 J	170.6 J	0.00913 UJ	873 J	R12	25.1559	5 UJ	84.09 J
Arsenic	mg/kg	74	46	62.2	1.29	78 J	R47	11.2	4.98 J	55.5 J	1.29	78 J	R47	7.51	2.87 J	34.7 J
Barium	mg/kg	36	36	100	30.4 J	1610 J	R31	229	160	432 J	30.4 J	1610 J	R31	229	160	432 J
Beryllium	mg/kg	44	32	72.7	0.347	2.25	R45	1.04	0.942	1.99	0.347	2.25	R45	0.939	0.893	1.87
Cadmium	mg/kg	110	64	58.2	0.127	132 J	R12	4.47	1.35 J	8.037 J	0.0369 U	132 J	R12	2.707	0.5 U	6.428 J
Chromium	mg/kg	110	110	100	1.24 J	758 J	R50	55.958	26.6	167.55 J	1.24 J	758 J	R50	55.958	26.6	167.55 J
Copper	mg/kg	110	107	97.3	5.51	2150 J	R38	195.48	42.9	1125 J	0.184 UJ	2150 J	R38	190.17	41	1117.5 J
Lead	mg/kg	110	97	88.2	2.1	20800 J	R12	489.8	41	1438 J	0.576 U	20800 J	R12	432.3	31.23 J	1378 J
Mercury	mg/kg	104	72	69.2	0.0223 T	20.2 J	R50	0.71889	0.171	2.298 J	0.00172 U	20.2 J	R50	0.50716	0.1 U	1.468 J
Nickel	mg/kg	109	108	99.1	3.89 J	11500 J	R50	153	21.6 J	153.9 J	0.0508 U	11500 J	R50	151.6	21.3 J	153.6 J
Selenium	mg/kg	12	0	0	--	--	--	--	--	--	1 U	1 U	WRS05; WRS06; WRS07; WRS08; WRS11; WRS12; WRS13; WRS15; WRS18; WRS19; WRS20; WRS21	0.5	0.5 U	0.5 U
Silver	mg/kg	44	17	38.6	1.14	9.95	R47	2.5	1.79	5.5 J	0.862 U	9.95	R47	1.52	1 U	3.4 J
Thallium	mg/kg	12	0	0	--	--	--	--	--	--	1 U	1 U	WRS05; WRS06; WRS07; WRS08; WRS11; WRS12; WRS13; WRS15; WRS18; WRS19; WRS20; WRS21	0.5	0.5 U	0.5 U
Zinc	mg/kg	110	110	100	3.27 J	6480 J	R50	555.1	147.5 J	2536 J	3.27 J	6480 J	R50	555.1	147.5 J	2536 J

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Butyltins																
Butyltin ion	µg/kg	68	18	26.5	0.64	1140	WRS15	82.02	2.95	290	0.0013 U	1140	WRS15	21.85	0.2675 U	19.05
Dibutyltin ion	µg/kg	68	24	35.3	1.5	368	WRS11	44.86	4	252.5	0.0017 U	368	WRS11	15.96	0.4225 U	73.3
Tetrabutyltin	µg/kg	89	0	0	--	--	--	--	--	--	0.00088 U	150 U	WRS20	1.1487	0.065 U	1.5 U
Tributyltin	µg/kg	17	0	0	--	--	--	--	--	--	0.1 U	0.1 U	R05; R09; R12; R14; R16; R20; R22; R24; R26; R30; R34; R36; R38; R41; R43; R44; R45	0.05	0.05 U	0.05 U
Tributyltin ion	µg/kg	80	26	32.5	1.9	1990	WRS20	101.8	8	187.5	0.0013 U	1990	WRS20	33.19	0.2825 U	40.35
PCB Aroclors																
Aroclor 1016	µg/kg	111	5	4.5	4	4740	R50	958	7.77	3800	0.24 U	4740	R50	61.3	2 U	80 U
Aroclor 1221	µg/kg	111	0	0	--	--	--	--	--	--	0.24 U	200 U	WRS34	17.6	2 U	77.5 U
Aroclor 1232	µg/kg	111	0	0	--	--	--	--	--	--	0.24 U	200 U	WRS34	17.6	2 U	77.5 U
Aroclor 1242	µg/kg	111	0	0	--	--	--	--	--	--	0.24 U	200 U	WRS34	17.6	2 U	77.5 U
Aroclor 1248	µg/kg	111	0	0	--	--	--	--	--	--	0.24 U	200 U	WRS34	17.6	2 U	77.5 U
Aroclor 1254	µg/kg	111	54	48.6	1.27	12300	R49	748	108	3480	0.24 U	12300	R49	378	49 U	1700
Aroclor 1260	µg/kg	111	77	69.4	2.21	12900	WRS-75	802.2	97.8	3726	0.24 U	12900	WRS-75	570.9	59	2825
Aroclor 1262	µg/kg	15	0	0	--	--	--	--	--	--	0.24 U	180 U	WRS35	29.5	2.32 U	83 U
Aroclor 1268	µg/kg	15	1	6.7	101 T	101 T	WRS-95	101	101 T	101 T	0.24 U	180 U	WRS35	36.1	2.55 U	93.3
Aroclors	µg/kg	111	81	73	1.27 T	19700 T	R50	1320	133 T	7780 T	0.24 UT	19700 T	R50	977	80 UT	6220
PCBs[c]																
Total PCBs	µg/kg	111	81	73	1.27 T	19700 T	--	1320	133 T	7780 T	0.24 UT	19700 T	--	977	80 UT	6220
Polycyclic Aromatic Hydrocarbons																
2-Methylnaphthalene	µg/kg	36	13	36.1	5	200	WRS16	42.62	8	146	0.0088 U	200	WRS16	16.63	2.625 U	85.25
Acenaphthene	µg/kg	112	33	29.5	6	1230	WRS-96	114.8	26.7	584	0.0088 U	1230	WRS-96	35.44	3.15 U	121.4
Acenaphthylene	µg/kg	112	40	35.7	5	895	R20	69.18	24	217.2	0.0088 U	895	R20	26.05	3.05 U	110.2
Anthracene	µg/kg	112	55	49.1	5.6	1280	R20	125.3	46.8	453	0.0088 U	1280	R20	62.47	6.7 U	340.5
Benzo(a)anthracene	µg/kg	112	83	74.1	0.011	3830	R20	271.6	64.3	960.1	0.011	3830	R20	201.7	30.9	757.5
Benzo(a)pyrene	µg/kg	112	83	74.1	0.0097	3320	R20	237.76	75.3	899.1	0.0097	3320	R20	176.66	36.65	730.3
Benzo(b)fluoranthene	µg/kg	112	82	73.2	0.013	4330	R20	297.77	96	1237.2	0.013	4330	R20	218.46	36.3	987.5
Benzo(g,h,i)perylene	µg/kg	112	78	69.6	0.015	1210	R14	147.3	72.1	495.5	0.011 UT	1210	R14	103.1	24.85	464.5
Benzo(k)fluoranthene	µg/kg	112	79	70.5	0.0097	1500	WRS16	126	41.7	477.7	0.0097	1500	WRS16	89.29	19.35	365.5
Chrysene	µg/kg	112	84	75	0.015	3300	WRS16	247	63.6	1000	0.015	3300	WRS16	185	36.9	622
Dibenzo(a,h)anthracene	µg/kg	112	54	48.2	2.9 T	434	R20	62.45	37.35	194.2	0.0088 U	434	R20	31.08	6.5 U	153.3
Fluoranthene	µg/kg	112	91	81.3	0.31	6250	R20	490.5	90	2140	0.0088 U	6250	R20	398.8	72.5	1823
Fluorene	µg/kg	112	43	38.4	5	673	WRS-96	68.71	20	217.8	0.0088 U	673	WRS-96	27.67	3.335 U	143.8
Total HPAHs	µg/kg	112	98	87.5	0.0734 T	28000 T	R20	2124	500	7515	0.0734 T	28000 T	R20	1858	357	6900
Indeno(1,2,3-cd)pyrene	µg/kg	112	73	65.2	0.12	1320	R20	149.3	73.3	630	0.0088 U	1320	R20	97.84	21.1	474.4
Total LPAHs	µg/kg	112	78	69.6	0.11 T	4330 T	WRS16	526.3	133	2626	0.0088 UT	4330 T	WRS16	367.2	47.9	2350
Naphthalene	µg/kg	112	56	50	5	495	R22	56.88	29.3	165	0.0088 U	495	R22	29.7	6.5 U	115.4
Phenanthrene	µg/kg	112	78	69.6	0.11	2020	R47	265.8	63.85	1264	0.0088 U	2020	R47	185.6	30.3	1112
Pyrene	µg/kg	112	93	83	0.31	6500	WRS15	433.8	90.6	1884	0.0088 U	6500	WRS15	360.5	66.65	1308
Total BaPEq	µg/kg	112	90	80.4	0.004 T	4710 T	R20	322	92	1270	0.004 T	4710 T	R20	259	47	1090
Total cPAHs	µg/kg	112	90	80.4	0.058 T	16000 T	R20	1240	326	4830	0.058 T	16000 T	R20	1000	184	3840
Total PAHs	µg/kg	112	98	87.5	0.0734 T	32000 A	R20	2538	589	9835	0.0734 T	32000 A	R20	2221	419.5	8495
Semivolatile Organic Compounds																
2-Chloronaphthalene	µg/kg	15	0	0	--	--	--	--	--	--	0.0088 U	6.3 U	WRS35	1.388	1.8 UT	2.8 U
Dibenzofuran	µg/kg	14	6	42.9	6	440	WRS16	130	13	400	5 U	440	WRS16	56	2.5 U	340
Petroleum																
Total Petroleum Hydrocarbons (Diesel)	mg/kg	36	3	8.3	44	74	WRS22	57	53 T	71.9	0.064 U	110 U	WRS28	18.6	13.5 U	53.5
Total Petroleum Hydrocarbons (Gasoline)	mg/kg	14	0	0	--	--	--	--	--	--	10 U	100 U	WRS11; WRS15; WRS16	10	5 U	50 U
Total Petroleum Hydrocarbons (Heavy Oil)	mg/kg	10	0	0	--	--	--	--	--	--	25 U	250 U	WRS11; WRS15; WRS16	46	13 U	130 U
Jet fuel A	mg/kg	14	0	0	--	--	--	--	--	--	10 U	100 U	WRS11; WRS15; WRS16	10	5 U	50 U
JP-4 jet fuel	mg/kg	10	0	0	--	--	--	--	--	--	10 U	100 U	WRS11; WRS15; WRS16	20	5 U	50 U
Kerosene	mg/kg	14	0	0	--	--	--	--	--	--	10 U	100 U	WRS11; WRS15; WRS16	10	5 U	50 U
Lube Oil	mg/kg	10	10	100	78	8600	WRS16	1940	567	6480	78	8600	WRS16	1940	567	6480
Mineral spirits	mg/kg	14	0	0	--	--	--	--	--	--	10 U	100 U	WRS11; WRS15; WRS16	10	5 U	50 U
Motor oil	mg/kg	22	14	63.6	0.17	560	WRS22	182	140	485	0.17	560	WRS22	126	34 U	443
Naphtha distillate	mg/kg	10	0	0	--	--	--	--	--	--	10 U	100 U	WRS11; WRS15; WRS16	20	5 U	50 U

Table D1.3-6. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Non-petroleum hydrocarbons	mg/kg	10	0	0	--	--	--	--	--	--	50 U	500 U	WRS11; WRS15; WRS16	90	30 U	300 U
Total Petroleum Hydrocarbons	mg/kg	36	18	50	0.17 A	642	WRS07	226	172	635	0.17 A	642	WRS07	132	34 U	532

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

[c] Total PCBs are total PCB congeners whenever available and total Aroclors if not.

-- data not available.
BaPEq - benzo(a)pyrene equivalent
BTEX - benzene, toluene, ethylbenzene, and xylene
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PAH - polycyclic aromatic hydrocarbon
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-7. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Grain Size																
< 0.075 mm	percent	2	2	100	22.1 T	62.9 T	C035	42.5	42.5	60.9	22.1 T	62.9 T	C035	42.5	42.5	60.9
>10 Phi clay	percent	2	2	100	0.4	6.73 T	C100	3.57	3.57	6.41	0.4	6.73 T	C100	3.57	3.57	6.41
>9 Phi clay	percent	61	61	100	0	9.77 T	C021	3.66	2.52	9.28	0	9.77 T	C021	3.66	2.52	9.28
8-9 Phi clay	percent	63	63	100	0	7.36	C003	1.813	1.4 T	4.874	0	7.36	C003	1.813	1.4 T	4.874
9-10 Phi clay	percent	2	2	100	0.8	4.48 T	C100	2.64	2.64	4.3	0.8	4.48 T	C100	2.64	2.64	4.3
Clay	percent	63	63	100	0.26	30.5	WRS37	7.27	6.45	20.4	0.26	30.5	WRS37	7.27	6.45	20.4
Coarse sand	percent	119	119	100	0.08	41.2	UC04	9.97	4.99	36	0.08	41.2	UC04	9.97	4.99	36
Coarse silt	percent	63	63	100	0.03 T	28.1 T	C011	8.56	5.85	22.8	0.03 T	28.1 T	C011	8.56	5.85	22.8
Fine gravel	percent	117	117	100	0	21.8	C002	2.75	1.46 T	10.1	0	21.8	C002	2.75	1.46 T	10.1
Fine sand	percent	119	119	100	0.527 T	50.2	PGC-01	17.4	15.1	35.6	0.527 T	50.2	PGC-01	17.4	15.1	35.6
Fine silt	percent	63	63	100	0	12.2 T	C100	4.35	3.25	11.8	0	12.2 T	C100	4.35	3.25	11.8
Fines	percent	129	129	100	0.31 T	89 T	WRS37	33.08	32.8 T	71.36	0.31 T	89 T	WRS37	33.08	32.8 T	71.36
Gravel	percent	12	12	100	0 T	64.9	WRS46	5.45	0	29.5	0 T	64.9	WRS46	5.45	0	29.5
Medium gravel	percent	117	117	100	0 T	84.2	C023	7.8903	0.75	49.04	0 T	84.2	C023	7.8903	0.75	49.04
Medium sand	percent	119	119	100	0.24	72.5 T	UC05-2	17.4	13.5	53.4	0.24	72.5 T	UC05-2	17.4	13.5	53.4
Medium silt	percent	63	63	100	0	19.8 T	C004	7.26	5.84	18	0	19.8 T	C004	7.26	5.84	18
Sand	percent	10	10	100	11	96.9	WRS22	56.2	61.3	95.3	11	96.9	WRS22	56.2	61.3	95.3
Sieve 10	percent	2	2	100	0.05 T	18.3 T	C039	9.18	9.18	17.4	0.05 T	18.3 T	C039	9.18	9.18	17.4
Sieve 140	percent	2	2	100	6.2 T	24.7 T	C035	15.5	15.5	23.8	6.2 T	24.7 T	C035	15.5	15.5	23.8
Sieve 20	percent	2	2	100	0.65 T	8.35 T	C039	4.5	4.5	7.97	0.65 T	8.35 T	C039	4.5	4.5	7.97
Sieve 200	percent	2	2	100	0.95 T	8.65 T	C035	4.8	4.8	8.27	0.95 T	8.65 T	C035	4.8	4.8	8.27
Sieve 4	percent	2	2	100	0.05 T	31.5 T	C039	15.8	15.8	29.9	0.05 T	31.5 T	C039	15.8	15.8	29.9
Sieve 40	percent	2	2	100	0.85 T	4.75 T	C039	2.8	2.8	4.56	0.85 T	4.75 T	C039	2.8	2.8	4.56
Sieve 60	percent	2	2	100	2.25 T	8 T	C039	5.13	5.13	7.71	2.25 T	8 T	C039	5.13	5.13	7.71
Silt	percent	63	63	100	2.42	66.7	PGC-04	31.7	31	59	2.42	66.7	PGC-04	31.7	31	59
Very coarse sand	percent	119	119	100	0 T	22.6	C046	3.09	2.16	10.1	0 T	22.6	C046	3.09	2.16	10.1
Very fine sand	percent	119	119	100	0.03	31.2	C022	9.15	8.01	21.5	0.03	31.2	C022	9.15	8.01	21.5
Very fine silt	percent	63	63	100	0 T	8.14 T	C011	2.79	2.46	7.09	0 T	8.14 T	C011	2.79	2.46	7.09
Conventionals																
Ammonia	mg/kg	14	14	100	2.4	813 T	C100	121	57.4	430	2.4	813 T	C100	121	57.4	430
Cyanide	mg/kg	57	32	56.1	0.07 J	40.7 J	PGC-05	4.3	0.365 J	21.4 J	0.07 J	40.7 J	PGC-05	2.48	0.18 UJ	12.3 J
Phosphorus	mg/kg	15	15	100	702	1560	WRS06	1070	1050	1390	702	1560	WRS06	1070	1050	1390
Specific Gravity	NA	25	25	100	1.5 T	2.43	C782	1.85	1.79	2.25	1.5 T	2.43	C782	1.85	1.79	2.25
Sulfide	mg/kg	62	62	100	0.84	2260 J	PGC-06	185	16.2	1220	0.84	2260 J	PGC-06	185	16.2	1220
Total organic carbon	percent	159	156	98.1	0.034 J	22.4 J	C024	1.81	0.939	7.53	0.02 UJ	22.4 J	C024	1.78	0.92 J	7.44
Total solids	percent	163	163	100	32.9 J	94.3	C782; O33-C008	72.3	70.7	89.7	32.9 J	94.3	C782; O33-C008	72.3	70.7	89.7
Metals																
Aluminum	mg/kg	90	90	100	4250	31800	UC07	16330	15700	28460	4250	31800	UC07	16330	15700	28460
Antimony	mg/kg	122	90	73.8	0.041 J	1.55	C036	0.355	0.29 J	0.785 J	0.041 J	17 U	WRS34	1.68	0.429 J	6.5 U
Arsenic	mg/kg	178	168	94.4	0.57	7.5	WRS46	2.96	2.85	5.05	0.57	7.5	WRS46	2.86	2.8	5.01
Barium	mg/kg	15	15	100	113	509	WRS07	196	177	338	113	509	WRS07	196	177	338
Beryllium	mg/kg	15	0	0	--	--	--	--	--	--	2 U	2 U	WRS05; WRS06; WRS07; WRS08	1	1 U	1 U
Cadmium	mg/kg	178	159	89.3	0.03	3.6	WRS46	0.467	0.211 J	1.91	0.026 U	3.6	WRS46	0.464	0.239	1.82 J
Chromium	mg/kg	178	174	97.8	4.56	143	WRS06	22.2	19.9	41.7	4.56	143	WRS06	22	19.6 J	41.3
Copper	mg/kg	178	178	100	9.48	1050	WRS07	46.3	30.9	101 J	9.48	1050	WRS07	46.3	30.9	101 J
Iron	mg/kg	56	56	100	20000	38200	PGC-05	30200	30600	36700	20000	38200	PGC-05	30200	30600	36700
Lead	mg/kg	178	168	94.4	1.35 J	1380	PGC-07	65	30.9	173 J	1.35 J	1380	PGC-07	61.8	25	171 J
Mercury	mg/kg	178	163	91.6	0.005 J	3.46 JT	C783	0.3509	0.116	1.556	0.005 J	3.46 JT	C783	0.3283	0.1 U	1.376
Nickel	mg/kg	114	114	100	6.77	151	WRS06	22.2	19.6	34 J	6.77	151	WRS06	22.2	19.6	34 J
Selenium	mg/kg	99	55	55.6	0.02 J	0.6 J	IPC-C014; IPC-C018	0.179	0.11	0.5 J	0.02 J	1 U	WRS05; WRS06; WRS07; WRS08	0.211	0.123	0.5 U
Silver	mg/kg	163	143	87.7	0.018 J	22 J	PGC-01	1.07	0.252	5.47 J	0.018 J	22 J	PGC-01	1.12	0.277	5.15 J
Thallium	mg/kg	15	0	0	--	--	--	--	--	--	1 U	1 U	WRS05; WRS06; WRS07; WRS08	0.5	0.5 U	0.5 U
Zinc	mg/kg	178	178	100	21.4	11100 J	PGC-06	379	99.4 J	1410 J	21.4	11100 J	PGC-06	379	99.4 J	1410 J

Table D1.3-7. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Butyltins																
Butyltin ion	µg/kg	50	9	18	0.42 J	5.8	C004	1.619	0.82 J	4.96	0.0015 U	5.8	C004	0.3956	0.145 U	1.089 J
Dibutyltin ion	µg/kg	50	7	14	0.5 J	9.4	C002	2.02	0.81 J	7	0.002 U	9.4	C002	0.395	0.115 U	0.832 J
Tetrabutyltin	µg/kg	50	0	0	--	--	--	--	--	--	0.001 U	0.74 UT	C100	0.147	0.0625 U	0.333 U
Tributyltin ion	µg/kg	65	21	32.3	0.55 JT	14000	WRS06	1052	6	7300	0.0015 U	14000	WRS06	340.1	0.24 U	72.2
PCB Aroclors																
Aroclor 1016	µg/kg	110	0	0	--	--	--	--	--	--	0.73 U	170 U	WRS34	8	0.8 U	65 U
Aroclor 1221	µg/kg	110	0	0	--	--	--	--	--	--	0.73 U	170 U	WRS34	8	0.78 U	65 U
Aroclor 1232	µg/kg	110	0	0	--	--	--	--	--	--	0.73 U	170 U	WRS34	8	0.8 U	65 U
Aroclor 1242	µg/kg	110	5	4.5	17	60	IPC-C014	35	31 T	57	0.73 U	170 U	WRS34	9.6	1.1 U	65 U
Aroclor 1248	µg/kg	110	9	8.2	11	230 J	C031	71.63	37.5 T	184.5 J	0.73 U	230 J	C031	13.8	1.05 U	75 U
Aroclor 1254	µg/kg	110	34	30.9	1.4 J	220	C022	43	29 J	150 J	0.73 U	220	C022	21	1.3 U	75 U
Aroclor 1260	µg/kg	110	44	40	1.6 J	530	O33-C005	60.1	21	187	0.73 U	530	O33-C005	30.5	1.75 J	127 J
Aroclor 1262	µg/kg	106	3	2.8	31	259.3 JT	C039	112.1	46	238 J	0.73 U	259.3 JT	C039	8.685	0.65 U	58.75 U
Aroclor 1268	µg/kg	106	3	2.8	7.7	153 JT	C039	57.2	11	139 J	0.73 U	153 JT	C039	7.25	0.775 U	58.8 U
Aroclors	µg/kg	110	59	53.6	1.4 JT	610 T	C022	92.1	41 T	521 J	0.73 UT	610 T	C022	55.6	11	217 J
PCBs[c]																
Total PCBs	µg/kg	110	59	53.6	1.4 JT	610 T	C022	92.1	41 T	521 J	0.73 UT	610 T	C022	55.6	11	217 J
PCDD/Fs Homologs																
Heptachlorodibenzofuran homologs	pg/g	35	31	88.6	0.136 J	790	C007	82.69	45.7 J	168.5	0.0523 U	790	C007	73.26	29.9	166.3
Heptachlorodibenzo-p-dioxin homologs	pg/g	35	33	94.3	0.499 J	377	C007	138	119	328 J	0.367 U	377	C007	130	110	327 J
Hexachlorodibenzofuran homologs	pg/g	35	29	82.9	0.0279 J	166	C007	48.23	38.8 J	131.2	0.0227 U	166	C007	39.97	29.8	111.8
Hexachlorodibenzo-p-dioxin homologs	pg/g	35	31	88.6	0.212 J	65.1	C004	23.68	19.4	61.95	0.0317 U	65.1	C004	20.99	17	61.57
Octachlorodibenzofuran	pg/g	44	36	81.8	0.203 J	268	C007	47.38	28.15	118.8	0.0951 U	268	C007	39.45	20.85 J	112.4
Octachlorodibenzo-p-dioxin	pg/g	44	38	86.4	3.87 J	2940	C019	787	379 J	2260 J	2.88 U	2940	C019	680	261	2160 J
Pentachlorodibenzofuran homologs	pg/g	35	28	80	0.203 J	158	C022	41.64	25.6 J	152.6	0.0167 U	158	C022	33.32	19.7	151.2
Pentachlorodibenzo-p-dioxin homologs	pg/g	35	24	68.6	0.661 J	12.1	C007	4.728	4.83 J	9.682	0.0128 U	12.1	C007	3.255	1.74 J	9.577
Tetrachlorodibenzofuran homologs	pg/g	35	30	85.7	0.108 J	80	C020	16.18	10.01 J	53.25	0.0198 U	80	C020	13.87	8.94	51
Tetrachlorodibenzo-p-dioxin homologs	pg/g	35	25	71.4	0.167 J	16.4 J	C008	2.83	1.83	9.118	0.0171 U	16.4 J	C008	2.029	0.798 J	8.563
Total PCDD/F	pg/g	44	39	88.6	4.74 T	4590 T	C007	1090	541 JA	3030	2.88 UT	4590 T	C007	970	440	2920 J
PCDD/Fs																
1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/g	44	40	90.9	0.0956 J	396	C007	25.39	9.05	57.22	0.0523 U	396	C007	23.11	7.39	55.26
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/g	44	37	84.1	0.342 J	150	C019	55.9	46.7	135	0.342 J	150	C019	47.4	27.3	134
1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/g	44	26	59.1	0.175 J	4.2 J	C007	1.313	1.03 J	3.348 J	0.0359 U	4.2 J	C007	0.8165	0.666 J	2.077 J
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	44	35	79.5	0.0403 J	6.19 J	C007	1.659	1.54 J	5.639 J	0.0128 U	6.19 J	C007	1.331	0.7795 J	5.255 J
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/g	44	28	63.6	0.0656 J	1.39 J	C022	0.5413	0.4635 J	1.169 J	0.0268 U	1.39 J	C022	0.3738	0.2935 J	1.1 J
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	44	29	65.9	0.194 J	16.9	C007	2.925	1.5 J	10.52	0.0139 U	16.9	C007	2.089	0.957 J	9.574 J
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/g	44	33	75	0.0385 J	8.46	C004	3.165	2.52 J	7.878	0.0297 U	8.46	C004	2.471	1.88 J	7.305 J
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	44	9	20.5	0.071 JT	0.261 J	C007	0.1405	0.135 J	0.2238 J	0.0199 U	0.895 UJ	C024	0.08376	0.05325 U	0.2471 J
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/g	44	30	68.2	0.0926 J	4 J	C022	1.554	1.395 J	3.602 J	0.029 U	4 J	C022	1.113	0.8605 J	3.082 J
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	44	25	56.8	0.0934 J	1.16 J	C007	0.4745	0.436 J	1.126 J	0.0166 U	1.16 J	C007	0.2873	0.1395 J	1.03 J
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/g	44	26	59.1	0.0902 J	1.5 J	C022	0.513	0.4755 J	0.9418 J	0.0128 U	1.5 J	C022	0.3232	0.221 J	0.9094 J
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	44	30	68.2	0.126 J	10.3	C007	2.335	1.52 J	7.379 J	0.013 U	10.3	C007	1.682	0.699 J	5.533 J
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	44	29	65.9	0.0425 J	2.55 J	C020	0.8221	0.668 J	2.276 J	0.0167 U	2.55 J	C020	0.5605	0.206 J	2.108 J
2,3,7,8-Tetrachlorodibenzofuran	pg/g	44	22	50	0.274 J	13.4	C028	1.353	0.8335 J	1.501 J	0.0227 U	13.4	C028	0.7243	0.276 J	1.299 J
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	44	22	50	0.0681 J	0.56 J	C022	0.2814	0.238 J	0.5294 J	0.0171 U	0.56 J	C022	0.1652	0.0946 J	0.4777 J
TCDD TEQ (ND = 0)	pg/g	44	41	93.2	0.00226 JT	12.8 T	C007	2.6527	1.67 T	6.02 T	0.00226 JT	12.8 T	C007	2.4736	1.37 J	5.9945
Total TCDD TEQ (ND = 0)	pg/g	44	43	97.7	0.00226 JA	12.8 T	C007	2.5312	1.56 JA	6.003	0.00226 JA	12.8 T	C007	2.4745	1.37 J	5.9945
Pesticides																
2,4'-DDD	µg/kg	94	36	38.3	0.14 J	28 JT	IPC-C014	4.62	1.9 J	17.4 J	0.032 U	28 JT	IPC-C014	1.89	0.185 J	11.8 J
2,4'-DDE	µg/kg	94	5	5.3	0.082 J	1.2 J	C037	0.51	0.43 J	1.07 J	0.03 U	3.4 UJ	C031	0.198	0.125 U	0.67 U
2,4'-DDT	µg/kg	94	39	41.5	0.049 J	14 JT	C031	2.63	1.7 J	6.54 J	0.03 U	14 JT	C031	1.33	0.293 U	5.23 J
4,4'-DDD	µg/kg	94	53	56.4	0.13 J	31 J	C031	3.71	1.6	21.4	0.047 U	31 J	C031	2.17	0.445 J	9.79
4,4'-DDE	µg/kg	94	44	46.8	0.052 J	11 J	C783	2.83	2.05 J	8.08 J	0.027 U	11 J	C783	1.39	0.235 UJ	6.37 J
4,4'-DDT	µg/kg	94	43	45.7	0.13 J	240 JT	C031	10.5	1.4	38.7 J	0.059 U	240 JT	C031	4.97	0.403 J	10.5 J
Aldrin	µg/kg	94	8	8.5	0.079 J	1.7	C002	0.414	0.21 J	1.3 J	0.046 UJ	1.7	C002	0.114	0.08 U	0.324 UJ
alpha-Endosulfan	µg/kg	94	7	7.4	0.086 J	0.72 J	C031	0.261	0.16 J	0.6 J	0.025 U	2.7 U	C783	0.11	0.06 U	0.334 U
alpha-Hexachlorocyclohexane	µg/kg	94	3	3.2	0.055 J	0.26 J	C031	0.125	0.059 J	0.24 J	0.047 U	0.97 U	C783	0.076	0.0465 UJ	0.197 U
beta-Endosulfan	µg/kg	94	12	12.8	0.093 J	3.4 JT	C039	0.824	0.46	2.52 J	0.031 U	3.4 JT	C039	0.226	0.11 UJ	0.914

Table D1.3-7. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
beta-Hexachlorocyclohexane	µg/kg	94	12	12.8	0.076 J	3.1 NJ	C783	0.631	0.435 J	1.81 J	0.054 U	3.1 NJ	C783	0.191	0.09 U	0.571
Chlordane (technical)	µg/kg	16	0	0	--	--	--	--	--	--	1.9 U	9.9 U	O33-C005	2.6	1.9 U	4.7 U
Chlorpyrifos	µg/kg	1	0	0	--	--	--	--	--	--	0.072 UJ	0.072 UJ	C031	0.036	0.036 UJ	0.036 UJ
cis-Chlordane	µg/kg	94	12	12.8	0.073 J	3 J	C031	0.843	0.44 J	2.29 J	0.031 U	3 J	C031	0.187	0.0825 U	0.53 J
cis-Nonachlor	µg/kg	94	8	8.5	0.18 J	54 J	O33-C005	7.71	1.03 J	36.3 J	0.043 U	54 J	O33-C005	1.01	0.1 U	2.48 U
delta-Hexachlorocyclohexane	µg/kg	94	4	4.3	0.099 J	0.87 J	C025	0.39	0.295 J	0.806 J	0.037 U	1.1 U	C783	0.0713	0.0368 U	0.328 UJ
Dieldrin	µg/kg	94	4	4.3	0.29 J	16 J	C031	7.06	5.98 J	14.7 J	0.03 U	16 J	C031	0.514	0.07 U	2.55 U
Endosulfan sulfate	µg/kg	94	4	4.3	0.18 J	0.38 J	UC05-1	0.29	0.3 J	0.37 J	0.051 UJ	4.5 U	C022	0.128	0.055 U	0.389 J
Endrin	µg/kg	94	10	10.6	0.18	2.4	C035	0.909	0.795 J	2 J	0.046 U	2.7 U	C037	0.204	0.0875 UJ	1.05 J
Endrin aldehyde	µg/kg	94	9	9.6	0.079 J	0.6 J	C002; C008	0.381	0.39 J	0.6 J	0.042 U	2.7 U	C783	0.153	0.06 U	0.574 J
Endrin ketone	µg/kg	94	10	10.6	0.19 J	31.2 JT	C039	4.21	1.1 J	18.5 J	0.029 U	62 U	O33-C005	0.924	0.0625 U	1.69 U
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	94	31	33	0.12 J	1.9 JT	IPC-C014	0.528	0.4 J	1.35 J	0.043 U	2.9 U	C783	0.27	0.113 U	1.02 J
Heptachlor	µg/kg	94	3	3.2	0.12 NJ	0.34 J	C008	0.233	0.24	0.33 J	0.046 UJ	0.76 U	C783	0.0644	0.0458 U	0.204 UJ
Heptachlor epoxide	µg/kg	94	9	9.6	0.14 J	0.86	IPC-C017	0.482	0.4 J	0.856 J	0.048 U	2.8 U	O33-C005	0.152	0.0875 U	0.526 J
Methoxychlor	µg/kg	94	6	6.4	0.21 J	21 JT	C039	3.98	0.59 J	16 J	0.054 U	21 JT	C039	0.395	0.095 U	0.624
Mirex	µg/kg	94	1	1.1	0.74 J	0.74 J	UC08	0.74	0.74 J	0.74 J	0.041 UJ	2.1 U	C783	0.0669	0.0375 U	0.122 UJ
Oxychlordane	µg/kg	94	10	10.6	0.12 J	4.3 NJ	C783	0.772	0.365 J	2.68 J	0.038 U	4.3 NJ	C783	0.196	0.11 U	0.508 J
Total chlordanes	µg/kg	94	51	54.3	0.094 JT	54 JT	O33-C005	3.16	1.3 T	8.2 J	0.054 UT	54 JT	O33-C005	1.81	0.33 J	6.61 J
Total Endosulfan	µg/kg	94	19	20.2	0.086 JT	3.4 T	C039	0.678	0.38 JT	2.61	0.053 UT	4.5 UT	C022	0.311	0.128 J	1.29 U
Total DDD	µg/kg	94	54	57.4	0.15 JT	48 JT	C031	6.72	2.2	35.6 J	0.047 UT	48 JT	C031	3.95	0.62 J	24
Total DDx	µg/kg	94	64	68.1	0.052 T	301 T	C031	16.3	5.71 J	67 J	0.052 T	301 T	C031	11.2	2.04 J	43.6 J
Total DDE	µg/kg	94	46	48.9	0.052 T	11 JT	C783	2.75	2	8	0.034 UT	11 JT	C783	1.45	0.275 J	6.58 J
Total DDT	µg/kg	94	54	57.4	0.049 JT	254 T	C031	10.2	2.55	30.2	0.049 JT	254 T	C031	6.01	0.515 J	13.5 J
Total 4,4' DDx	µg/kg	19	3	15.8	0.17 JT	0.85 JT	UC06	0.51	0.52 JT	0.82 J	0.13 UT	0.85 JT	UC06; UC07	0.17	0.09 UT	0.55 J
Toxaphene	µg/kg	93	0	0	--	--	--	--	--	--	2.5 U	660 U	O33-C005	21	8 U	59 U
trans-Chlordane	µg/kg	94	38	40.4	0.094 J	14	C022	2.06	1.3 J	5.82 J	0.027 U	14	C022	0.888	0.097 J	3.84 J
trans-Nonachlor	µg/kg	94	12	12.8	0.11 J	1.3 J	C031	0.393	0.285 J	0.91 J	0.034 U	1.5 U	C783	0.122	0.06 U	0.444 J
Polycyclic Aromatic Hydrocarbons																
1-Methylnaphthalene	µg/kg	94	81	86.2	1 J	240000	PGC-06	17000	40	150000	0.31 U	240000	PGC-06	14700	27.5	131000
2-Methylnaphthalene	µg/kg	161	118	73.3	0.51 J	400000	PGC-06	17900	34.8 J	153000	0.37 U	400000	PGC-06	13100	13	90000
Acenaphthene	µg/kg	161	134	83.2	0.25 J	410000	PGC-05	19200	44.5	164000	0.2 U	410000	PGC-05	16000	18	160000
Acenaphthylene	µg/kg	161	124	77	0.36 J	130000	PGC-05	2160	22.5	11000	0.24 U	130000	PGC-05	1670	11.6 T	10000
Anthracene	µg/kg	161	132	82	0.4 JT	260000	PGC-06	12400	23	109000	0.24 U	260000	PGC-06	10200	12	97000
Benzo(a)anthracene	µg/kg	161	135	83.9	0.2 J	150000	PGC-06	7150	39.5 T	66300	0.18 U	150000	PGC-06	6000	25 J	54000
Benzo(a)pyrene	µg/kg	161	132	82	0.23 J	170000	PGC-06	8990	51	91300	0.14 U	170000	PGC-06	7370	27	68000
Benzo(b)fluoranthene	µg/kg	161	130	80.7	0.26 J	150000	PGC-06	7570	64.5	73900	0.25 U	150000	PGC-06	6110	35	55000
Benzo(e)pyrene	µg/kg	118	104	88.1	0.64 J	93000	PGC-06	6010	82.5	51900	0.18 U	93000	PGC-06	5290	54	51200
Benzo(g,h,i)perylene	µg/kg	161	124	77	0.7 J	120000	PGC-05; PGC-06	6730	68.5	54300	0.25 U	120000	PGC-05; PGC-06	5190	30	46000
Benzo(k)fluoranthene	µg/kg	161	123	76.4	0.66 J	47000	PGC-06	2660	31	25500	0.15 U	47000	PGC-06	2030	13	19000
C1-Chrysene	µg/kg	94	79	84	2.8	89000	PGC-06	6670	170	50000	0.25 U	89000	PGC-06	5610	115	45500
C1-Dibenzothiophene	µg/kg	36	28	77.8	1.3 J	400	C020; C783	115	54.5	386	0.21 U	400	C020; C783	89.5	43.5 J	370
C1-Fluoranthene/pyrene	µg/kg	94	80	85.1	1.1 J	230000	PGC-06	17900	265	140000	0.61 U	230000	PGC-06	15200	205 J	127000
C1-Fluorene	µg/kg	94	74	78.7	1.4 J	74000	PGC-06	5870	67.5	43400	0.5 U	74000	PGC-06	4620	38	40400
C1-Phenanthrene/anthracene	µg/kg	94	80	85.1	0.82 J	220000	PGC-06	17300	288	140000	0.75 U	220000	PGC-06	14800	180 J	121000
C2-Chrysene	µg/kg	94	77	81.9	6.7	34000	PGC-06	2750	150	19000	0.25 U	34000	PGC-06	2260	110	18400
C2-Dibenzothiophene	µg/kg	36	27	75	5.9	700	C783	128	45	424	0.21 U	700	C783	95.9	35	415
C2-Fluoranthene/pyrene	µg/kg	36	31	86.1	2.8	2900	C783	230	75	820	0.61 U	2900	C783	200	54	720
C2-Fluorene	µg/kg	94	76	80.9	2.4 J	44000	PGC-06	3420	115	24300	0.5 U	44000	PGC-06	2770	82.5 J	23000
C2-Naphthalene	µg/kg	94	78	83	3.3	220000	PGC-06	16600	165 J	133000	0.37 U	220000	PGC-06	13800	100	111000
C2-Phenanthrene/anthracene	µg/kg	94	80	85.1	1.1 J	110000	PGC-06	7840	280	58300	0.75 U	110000	PGC-06	6680	210	54100
C3-Chrysene	µg/kg	94	75	79.8	7.6 J	22000	PGC-06	1720	140	11300	0.25 U	22000	PGC-06	1380	110	9630
C3-Dibenzothiophene	µg/kg	36	26	72.2	9.4	560	C020; C783	136	54.5 J	538	0.21 U	560	C020; C783	98.5	35	493
C3-Fluoranthene/pyrene	µg/kg	36	28	77.8	5.3 J	1400	C783	185	72.5	582	0.61 U	1400	C783	144	58.5	538
C3-Fluorene	µg/kg	94	74	78.7	4.1	44000	PGC-06	3060	218	20700	0.5 U	44000	PGC-06	2410	120	18100
C3-Naphthalene	µg/kg	94	75	79.8	3.2	88000	PGC-06	6860	180	48500	0.37 U	88000	PGC-06	5480	130	42500
C3-Phenanthrene/anthracene	µg/kg	94	80	85.1	0.85 J	43000	PGC-06	3210	290	22100	0.75 U	43000	PGC-06	2730	205	21400
C4-Chrysene	µg/kg	94	64	68.1	6.6	7700	PGC-06	685	72.5	4190	0.25 U	7700	PGC-06	477	50	3450
C4-Naphthalene	µg/kg	94	75	79.8	2.8	34000	PGC-06	2610	170	15900	0.37 U	34000	PGC-06	2080	105	15000
C4-Phenanthrene/anthracene	µg/kg	94	74	78.7	5.9	14000	PGC-06	1240	130	7920	0.75 U	14000	PGC-06	984	76	7440

Table D1.3-7. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Chrysene	µg/kg	161	130	80.7	0.3 J	150000	PGC-06	7470	66	66000	0.25 U	150000	PGC-06	6030	32	52000
Dibenzo(a,h)anthracene	µg/kg	161	107	66.5	0.28 J	14000	PGC-06	844	16	6810	0.28 J	14000	PGC-06	561	4.9	5200
Dibenzothiophene	µg/kg	94	78	83	0.36 J	62000 J	PGC-06	5520	39 J	39800 J	0.21 U	62000 J	PGC-06	4580	22 J	36700 J
Fluoranthene	µg/kg	161	140	87	0.64 J	470000	PGC-06	24400	140	231000	0.41 U	470000	PGC-06	21200	83	190000
Fluorene	µg/kg	161	127	78.9	0.38 J	260000	PGC-06	11900	29	102000	0.21 U	260000	PGC-06	9430	15	83000
Total HPAHs	µg/kg	161	145	90.1	0.28 T	1950000 T	PGC-06	91900	513 T	850000	0.28 T	1950000 T	PGC-06	82800	377 T	748000 T
Indeno(1,2,3-cd)pyrene	µg/kg	161	128	79.5	0.21 J	110000	PGC-06	5920	55	50500	0.16 U	110000	PGC-06	4700	24	42000
Total LPAHs	µg/kg	161	150	93.2	0.25 JT	3030000 T	PGC-05	141000	353	1360000	0.25 JT	3030000 T	PGC-05	132000	222 T	1300000 T
Naphthalene	µg/kg	162	125	77.2	0.45 J	1600000	PGC-05	63100	84	628000	0.44 U	1600000	PGC-05	48700	37.5	487000
Perylene	µg/kg	118	114	96.6	1.2 J	35000	PGC-06	2380	60.5	21000	0.32 U	35000	PGC-06	2300	58	21000
Phenanthrene	µg/kg	161	135	83.9	1.9 J	750000	PGC-06	38400	150	342000	0.4 U	750000	PGC-06	32200	81	300000
Pyrene	µg/kg	161	140	87	0.53 J	570000	PGC-06	27000	140	251000	0.37 U	570000	PGC-06	23500	96	220000
Total BaPEq	µg/kg	161	140	87	0.0003 JT	226000 T	PGC-06	11080	59.25	109200	0.0003 JT	226000 T	PGC-06	9634	39.3 JT	88300 T
Total cPAHs	µg/kg	161	140	87	0.28 JT	788000 T	PGC-06	37700	244	351000	0.28 JT	788000 T	PGC-06	32800	150 T	292000 T
Total PAHs	µg/kg	161	157	97.5	0.25 JT	4850000 T	PGC-06	219700	680 T	2146000	0.25 JT	4850000 T	PGC-06	214200	640 JT	2140000 T
Phthalates																
Bis(2-ethylhexyl) phthalate	µg/kg	64	36	56.3	2.5 J	815 T	C031	103	37.5 J	535	2.3 U	815 T	C031	68.8	17.8 J	324
Butylbenzyl phthalate	µg/kg	64	6	9.4	3.3 J	33 T	C031	14	11 J	30	1.7 U	160 U	C783	7.4	1.6 U	31
Dibutyl phthalate	µg/kg	64	36	56.3	3.6 J	28.5 T	C021	10.4	9 J	22.1	3.3 U	400 U	C783	18.9	8.4 J	37.8
Diethyl phthalate	µg/kg	64	3	4.7	1.4 J	2.8 J	C038	2.2	2.5 J	2.8 J	1.3 U	65 U	C783	3.5	2.2 U	6.4 U
Dimethyl phthalate	µg/kg	64	9	14.1	1.8 J	470	C034	190	160	440	1 U	470	C034	32	1.2 U	170
Di-n-octyl phthalate	µg/kg	64	1	1.6	18	18	C006	18	18	18	1.3 U	85 U	C783	3.6	0.85 U	17
Semivolatile Organic Compounds																
1,2,4-Trichlorobenzene	µg/kg	64	0	0	--	--	--	--	--	--	1.7 U	130 U	C783	5	1.3 U	12 U
1,2-Dichlorobenzene	µg/kg	64	0	0	--	--	--	--	--	--	1.4 U	150 U	C783	5.6	1.5 U	13 U
1,3-Dichlorobenzene	µg/kg	64	0	0	--	--	--	--	--	--	1.8 U	150 U	C783	5.7	1.5 U	14 U
1,4-Dichlorobenzene	µg/kg	65	8	12.3	4.1 J	315 T	C031	70.2	19.5 J	250	0.21 U	315 T	C031	13.7	1.45 U	75 U
2,4-Dinitrotoluene	µg/kg	64	0	0	--	--	--	--	--	--	1.5 U	75 U	C783	3.3	0.8 U	6.9 U
2,6-Dinitrotoluene	µg/kg	64	0	0	--	--	--	--	--	--	2 U	100 U	C783	4.2	1.1 U	9.3 U
2-Chloronaphthalene	µg/kg	64	1	1.6	120 J	120 J	C783	120	120 J	120 J	1.6 U	120 J	C783	4.8	0.85 U	7.4 U
2-Nitroaniline	µg/kg	64	0	0	--	--	--	--	--	--	3 U	160 U	C783	6.3	1.6 U	15 U
3,3'-Dichlorobenzidine	µg/kg	64	0	0	--	--	--	--	--	--	3.7 U	190 U	C783	7.8	1.9 U	19 U
3-Nitroaniline	µg/kg	64	0	0	--	--	--	--	--	--	2.5 U	130 U	C783	5.1	1.3 U	12 U
4-Bromophenyl phenyl ether	µg/kg	64	0	0	--	--	--	--	--	--	1.6 U	80 U	C783	3.2	0.83 U	7.4 U
4-Chloroaniline	µg/kg	64	0	0	--	--	--	--	--	--	1.9 U	95 U	C783	3.8	1 U	8.8 U
4-Chlorophenyl phenyl ether	µg/kg	64	0	0	--	--	--	--	--	--	1.4 U	70 U	C783	2.9	0.75 U	6.5 U
4-Nitroaniline	µg/kg	64	0	0	--	--	--	--	--	--	1.8 U	90 U	C783	3.9	0.95 U	8.3 U
Aniline	µg/kg	56	2	3.6	5.1 J	16 J	C022	11	11 J	15 J	1.5 U	75 U	C783	3.6	0.93 U	21 J
Azobenzene	µg/kg	64	0	0	--	--	--	--	--	--	1.1 U	55 U	C783	2.5	0.6 U	5.1 U
Benzoic acid	µg/kg	53	3	5.7	100 J	110 J	C027; C036	110	110 J	110 J	96 U	4800 U	C783	210	60 U	1200 U
Benzyl alcohol	µg/kg	64	29	45.3	2.7 J	69 T	UC05-2	22	20	53	2.1 U	110 U	C783	14	5.5 U	55 U
Bis(2-chloroethoxy) methane	µg/kg	64	0	0	--	--	--	--	--	--	1.4 U	75 U	C783	3	0.78 U	6.9 U
Bis(2-chloroethyl) ether	µg/kg	64	0	0	--	--	--	--	--	--	1.9 U	95 U	C783	3.9	1 U	8.8 U
Bis(2-chloroisopropyl) ether	µg/kg	64	0	0	--	--	--	--	--	--	1.3 UJ	130 UJ	C783	4.9	1.3 U	12 U
Carbazole	µg/kg	64	24	37.5	1.5 JT	1700	C783	113	11	547	1.3 U	1700	C783	43.9	1.25 J	46.6 J
Dibenzofuran	µg/kg	67	46	68.7	0.22 J	2400	C783	78.3	7.4 J	123	0.21 U	2400	C783	53.9	2.5 J	96.4 J
Hexachlorobenzene	µg/kg	94	13	13.8	0.14 J	2.8	O33-C005	0.454	0.24 J	1.5 J	0.068 U	2.8	O33-C005	0.137	0.06 U	0.308 J
Hexachlorobutadiene	µg/kg	93	4	4.3	0.078 J	0.35 JT	C039	0.207	0.2 J	0.332 J	0.062 U	1.4 U	C783	0.138	0.07 U	0.367 U
Hexachlorocyclopentadiene	µg/kg	64	0	0	--	--	--	--	--	--	17 U	1500 U	C783	56	15 U	130 U
Hexachloroethane	µg/kg	77	1	1.3	0.79 J	0.79 J	UC07	0.79	0.79 J	0.79 J	0.037 UJ	2.9 U	UC06	0.158	0.0395 U	0.58 U
Isophorone	µg/kg	64	2	3.1	3.9 JT	3.9 JT	UC05-2	3.9	3.9 J	3.9 J	1 U	50 U	C783	2.2	0.55 U	4.8 J
Nitrobenzene	µg/kg	64	0	0	--	--	--	--	--	--	2.2 U	110 U	C783	4.4	1.1 U	10 U
N-Nitrosodimethylamine	µg/kg	64	0	0	--	--	--	--	--	--	6.1 U	310 U	C783	12	3.1 U	28 U
N-Nitrosodiphenylamine	µg/kg	64	0	0	--	--	--	--	--	--	1.6 U	80 U	C783	3.3	0.85 U	7.4 U
N-Nitrosodipropylamine	µg/kg	64	0	0	--	--	--	--	--	--	2.4 U	120 U	C783	5	1.3 U	11 U
Octachlorostyrene	µg/kg	1	0	0	--	--	--	--	--	--	0.17 UJ	0.17 UJ	C031	0.085	0.085 UJ	0.085 UJ
Phenols																
2,3,4,5-Tetrachlorophenol	µg/kg	52	0	0	--	--	--	--	--	--	0.23 U	6.1 U	C019	1.3	1.4 U	2.7 U
2,3,5,6-Tetrachlorophenol	µg/kg	52	1	1.9	3.2 JT	3.2 JT	UC05-2	3.2	3.2 JT	3.2 JT	0.18 U	7.5 U	C019	1.6	2.2 U	3.3 U

Table D1.3-7. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
2,4,5-Trichlorophenol	µg/kg	52	2	3.8	4.1 J	5.1 J	C783	4.6	4.6 J	5.1 J	0.6 U	5.3 U	C019; C782	1.4	1.7 U	2.7 U
2,4,6-Trichlorophenol	µg/kg	52	1	1.9	1.3 J	1.3 J	C783	1.3	1.3 J	1.3 J	0.12 U	5.5 U	C019	1.2	1.5 J	2.4 U
2,4-Dichlorophenol	µg/kg	64	0	0	--	--	--	--	--	--	1 UJ	50 U	C783	2.2	0.55 U	4.6 U
2,4-Dimethylphenol	µg/kg	77	5	6.5	6.7 J	2100 J	PGC-05	900	1000 J	2000 J	5.5 UJ	42000 UJ	PGC-06	1000	3.7 U	4700 UJ
2,4-Dinitrophenol	µg/kg	64	0	0	--	--	--	--	--	--	17 UJ	850 U	C783	38	9 U	79 U
2-Chlorophenol	µg/kg	64	0	0	--	--	--	--	--	--	1.9 U	100 U	C783	3.9	1 U	9.3 U
2-Methylphenol	µg/kg	121	2	1.7	6.2 J	6.9 J	C024	6.6	6.6 J	6.9 J	1.5 UJ	8300 U	PGC-06	140	3.6 UJT	210 U
2-Nitrophenol	µg/kg	64	0	0	--	--	--	--	--	--	1.5 UJ	75 U	C783	3.2	0.8 U	6.9 U
4,6-Dinitro-2-methylphenol	µg/kg	64	0	0	--	--	--	--	--	--	1.4 UJ	70 U	C783	2.9	0.75 U	6.5 U
4-Chloro-3-methylphenol	µg/kg	64	0	0	--	--	--	--	--	--	1.4 UJ	70 U	C783	2.9	0.75 U	6.5 U
4-Methylphenol	µg/kg	121	57	47.1	3.4 J	330	C024	81.9	48 J	224 J	1.5 UJ	8300 UJ	PGC-06	169	14 J	330
4-Nitrophenol	µg/kg	64	0	0	--	--	--	--	--	--	18 UJ	900 U	C783	38	9.5 U	83 U
Pentachlorophenol	µg/kg	109	3	2.8	0.24 J	26 T	UC05-2	9.7	3 J	24 J	0.16 U	83000 UJ	PGC-06	1500	30 U	3000 UJ
Phenol	µg/kg	121	40	33.1	2.2 J	200 J	PGC-05	23.8	8.5 J	152 J	2 UJ	25000 U	PGC-06	412	8 J	650 U
Petroleum																
C10-C12 Aliphatics	mg/kg	12	2	16.7	2.5	5.4	C037	4	4	5.3	2.4 U	5.4	C037	1.7	1.4 U	3.8
C10-C12 Aromatics	mg/kg	12	0	0	--	--	--	--	--	--	2.3 U	2.9 U	C035; C038	1.3	1.3 U	1.5 U
C12-C13 Aromatics	mg/kg	2	0	0	--	--	--	--	--	--	20 UT	33 U	C035	13	13 U	16 U
C12-C16 Aliphatics	mg/kg	12	3	25	3.9	16	C037	9.6	8.8	15	2.4 U	16	C037	3.4	1.4 U	12
C12-C16 Aromatics	mg/kg	12	0	0	--	--	--	--	--	--	2.3 U	2.9 U	C035; C038	1.3	1.3 U	1.5 U
C16-C21 Aliphatics	mg/kg	12	6	50	2.8	47	C037	16	6.6	43	2.4 U	47	C037	8.7	2.1	38
C16-C21 Aromatics	mg/kg	12	3	25	3.2	15	C037	7.5	4.2	14	2.4 U	15	C037	2.8	1.4 U	9.1
C21-C34 Aliphatics	mg/kg	12	12	100	15.5 T	340	C037	92	48.5	258	15.5 T	340	C037	92	48.5	258
C21-C34 Aromatics	mg/kg	12	11	91.7	3.5	140	C034	28	9.4	110	2.4 U	140	C034	26	7.7	100
C5-C6 Aliphatics	mg/kg	2	0	0	--	--	--	--	--	--	20 UT	33 U	C035	13	13 U	16 U
C6-C8 Aliphatics	mg/kg	2	0	0	--	--	--	--	--	--	20 UT	33 U	C035	13	13 U	16 U
C8-C10 Aliphatics	mg/kg	12	2	16.7	2.6	6.6	C037	4.6	4.6	6.4	2.4 U	6.6	C037	1.9	1.4 U	4.4
C8-C10 Aromatics	mg/kg	12	0	0	--	--	--	--	--	--	2.3 U	2.9 U	C035; C038	1.3	1.3 U	1.5 U
Decane	mg/kg	2	0	0	--	--	--	--	--	--	2 UT	3.3 U	C035	1.3	1.3 U	1.6 U
Total Petroleum Hydrocarbons (Diesel)	mg/kg	107	65	60.7	1.9 J	19000	PGC-06	2360	420	14600	1.3 UT	19000	PGC-06	1430	38	11700
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	57	47	82.5	4.65 JT	1200 J	C783	237	140 J	852 J	1.3 UT	1200 J	C783	196	110	773 J
Dodecane	mg/kg	2	0	0	--	--	--	--	--	--	2 UT	3.3 U	C035	1.3	1.3 U	1.6 U
Total Petroleum Hydrocarbons (Gasoline)	mg/kg	93	44	47.3	0.92 JT	4800	PGC-06	617	62.5 J	2890	0.75 UT	4800	PGC-06	294	5 U	2520
Jet fuel A	mg/kg	15	0	0	--	--	--	--	--	--	10 U	10 U	WRS05; WRS06; WRS07; WRS08	5	5 U	5 U
Kerosene	mg/kg	15	0	0	--	--	--	--	--	--	10 U	10 U	WRS05; WRS06; WRS07; WRS08	5	5 U	5 U
Mineral spirits	mg/kg	15	0	0	--	--	--	--	--	--	10 U	10 U	WRS05; WRS06; WRS07; WRS08	5	5 U	5 U
Motor oil	mg/kg	9	9	100	42	900	WRS31	229	110	688	42	900	WRS31	229	110	688
n-Hexane	mg/kg	2	0	0	--	--	--	--	--	--	2 UT	3.3 U	C035	1.3	1.3 U	1.6 U
Octane	mg/kg	2	0	0	--	--	--	--	--	--	2 UT	3.3 U	C035	1.3	1.3 U	1.6 U
Pentane	mg/kg	2	0	0	--	--	--	--	--	--	2 UT	3.3 U	C035	1.3	1.3 U	1.6 U
Total Petroleum Hydrocarbons (Residual)	mg/kg	83	64	77.1	3.6 JT	13000	PGC-06	1940	505	9040	3.2 U	13000	PGC-06	1500	210	8690
Total Petroleum Hydrocarbons (Residual) (silica gel	mg/kg	57	50	87.7	5.25 JT	2300 J	C783	472	335	1380 J	3.1 UT	2300 J	C783	417	290 J	1330 J
Total Petroleum Hydrocarbons	mg/kg	107	95	88.8	0.92 JT	36800 T	PGC-06	3330	490 JT	23800	0.92 JT	36800 T	PGC-06	2960	381	22900
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	57	50	87.7	6.7 JA	3500 JA	C783	694	495	2120	3.1 UA	3500 JA	C783	611	410 T	2060
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	µg/kg	20	0	0	--	--	--	--	--	--	0.059 U	0.083 U	UC07	0.0369	0.0373 U	0.041 U
1,1,1-Trichloroethane	µg/kg	20	0	0	--	--	--	--	--	--	0.082 U	0.12 U	UC05-1; UC05-2; UC06; UC07	0.053	0.055 U	0.06 U
1,1,2,2-Tetrachloroethane	µg/kg	20	0	0	--	--	--	--	--	--	0.13 U	0.19 U	UC05-1; UC07	0.083	0.083 U	0.095 U
1,1,2-Trichloroethane	µg/kg	20	0	0	--	--	--	--	--	--	0.074 U	0.11 U	UC05-1; UC05-2; UC06; UC07	0.0476	0.0468 U	0.055 U
1,1-Dichloroethane	µg/kg	20	0	0	--	--	--	--	--	--	0.066 U	0.094 U	UC07	0.0416	0.0418 U	0.0461 U
1,1-Dichloroethene	µg/kg	20	0	0	--	--	--	--	--	--	0.09 U	0.13 U	UC05-1; UC05-2; UC06; UC07	0.058	0.058 U	0.065 U
1,2,3-Trichloropropane	µg/kg	20	0	0	--	--	--	--	--	--	0.2 U	0.28 U	UC05-1; UC07	0.12	0.13 U	0.14 U

Table D1.3-7. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
1,2-Dichloroethane	µg/kg	20	0	0	--	--	--	--	--	--	0.11 U	0.15 U	UC05-1; UC05-2; UC06; UC07	0.068	0.068 U	0.075 U
1,2-Dichloropropane	µg/kg	20	0	0	--	--	--	--	--	--	0.072 U	0.11 U	UC07	0.0452	0.0453 U	0.0503 U
1,4-Dichloro-trans-2-butene	µg/kg	20	0	0	--	--	--	--	--	--	0.36 U	0.51 U	UC07	0.23	0.23 U	0.25 U
2-Chloroethyl vinyl ether	µg/kg	20	0	0	--	--	--	--	--	--	0.17 U	0.23 U	UC05-1; UC05-2; UC06; UC07	0.1	0.11 U	0.12 U
Acetone	µg/kg	20	0	0	--	--	--	--	--	--	7.9 U	67 U	UC05-1	14	12 U	31 U
Acrylonitrile	µg/kg	20	0	0	--	--	--	--	--	--	0.45 U	0.63 U	UC07	0.28	0.28 U	0.31 U
Benzene	µg/kg	80	20	25	0.12 JT	13000	PGC-06	3030	268 J	9580	0.048 U	13000	PGC-06	793	3.43 U	7860
Bromochloromethane	µg/kg	20	0	0	--	--	--	--	--	--	0.11 U	0.15 U	UC05-1; UC05-2; UC06; UC07; UC08	0.068	0.068 U	0.075 U
Bromodichloromethane	µg/kg	20	0	0	--	--	--	--	--	--	0.044 U	0.062 U	UC07	0.0274	0.0275 U	0.0305 U
Bromoform	µg/kg	20	0	0	--	--	--	--	--	--	0.13 U	0.19 U	UC05-1; UC07	0.083	0.083 U	0.095 U
Bromomethane	µg/kg	20	0	0	--	--	--	--	--	--	0.31 U	0.43 U	UC05-1; UC07	0.19	0.2 U	0.22 U
BTEX	µg/kg	80	32	40	0.12 JT	154000 JT	PGC-06	24400	4.08 J	122000 J	0.12 JT	154000 JT	PGC-06	9840	3.25 U	88600 J
Carbon disulfide	µg/kg	20	4	20	0.084 J	0.11 JT	UC05-2	0.0985	0.1 J	0.109 J	0.073 U	0.11 JT	UC05-1; UC05-2; UC07	0.0571	0.048 U	0.101 J
Carbon tetrachloride	µg/kg	20	0	0	--	--	--	--	--	--	0.054 U	0.077 U	UC07	0.0342	0.0345 U	0.038 U
Chlorobenzene	µg/kg	20	1	5	0.37 J	0.37 J	UC07	0.37	0.37 J	0.37 J	0.065 U	0.37 J	UC07	0.0571	0.0413 U	0.0617 J
Chlorodibromomethane	µg/kg	20	0	0	--	--	--	--	--	--	0.11 U	0.16 U	UC05-1; UC07	0.07	0.073 U	0.08 U
Chloroethane	µg/kg	20	0	0	--	--	--	--	--	--	0.22 U	0.31 U	UC05-1; UC07	0.14	0.14 U	0.16 U
Chloroform	µg/kg	20	0	0	--	--	--	--	--	--	0.086 U	0.13 U	UC07	0.0559	0.0575 U	0.0603 U
Chloromethane	µg/kg	20	0	0	--	--	--	--	--	--	0.081 U	0.12 U	UC05-1; UC05-2; UC06; UC07	0.0525	0.0525 U	0.06 U
cis-1,2-Dichloroethene	µg/kg	20	0	0	--	--	--	--	--	--	0.11 U	0.15 U	UC05-1; UC05-2; UC06; UC07	0.068	0.068 U	0.075 U
cis-1,3-Dichloropropene	µg/kg	20	0	0	--	--	--	--	--	--	0.067 U	0.095 U	UC07	0.0423	0.0428 U	0.047 U
Dichlorodifluoromethane	µg/kg	20	0	0	--	--	--	--	--	--	0.064 U	0.091 U	UC07	0.0403	0.0408 U	0.0446 U
Ethylbenzene	µg/kg	80	20	25	0.33 J	55000	PGC-06	13000	1630	34100	0.055 U	55000	PGC-06	3290	3.5 U	30100
Ethylene dibromide	µg/kg	20	0	0	--	--	--	--	--	--	0.066 U	0.094 U	UC07	0.0416	0.0418 U	0.0461 U
Isopropylbenzene	µg/kg	20	3	15	0.24 J	0.78	UC07	0.52	0.54 J	0.756 J	0.092 U	0.78	UC07	0.129	0.0625 U	0.552 J
m,p-Xylene	µg/kg	80	14	17.5	0.9 J	60000	PGC-06	19000	4000	55000	0.12 U	60000	PGC-06	3500	3.5 U	34000
Methyl iodide	µg/kg	20	0	0	--	--	--	--	--	--	0.36 U	0.51 U	UC07	0.23	0.23 U	0.25 U
Methyl isobutyl ketone	µg/kg	20	0	0	--	--	--	--	--	--	0.54 U	0.77 U	UC07	0.34	0.35 U	0.38 U
Methyl n-butyl ketone	µg/kg	20	0	0	--	--	--	--	--	--	3.8 U	5.4 U	UC07	2.4	2.4 U	2.7 U
Methyl tert-butyl ether	µg/kg	22	3	13.6	0.11 J	0.15 JT	UC05-2	0.133	0.14 J	0.149 J	0.077 U	3300 U	C035	121	0.055 U	950 J
Methylene bromide	µg/kg	20	0	0	--	--	--	--	--	--	0.076 U	0.11 U	UC05-1; UC05-2; UC06; UC07; UC08	0.0487	0.048 U	0.055 U
Methylene chloride	µg/kg	20	0	0	--	--	--	--	--	--	1.6 U	5.7 U	UC06	1.7	1.7 U	2.7 U
o-Xylene	µg/kg	80	23	28.8	0.26 J	39000	PGC-06	7780	7	25800	0.062 U	39000	PGC-06	2270	3.25 U	21100
Styrene	µg/kg	20	0	0	--	--	--	--	--	--	0.12 U	0.31 U	UC04	0.078	0.07 U	0.12 U
Tetrachloroethene	µg/kg	20	0	0	--	--	--	--	--	--	0.092 U	0.13 U	UC05-1; UC05-2; UC06; UC07; UC08	0.0601	0.06 U	0.065 U
Toluene	µg/kg	80	18	22.5	0.25 J	3900	PGC-05	640	94 J	3140	0.076 U	3900	PGC-05	179	3.3 U	1100 J
trans-1,2-Dichloroethene	µg/kg	20	0	0	--	--	--	--	--	--	0.064 U	0.091 U	UC07	0.0403	0.0408 U	0.0446 U
trans-1,3-Dichloropropene	µg/kg	20	0	0	--	--	--	--	--	--	0.07 U	0.1 U	UC07	0.0443	0.0448 U	0.0491 U
Trichloroethene	µg/kg	20	0	0	--	--	--	--	--	--	0.088 U	0.13 U	UC05-1; UC05-2; UC07	0.0573	0.0575 U	0.065 U
Trichlorofluoromethane	µg/kg	20	0	0	--	--	--	--	--	--	0.38 U	0.54 U	UC07	0.24	0.24 U	0.27 U
Vinyl chloride	µg/kg	20	0	0	--	--	--	--	--	--	0.16 U	0.22 U	UC05-1; UC07	0.097	0.098 U	0.11 U
Xylene	µg/kg	80	23	28.8	0.26 JT	86000 T	PGC-06	19600	8.5 JT	84000	0.12 UT	86000 T	PGC-06	5700	3.4 U	53800
Excluding All Zidell Data																
Grain Size																
< 0.075 mm	percent	2	2	100	22.1 T	62.9 T	C035	42.5	42.5	60.9	22.1 T	62.9 T	C035	42.5	42.5	60.9
>10 Phi clay	percent	2	2	100	0.4	6.73 T	C100	3.57	3.57	6.41	0.4	6.73 T	C100	3.57	3.57	6.41
>9 Phi clay	percent	61	61	100	0	9.77 T	C021	3.66	2.52	9.28	0	9.77 T	C021	3.66	2.52	9.28
8-9 Phi clay	percent	63	63	100	0	7.36	C003	1.813	1.4 T	4.874	0	7.36	C003	1.813	1.4 T	4.874
9-10 Phi clay	percent	2	2	100	0.8	4.48 T	C100	2.64	2.64	4.3	0.8	4.48 T	C100	2.64	2.64	4.3

Table D1.3-7. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Clay	percent	56	56	100	0.26	12	PGC-01; PGC-12	5.57	5.29	10.5	0.26	12	PGC-01; PGC-12	5.57	5.29	10.5
Coarse sand	percent	119	119	100	0.08	41.2	UC04	9.97	4.99	36	0.08	41.2	UC04	9.97	4.99	36
Coarse silt	percent	63	63	100	0.03 T	28.1 T	C011	8.56	5.85	22.8	0.03 T	28.1 T	C011	8.56	5.85	22.8
Fine gravel	percent	117	117	100	0	21.8	C002	2.75	1.46 T	10.1	0	21.8	C002	2.75	1.46 T	10.1
Fine sand	percent	119	119	100	0.527 T	50.2	PGC-01	17.4	15.1	35.6	0.527 T	50.2	PGC-01	17.4	15.1	35.6
Fine silt	percent	63	63	100	0	12.2 T	C100	4.35	3.25	11.8	0	12.2 T	C100	4.35	3.25	11.8
Fines	percent	119	119	100	0.31 T	75.6 T	PGC-04	32.72	33.6 T	71.03	0.31 T	75.6 T	PGC-04	32.72	33.6 T	71.03
Gravel	percent	2	2	100	0 T	0.53	C099	0.27	0.27	0.5	0 T	0.53	C099	0.27	0.27	0.5
Medium gravel	percent	117	117	100	0 T	84.2	C023	7.8903	0.75	49.04	0 T	84.2	C023	7.8903	0.75	49.04
Medium sand	percent	119	119	100	0.24	72.5 T	UC05-2	17.4	13.5	53.4	0.24	72.5 T	UC05-2	17.4	13.5	53.4
Medium silt	percent	63	63	100	0	19.8 T	C004	7.26	5.84	18	0	19.8 T	C004	7.26	5.84	18
Sieve 10	percent	2	2	100	0.05 T	18.3 T	C039	9.18	9.18	17.4	0.05 T	18.3 T	C039	9.18	9.18	17.4
Sieve 140	percent	2	2	100	6.2 T	24.7 T	C035	15.5	15.5	23.8	6.2 T	24.7 T	C035	15.5	15.5	23.8
Sieve 20	percent	2	2	100	0.65 T	8.35 T	C039	4.5	4.5	7.97	0.65 T	8.35 T	C039	4.5	4.5	7.97
Sieve 200	percent	2	2	100	0.95 T	8.65 T	C035	4.8	4.8	8.27	0.95 T	8.65 T	C035	4.8	4.8	8.27
Sieve 4	percent	2	2	100	0.05 T	31.5 T	C039	15.8	15.8	29.9	0.05 T	31.5 T	C039	15.8	15.8	29.9
Sieve 40	percent	2	2	100	0.85 T	4.75 T	C039	2.8	2.8	4.56	0.85 T	4.75 T	C039	2.8	2.8	4.56
Sieve 60	percent	2	2	100	2.25 T	8 T	C039	5.13	5.13	7.71	2.25 T	8 T	C039	5.13	5.13	7.71
Silt	percent	56	56	100	2.42	66.7	PGC-04	31.9	31.3	59.5	2.42	66.7	PGC-04	31.9	31.3	59.5
Very coarse sand	percent	119	119	100	0 T	22.6	C046	3.09	2.16	10.1	0 T	22.6	C046	3.09	2.16	10.1
Very fine sand	percent	119	119	100	0.03	31.2	C022	9.15	8.01	21.5	0.03	31.2	C022	9.15	8.01	21.5
Very fine silt	percent	63	63	100	0 T	8.14 T	C011	2.79	2.46	7.09	0 T	8.14 T	C011	2.79	2.46	7.09
Conventionals																
Ammonia	mg/kg	14	14	100	2.4	813 T	C100	121	57.4	430	2.4	813 T	C100	121	57.4	430
Cyanide	mg/kg	57	32	56.1	0.07 J	40.7 J	PGC-05	4.3	0.365 J	21.4 J	0.07 J	40.7 J	PGC-05	2.48	0.18 UJ	12.3 J
Specific Gravity	NA	25	25	100	1.5 T	2.43	C782	1.85	1.79	2.25	1.5 T	2.43	C782	1.85	1.79	2.25
Sulfide	mg/kg	62	62	100	0.84	2260 J	PGC-06	185	16.2	1220	0.84	2260 J	PGC-06	185	16.2	1220
Total organic carbon	percent	159	156	98.1	0.034 J	22.4 J	C024	1.81	0.939	7.53	0.02 UJ	22.4 J	C024	1.78	0.92 J	7.44
Total solids	percent	163	163	100	32.9 J	94.3	C782; O33-C008	72.3	70.7	89.7	32.9 J	94.3	C782; O33-C008	72.3	70.7	89.7
Metals																
Aluminum	mg/kg	90	90	100	4250	31800	UC07	16330	15700	28460	4250	31800	UC07	16330	15700	28460
Antimony	mg/kg	92	90	97.8	0.041 J	1.55	C036	0.355	0.29 J	0.785 J	0.041 J	1.55	C036	0.347	0.273	0.784 J
Arsenic	mg/kg	148	148	100	0.57	7.18	C011	2.89	2.73	5.03	0.57	7.18	C011	2.89	2.73	5.03
Cadmium	mg/kg	148	145	98	0.03	3.02 J	PGC-03	0.304	0.206	0.831	0.026 U	3.02 J	PGC-03	0.299	0.203	0.816
Chromium	mg/kg	148	144	97.3	4.56	71.7 T	PGC-05	19.4	18.9	30.5 J	4.56	71.7 T	PGC-05	19.1	18.5	30.4 J
Copper	mg/kg	148	148	100	9.48	457	PGC-05	39	30.7 J	94.7	9.48	457	PGC-05	39	30.7 J	94.7
Iron	mg/kg	56	56	100	20000	38200	PGC-05	30200	30600	36700	20000	38200	PGC-05	30200	30600	36700
Lead	mg/kg	148	147	99.3	1.35 J	1380	PGC-07	62.6	31.9	173 J	1.35 J	1380	PGC-07	62.3	31.6	173 J
Mercury	mg/kg	148	148	100	0.005 J	3.46 JT	C783	0.3649	0.124	1.671	0.005 J	3.46 JT	C783	0.3649	0.124	1.671
Nickel	mg/kg	84	84	100	6.77	36.9 J	UC08	19	18.7	31.1 J	6.77	36.9 J	UC08	19	18.7	31.1 J
Selenium	mg/kg	84	55	65.5	0.02 J	0.6 J	IPC-C014; IPC-C018	0.179	0.11	0.5 J	0.02 J	0.9 U	C038	0.16	0.1	0.5 J
Silver	mg/kg	148	143	96.6	0.018 J	22 J	PGC-01	1.07	0.252	5.47 J	0.018 J	22 J	PGC-01	1.03	0.248	5.43 J
Zinc	mg/kg	148	148	100	21.4	11100 J	PGC-06	414	95.7 J	2070 J	21.4	11100 J	PGC-06	414	95.7 J	2070 J
Butyltins																
Butyltin ion	µg/kg	42	7	16.7	0.42 J	5.8	C004	1.79	0.82 J	5.17	0.036 U	5.8	C004	0.379	0.138 U	0.83 J
Dibutyltin ion	µg/kg	42	7	16.7	0.5 J	9.4	C002	2.02	0.81 J	7	0.034 U	9.4	C002	0.392	0.028 U	0.848 J
Tetrabutyltin	µg/kg	42	0	0	--	--	--	--	--	--	0.083 U	0.74 UT	C100	0.136	0.06 U	0.335 U
Tributyltin ion	µg/kg	42	8	19	0.55 JT	23	C004	4.48	1.05 J	17.5	0.067 U	23	C004	0.935	0.0525 U	1.39 J
PCB Aroclors																
Aroclor 1016	µg/kg	98	0	0	--	--	--	--	--	--	0.73 U	10 U	C045	0.88	0.65 UJ	1.6 U
Aroclor 1221	µg/kg	98	0	0	--	--	--	--	--	--	0.73 U	10 U	C045	0.85	0.65 UJ	1.3 U
Aroclor 1232	µg/kg	98	0	0	--	--	--	--	--	--	0.73 U	10 U	C045	0.89	0.65 UJ	1.4 U
Aroclor 1242	µg/kg	98	5	5.1	17	60	IPC-C014	35	31 T	57	0.73 U	60	IPC-C014	2.7	0.83 U	6.8
Aroclor 1248	µg/kg	98	9	9.2	11	230 J	C031	71.63	37.5 T	184.5 J	0.73 U	230 J	C031	7.379	0.975 U	33.68
Aroclor 1254	µg/kg	98	34	34.7	1.4 J	220	C022	43	29 J	150 J	0.73 U	220	C022	16	1.1 U	71 J
Aroclor 1260	µg/kg	98	42	42.9	1.6 J	530	O33-C005	55.1	20.5	166	0.73 U	530	O33-C005	24.3	1.3 U	110 J
Aroclor 1262	µg/kg	98	3	3.1	31	259.3 JT	C039	112.1	46	238 J	0.73 U	259.3 JT	C039	4.241	0.65 UJ	2.06 UJ
Aroclor 1268	µg/kg	98	3	3.1	7.7	153 JT	C039	57.2	11	139 J	0.73 U	153 JT	C039	2.68	0.65 U	3.51 UJ
Aroclors	µg/kg	98	57	58.2	1.4 JT	610 T	C022	89.6	41 T	522 J	0.73 UT	610 T	C022	52.5	7.2	242

Table D1.3-7. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCBs[c]																
Total PCBs	µg/kg	98	57	58.2	1.4 JT	610 T	C022	89.6	41 T	522 J	0.73 UT	610 T	C022	52.5	7.2	242
PCDD/Fs Homologs																
Heptachlorodibenzofuran homologs	pg/g	35	31	88.6	0.136 J	790	C007	82.69	45.7 J	168.5	0.0523 U	790	C007	73.26	29.9	166.3
Heptachlorodibenzo-p-dioxin homologs	pg/g	35	33	94.3	0.499 J	377	C007	138	119	328 J	0.367 U	377	C007	130	110	327 J
Hexachlorodibenzofuran homologs	pg/g	35	29	82.9	0.0279 J	166	C007	48.23	38.8 J	131.2	0.0227 U	166	C007	39.97	29.8	111.8
Hexachlorodibenzo-p-dioxin homologs	pg/g	35	31	88.6	0.212 J	65.1	C004	23.68	19.4	61.95	0.0317 U	65.1	C004	20.99	17	61.57
Octachlorodibenzofuran	pg/g	44	36	81.8	0.203 J	268	C007	47.38	28.15	118.8	0.0951 U	268	C007	39.45	20.85 J	112.4
Octachlorodibenzo-p-dioxin	pg/g	44	38	86.4	3.87 J	2940	C019	787	379 J	2260 J	2.88 U	2940	C019	680	261	2160 J
Pentachlorodibenzofuran homologs	pg/g	35	28	80	0.203 J	158	C022	41.64	25.6 J	152.6	0.0167 U	158	C022	33.32	19.7	151.2
Pentachlorodibenzo-p-dioxin homologs	pg/g	35	24	68.6	0.661 J	12.1	C007	4.728	4.83 J	9.682	0.0128 U	12.1	C007	3.255	1.74 J	9.577
Tetrachlorodibenzofuran homologs	pg/g	35	30	85.7	0.108 J	80	C020	16.18	10.01 J	53.25	0.0198 U	80	C020	13.87	8.94	51
Tetrachlorodibenzo-p-dioxin homologs	pg/g	35	25	71.4	0.167 J	16.4 J	C008	2.83	1.83	9.118	0.0171 U	16.4 J	C008	2.029	0.798 J	8.563
Total PCDD/F	pg/g	44	39	88.6	4.74 T	4590 T	C007	1090	541 JA	3030	2.88 UT	4590 T	C007	970	440	2920 J
PCDD/Fs																
1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/g	44	40	90.9	0.0956 J	396	C007	25.39	9.05	57.22	0.0523 U	396	C007	23.11	7.39	55.26
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/g	44	37	84.1	0.342 J	150	C019	55.9	46.7	135	0.342 J	150	C019	47.4	27.3	134
1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/g	44	26	59.1	0.175 J	4.2 J	C007	1.313	1.03 J	3.348 J	0.0359 U	4.2 J	C007	0.8165	0.666 J	2.077 J
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	44	35	79.5	0.0403 J	6.19 J	C007	1.659	1.54 J	5.639 J	0.0128 U	6.19 J	C007	1.331	0.7795 J	5.255 J
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/g	44	28	63.6	0.0656 J	1.39 J	C022	0.5413	0.4635 J	1.169 J	0.0268 U	1.39 J	C022	0.3738	0.2935 J	1.1 J
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	44	29	65.9	0.194 J	16.9	C007	2.925	1.5 J	10.52	0.0139 U	16.9	C007	2.089	0.957 J	9.574 J
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/g	44	33	75	0.0385 J	8.46	C004	3.165	2.52 J	7.878	0.0297 U	8.46	C004	2.471	1.88 J	7.305 J
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	44	9	20.5	0.071 JT	0.261 J	C007	0.1405	0.135 J	0.2238 J	0.0199 U	0.895 UJ	C024	0.08376	0.05325 U	0.2471 J
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/g	44	30	68.2	0.0926 J	4 J	C022	1.554	1.395 J	3.602 J	0.029 U	4 J	C022	1.113	0.8605 J	3.082 J
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	44	25	56.8	0.0934 J	1.16 J	C007	0.4745	0.436 J	1.126 J	0.0166 U	1.16 J	C007	0.2873	0.1395 J	1.03 J
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/g	44	26	59.1	0.0902 J	1.5 J	C022	0.513	0.4755 J	0.9418 J	0.0128 U	1.5 J	C022	0.3232	0.221 J	0.9094 J
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	44	30	68.2	0.126 J	10.3	C007	2.335	1.52 J	7.379 J	0.013 U	10.3	C007	1.682	0.699 J	5.533 J
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	44	29	65.9	0.0425 J	2.55 J	C020	0.8221	0.668 J	2.276 J	0.0167 U	2.55 J	C020	0.5605	0.206 J	2.108 J
2,3,7,8-Tetrachlorodibenzofuran	pg/g	44	22	50	0.274 J	13.4	C028	1.353	0.8335 J	1.501 J	0.0227 U	13.4	C028	0.7243	0.276 J	1.299 J
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	44	22	50	0.0681 J	0.56 J	C022	0.2814	0.238 J	0.5294 J	0.0171 U	0.56 J	C022	0.1652	0.0946 J	0.4777 J
TCDD TEQ (ND = 0)	pg/g	44	41	93.2	0.00226 JT	12.8 T	C007	2.6527	1.67 T	6.02 T	0.00226 JT	12.8 T	C007	2.4736	1.37 J	5.9945
Total TCDD TEQ (ND = 0)	pg/g	44	43	97.7	0.00226 JA	12.8 T	C007	2.5312	1.56 JA	6.003	0.00226 JA	12.8 T	C007	2.4745	1.37 J	5.9945
Pesticides																
2,4'-DDD	µg/kg	94	36	38.3	0.14 J	28 JT	IPC-C014	4.62	1.9 J	17.4 J	0.032 U	28 JT	IPC-C014	1.89	0.185 J	11.8 J
2,4'-DDE	µg/kg	94	5	5.3	0.082 J	1.2 J	C037	0.51	0.43 J	1.07 J	0.03 U	3.4 UJ	C031	0.198	0.125 U	0.67 U
2,4'-DDT	µg/kg	94	39	41.5	0.049 J	14 JT	C031	2.63	1.7 J	6.54 J	0.03 U	14 JT	C031	1.33	0.293 U	5.23 J
4,4'-DDD	µg/kg	94	53	56.4	0.13 J	31 J	C031	3.71	1.6	21.4	0.047 U	31 J	C031	2.17	0.445 J	9.79
4,4'-DDE	µg/kg	94	44	46.8	0.052 J	11 J	C783	2.83	2.05 J	8.08 J	0.027 U	11 J	C783	1.39	0.235 UJ	6.37 J
4,4'-DDT	µg/kg	94	43	45.7	0.13 J	240 JT	C031	10.5	1.4	38.7 J	0.059 U	240 JT	C031	4.97	0.403 J	10.5 J
Aldrin	µg/kg	94	8	8.5	0.079 J	1.7	C002	0.414	0.21 J	1.3 J	0.046 UJ	1.7	C002	0.114	0.08 U	0.324 UJ
alpha-Endosulfan	µg/kg	94	7	7.4	0.086 J	0.72 J	C031	0.261	0.16 J	0.6 J	0.025 U	2.7 U	C783	0.11	0.06 U	0.334 U
alpha-Hexachlorocyclohexane	µg/kg	94	3	3.2	0.055 J	0.26 J	C031	0.125	0.059 J	0.24 J	0.047 U	0.97 U	C783	0.076	0.0465 UJ	0.197 U
beta-Endosulfan	µg/kg	94	12	12.8	0.093 J	3.4 JT	C039	0.824	0.46	2.52 J	0.031 U	3.4 JT	C039	0.226	0.11 UJ	0.914
beta-Hexachlorocyclohexane	µg/kg	94	12	12.8	0.076 J	3.1 NJ	C783	0.631	0.435 J	1.81 J	0.054 U	3.1 NJ	C783	0.191	0.09 U	0.571
Chlordane (technical)	µg/kg	16	0	0	--	--	--	--	--	--	1.9 U	9.9 U	O33-C005	2.6	1.9 U	4.7 U
Chlorpyrifos	µg/kg	1	0	0	--	--	--	--	--	--	0.072 UJ	0.072 UJ	C031	0.036	0.036 UJ	0.036 UJ
cis-Chlordane	µg/kg	94	12	12.8	0.073 J	3 J	C031	0.843	0.44 J	2.29 J	0.031 U	3 J	C031	0.187	0.0825 U	0.53 J
cis-Nonachlor	µg/kg	94	8	8.5	0.18 J	54 J	O33-C005	7.71	1.03 J	36.3 J	0.043 U	54 J	O33-C005	1.01	0.1 U	2.48 U
delta-Hexachlorocyclohexane	µg/kg	94	4	4.3	0.099 J	0.87 J	C025	0.39	0.295 J	0.806 J	0.037 U	1.1 U	C783	0.0713	0.0368 U	0.328 UJ
Dieldrin	µg/kg	94	4	4.3	0.29 J	16 J	C031	7.06	5.98 J	14.7 J	0.03 U	16 J	C031	0.514	0.07 U	2.55 U
Endosulfan sulfate	µg/kg	94	4	4.3	0.18 J	0.38 J	UC05-1	0.29	0.3 J	0.37 J	0.051 UJ	4.5 U	C022	0.128	0.055 U	0.389 J
Endrin	µg/kg	94	10	10.6	0.18	2.4	C035	0.909	0.795 J	2 J	0.046 U	2.7 U	C037	0.204	0.0875 UJ	1.05 J
Endrin aldehyde	µg/kg	94	9	9.6	0.079 J	0.6 J	C002; C008	0.381	0.39 J	0.6 J	0.042 U	2.7 U	C783	0.153	0.06 U	0.574 J
Endrin ketone	µg/kg	94	10	10.6	0.19 J	31.2 JT	C039	4.21	1.1 J	18.5 J	0.029 U	62 U	O33-C005	0.924	0.0625 U	1.69 U
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	94	31	33	0.12 J	1.9 JT	IPC-C014	0.528	0.4 J	1.35 J	0.043 U	2.9 U	C783	0.27	0.113 U	1.02 J
Heptachlor	µg/kg	94	3	3.2	0.12 NJ	0.34 J	C008	0.233	0.24	0.33 J	0.046 UJ	0.76 U	C783	0.0644	0.0458 U	0.204 UJ
Heptachlor epoxide	µg/kg	94	9	9.6	0.14 J	0.86	IPC-C017	0.482	0.4 J	0.856 J	0.048 U	2.8 U	O33-C005	0.152	0.0875 U	0.526 J
Methoxychlor	µg/kg	94	6	6.4	0.21 J	21 JT	C039	3.98	0.59 J	16 J	0.054 U	21 JT	C039	0.395	0.095 U	0.624
Mirex	µg/kg	94	1	1.1	0.74 J	0.74 J	UC08	0.74	0.74 J	0.74 J	0.041 UJ	2.1 U	C783	0.0669	0.0375 U	0.122 UJ

Table D1.3-7. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Oxychlordane	µg/kg	94	10	10.6	0.12 J	4.3 NJ	C783	0.772	0.365 J	2.68 J	0.038 U	4.3 NJ	C783	0.196	0.11 U	0.508 J
Total chlordanes	µg/kg	94	51	54.3	0.094 JT	54 JT	O33-C005	3.16	1.3 T	8.2 J	0.054 UT	54 JT	O33-C005	1.81	0.33 J	6.61 J
Total Endosulfan	µg/kg	94	19	20.2	0.086 JT	3.4 T	C039	0.678	0.38 JT	2.61	0.053 UT	4.5 UT	C022	0.311	0.128 J	1.29 U
Total DDD	µg/kg	94	54	57.4	0.15 JT	48 JT	C031	6.72	2.2	35.6 J	0.047 UT	48 JT	C031	3.95	0.62 J	24
Total DDx	µg/kg	94	64	68.1	0.052 T	301 T	C031	16.3	5.71 J	67 J	0.052 T	301 T	C031	11.2	2.04 J	43.6 J
Total DDE	µg/kg	94	46	48.9	0.052 T	11 JT	C783	2.75	2	8	0.034 UT	11 JT	C783	1.45	0.275 J	6.58 J
Total DDT	µg/kg	94	54	57.4	0.049 JT	254 T	C031	10.2	2.55	30.2	0.049 JT	254 T	C031	6.01	0.515 J	13.5 J
Total 4,4' DDx	µg/kg	19	3	15.8	0.17 JT	0.85 JT	UC06	0.51	0.52 JT	0.82 J	0.13 UT	0.85 JT	UC06; UC07	0.17	0.09 UT	0.55 J
Toxaphene	µg/kg	93	0	0	--	--	--	--	--	--	2.5 U	660 U	O33-C005	21	8 U	59 U
trans-Chlordane	µg/kg	94	38	40.4	0.094 J	14	C022	2.06	1.3 J	5.82 J	0.027 U	14	C022	0.888	0.097 J	3.84 J
trans-Nonachlor	µg/kg	94	12	12.8	0.11 J	1.3 J	C031	0.393	0.285 J	0.91 J	0.034 U	1.5 U	C783	0.122	0.06 U	0.444 J
Polycyclic Aromatic Hydrocarbons																
1-Methylnaphthalene	µg/kg	94	81	86.2	1 J	240000	PGC-06	17000	40	150000	0.31 U	240000	PGC-06	14700	27.5	131000
2-Methylnaphthalene	µg/kg	149	114	76.5	0.51 J	400000	PGC-06	18500	35	157000	0.37 U	400000	PGC-06	14200	18	108000
Acenaphthene	µg/kg	149	131	87.9	0.25 J	410000	PGC-05	19700	48	165000	0.2 U	410000	PGC-05	17300	26	160000
Acenaphthylene	µg/kg	149	120	80.5	0.36 J	130000	PGC-05	2240	23.5 J	11200	0.24 U	130000	PGC-05	1800	13	10600
Anthracene	µg/kg	149	130	87.2	0.4 JT	260000	PGC-06	12600	25	111000	0.24 U	260000	PGC-06	11000	14	98800
Benzo(a)anthracene	µg/kg	149	129	86.6	0.2 J	150000	PGC-06	7480	53	69600	0.18 U	150000	PGC-06	6480	30	59400
Benzo(a)pyrene	µg/kg	149	124	83.2	0.23 J	170000	PGC-06	9570	79	96900	0.14 U	170000	PGC-06	7970	39	78200
Benzo(b)fluoranthene	µg/kg	149	124	83.2	0.26 J	150000	PGC-06	7930	81.5	79300	0.25 U	150000	PGC-06	6600	46	60400
Benzo(e)pyrene	µg/kg	118	104	88.1	0.64 J	93000	PGC-06	6010	82.5	51900	0.18 U	93000	PGC-06	5290	54	51200
Benzo(g,h,i)perylene	µg/kg	149	120	80.5	0.7 J	120000	PGC-05; PGC-06	6960	71.5 J	55200	0.25 U	120000	PGC-05; PGC-06	5600	38	48400
Benzo(k)fluoranthene	µg/kg	149	117	78.5	0.66 J	47000	PGC-06	2790	33	26000	0.15 U	47000	PGC-06	2190	15	20200
C1-Chrysene	µg/kg	94	79	84	2.8	89000	PGC-06	6670	170	50000	0.25 U	89000	PGC-06	5610	115	45500
C1-Dibenzothiophene	µg/kg	36	28	77.8	1.3 J	400	C020; C783	115	54.5	386	0.21 U	400	C020; C783	89.5	43.5 J	370
C1-Fluoranthene/pyrene	µg/kg	94	80	85.1	1.1 J	230000	PGC-06	17900	265	140000	0.61 U	230000	PGC-06	15200	205 J	127000
C1-Fluorene	µg/kg	94	74	78.7	1.4 J	74000	PGC-06	5870	67.5	43400	0.5 U	74000	PGC-06	4620	38	40400
C1-Phenanthrene/anthracene	µg/kg	94	80	85.1	0.82 J	220000	PGC-06	17300	288	140000	0.75 U	220000	PGC-06	14800	180 J	121000
C2-Chrysene	µg/kg	94	77	81.9	6.7	34000	PGC-06	2750	150	19000	0.25 U	34000	PGC-06	2260	110	18400
C2-Dibenzothiophene	µg/kg	36	27	75	5.9	700	C783	128	45	424	0.21 U	700	C783	95.9	35	415
C2-Fluoranthene/pyrene	µg/kg	36	31	86.1	2.8	2900	C783	230	75	820	0.61 U	2900	C783	200	54	720
C2-Fluorene	µg/kg	94	76	80.9	2.4 J	44000	PGC-06	3420	115	24300	0.5 U	44000	PGC-06	2770	82.5 J	23000
C2-Naphthalene	µg/kg	94	78	83	3.3	220000	PGC-06	16600	165 J	133000	0.37 U	220000	PGC-06	13800	100	111000
C2-Phenanthrene/anthracene	µg/kg	94	80	85.1	1.1 J	110000	PGC-06	7840	280	58300	0.75 U	110000	PGC-06	6680	210	54100
C3-Chrysene	µg/kg	94	75	79.8	7.6 J	22000	PGC-06	1720	140	11300	0.25 U	22000	PGC-06	1380	110	9630
C3-Dibenzothiophene	µg/kg	36	26	72.2	9.4	560	C020; C783	136	54.5 J	538	0.21 U	560	C020; C783	98.5	35	493
C3-Fluoranthene/pyrene	µg/kg	36	28	77.8	5.3 J	1400	C783	185	72.5	582	0.61 U	1400	C783	144	58.5	538
C3-Fluorene	µg/kg	94	74	78.7	4.1	44000	PGC-06	3060	218	20700	0.5 U	44000	PGC-06	2410	120	18100
C3-Naphthalene	µg/kg	94	75	79.8	3.2	88000	PGC-06	6860	180	48500	0.37 U	88000	PGC-06	5480	130	42500
C3-Phenanthrene/anthracene	µg/kg	94	80	85.1	0.85 J	43000	PGC-06	3210	290	22100	0.75 U	43000	PGC-06	2730	205	21400
C4-Chrysene	µg/kg	94	64	68.1	6.6	7700	PGC-06	685	72.5	4190	0.25 U	7700	PGC-06	477	50	3450
C4-Naphthalene	µg/kg	94	75	79.8	2.8	34000	PGC-06	2610	170	15900	0.37 U	34000	PGC-06	2080	105	15000
C4-Phenanthrene/anthracene	µg/kg	94	74	78.7	5.9	14000	PGC-06	1240	130	7920	0.75 U	14000	PGC-06	984	76	7440
Chrysene	µg/kg	149	126	84.6	0.3 J	150000	PGC-06	7700	71	67800	0.25 U	150000	PGC-06	6520	42	57400
Dibenzo(a,h)anthracene	µg/kg	149	106	71.1	0.28 J	14000	PGC-06	852	16.5	6830	0.28 J	14000	PGC-06	606	5.5	5560
Dibenzothiophene	µg/kg	94	78	83	0.36 J	62000 J	PGC-06	5520	39 J	39800 J	0.21 U	62000 J	PGC-06	4580	22 J	36700 J
Fluoranthene	µg/kg	149	132	88.6	0.64 J	470000	PGC-06	25900	150	244000	0.41 U	470000	PGC-06	22900	110	214000
Fluorene	µg/kg	149	125	83.9	0.38 J	260000	PGC-06	12100	30 J	105000	0.21 U	260000	PGC-06	10200	17	83600
Total HPAHs	µg/kg	149	135	90.6	0.28 T	1950000 T	PGC-06	98700	578 T	928000	0.28 T	1950000 T	PGC-06	89400	506 T	825000
Indeno(1,2,3-cd)pyrene	µg/kg	149	123	82.6	0.21 J	110000	PGC-06	6160	61	52300	0.16 U	110000	PGC-06	5080	31	44400
Total LPAHs	µg/kg	149	145	97.3	0.25 JT	3030000 T	PGC-05	146000	375 T	1380000	0.25 JT	3030000 T	PGC-05	142000	360 T	1360000
Naphthalene	µg/kg	150	122	81.3	0.45 J	1600000	PGC-05	64700	87	652000	0.44 U	1600000	PGC-05	52600	46.3	496000
Perylene	µg/kg	118	114	96.6	1.2 J	35000	PGC-06	2380	60.5	21000	0.32 U	35000	PGC-06	2300	58	21000
Phenanthrene	µg/kg	149	131	87.9	1.9 J	750000	PGC-06	39600	170	350000	0.4 U	750000	PGC-06	34800	110	318000
Pyrene	µg/kg	149	133	89.3	0.53 J	570000	PGC-06	28400	180	262000	0.37 U	570000	PGC-06	25400	130	238000
Total BaPEq	µg/kg	149	131	87.9	0.0003 JT	226000 T	PGC-06	11840	73.5 T	119500	0.0003 JT	226000 T	PGC-06	10410	55.3 JT	100100
Total cPAHs	µg/kg	149	131	87.9	0.28 JT	788000 T	PGC-06	40300	286 T	395000	0.28 JT	788000 T	PGC-06	35400	210 T	324000
Total PAHs	µg/kg	149	147	98.7	0.25 JT	4850000 T	PGC-06	235000	770 T	2160000	0.25 JT	4850000 T	PGC-06	231000	740 JT	2160000

Table D1.3-7. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Phthalates																
Bis(2-ethylhexyl) phthalate	µg/kg	64	36	56.3	2.5 J	815 T	C031	103	37.5 J	535	2.3 U	815 T	C031	68.8	17.8 J	324
Butylbenzyl phthalate	µg/kg	64	6	9.4	3.3 J	33 T	C031	14	11 J	30	1.7 U	160 U	C783	7.4	1.6 U	31
Dibutyl phthalate	µg/kg	64	36	56.3	3.6 J	28.5 T	C021	10.4	9 J	22.1	3.3 U	400 U	C783	18.9	8.4 J	37.8
Diethyl phthalate	µg/kg	64	3	4.7	1.4 J	2.8 J	C038	2.2	2.5 J	2.8 J	1.3 U	65 U	C783	3.5	2.2 U	6.4 U
Dimethyl phthalate	µg/kg	64	9	14.1	1.8 J	470	C034	190	160	440	1 U	470	C034	32	1.2 U	170
Di-n-octyl phthalate	µg/kg	64	1	1.6	18	18	C006	18	18	18	1.3 U	85 U	C783	3.6	0.85 U	17
Semivolatile Organic Compounds																
1,2,4-Trichlorobenzene	µg/kg	64	0	0	--	--	--	--	--	--	1.7 U	130 U	C783	5	1.3 U	12 U
1,2-Dichlorobenzene	µg/kg	64	0	0	--	--	--	--	--	--	1.4 U	150 U	C783	5.6	1.5 U	13 U
1,3-Dichlorobenzene	µg/kg	64	0	0	--	--	--	--	--	--	1.8 U	150 U	C783	5.7	1.5 U	14 U
1,4-Dichlorobenzene	µg/kg	65	8	12.3	4.1 J	315 T	C031	70.2	19.5 J	250	0.21 U	315 T	C031	13.7	1.45 U	75 U
2,4-Dinitrotoluene	µg/kg	64	0	0	--	--	--	--	--	--	1.5 U	75 U	C783	3.3	0.8 U	6.9 U
2,6-Dinitrotoluene	µg/kg	64	0	0	--	--	--	--	--	--	2 U	100 U	C783	4.2	1.1 U	9.3 U
2-Chloronaphthalene	µg/kg	64	1	1.6	120 J	120 J	C783	120	120 J	120 J	1.6 U	120 J	C783	4.8	0.85 U	7.4 U
2-Nitroaniline	µg/kg	64	0	0	--	--	--	--	--	--	3 U	160 U	C783	6.3	1.6 U	15 U
3,3'-Dichlorobenzidine	µg/kg	64	0	0	--	--	--	--	--	--	3.7 U	190 U	C783	7.8	1.9 U	19 U
3-Nitroaniline	µg/kg	64	0	0	--	--	--	--	--	--	2.5 U	130 U	C783	5.1	1.3 U	12 U
4-Bromophenyl phenyl ether	µg/kg	64	0	0	--	--	--	--	--	--	1.6 U	80 U	C783	3.2	0.83 U	7.4 U
4-Chloroaniline	µg/kg	64	0	0	--	--	--	--	--	--	1.9 U	95 U	C783	3.8	1 U	8.8 U
4-Chlorophenyl phenyl ether	µg/kg	64	0	0	--	--	--	--	--	--	1.4 U	70 U	C783	2.9	0.75 U	6.5 U
4-Nitroaniline	µg/kg	64	0	0	--	--	--	--	--	--	1.8 U	90 U	C783	3.9	0.95 U	8.3 U
Aniline	µg/kg	56	2	3.6	5.1 J	16 J	C022	11	11 J	15 J	1.5 U	75 U	C783	3.6	0.93 U	21 J
Azobenzene	µg/kg	64	0	0	--	--	--	--	--	--	1.1 U	55 U	C783	2.5	0.6 U	5.1 U
Benzoic acid	µg/kg	53	3	5.7	100 J	110 J	C027; C036	110	110 J	110 J	96 U	4800 U	C783	210	60 U	1200 U
Benzyl alcohol	µg/kg	64	29	45.3	2.7 J	69 T	UC05-2	22	20	53	2.1 U	110 U	C783	14	5.5 U	55 U
Bis(2-chloroethoxy) methane	µg/kg	64	0	0	--	--	--	--	--	--	1.4 U	75 U	C783	3	0.78 U	6.9 U
Bis(2-chloroethyl) ether	µg/kg	64	0	0	--	--	--	--	--	--	1.9 U	95 U	C783	3.9	1 U	8.8 U
Bis(2-chloroisopropyl) ether	µg/kg	64	0	0	--	--	--	--	--	--	1.3 UJ	130 UJ	C783	4.9	1.3 U	12 U
Carbazole	µg/kg	64	24	37.5	1.5 JT	1700	C783	113	11	547	1.3 U	1700	C783	43.9	1.25 J	46.6 J
Dibenzofuran	µg/kg	67	46	68.7	0.22 J	2400	C783	78.3	7.4 J	123	0.21 U	2400	C783	53.9	2.5 J	96.4 J
Hexachlorobenzene	µg/kg	94	13	13.8	0.14 J	2.8	O33-C005	0.454	0.24 J	1.5 J	0.068 U	2.8	O33-C005	0.137	0.06 U	0.308 J
Hexachlorobutadiene	µg/kg	93	4	4.3	0.078 J	0.35 JT	C039	0.207	0.2 J	0.332 J	0.062 U	1.4 U	C783	0.138	0.07 U	0.367 U
Hexachlorocyclopentadiene	µg/kg	64	0	0	--	--	--	--	--	--	17 U	1500 U	C783	56	15 U	130 U
Hexachloroethane	µg/kg	77	1	1.3	0.79 J	0.79 J	UC07	0.79	0.79 J	0.79 J	0.037 UJ	2.9 U	UC06	0.158	0.0395 U	0.58 U
Isophorone	µg/kg	64	2	3.1	3.9 JT	3.9 JT	UC05-2	3.9	3.9 J	3.9 J	1 U	50 U	C783	2.2	0.55 U	4.8 J
Nitrobenzene	µg/kg	64	0	0	--	--	--	--	--	--	2.2 U	110 U	C783	4.4	1.1 U	10 U
N-Nitrosodimethylamine	µg/kg	64	0	0	--	--	--	--	--	--	6.1 U	310 U	C783	12	3.1 U	28 U
N-Nitrosodiphenylamine	µg/kg	64	0	0	--	--	--	--	--	--	1.6 U	80 U	C783	3.3	0.85 U	7.4 U
N-Nitrosodipropylamine	µg/kg	64	0	0	--	--	--	--	--	--	2.4 U	120 U	C783	5	1.3 U	11 U
Octachlorostyrene	µg/kg	1	0	0	--	--	--	--	--	--	0.17 UJ	0.17 UJ	C031	0.085	0.085 UJ	0.085 UJ
Phenols																
2,3,4,5-Tetrachlorophenol	µg/kg	52	0	0	--	--	--	--	--	--	0.23 U	6.1 U	C019	1.3	1.4 U	2.7 U
2,3,5,6-Tetrachlorophenol	µg/kg	52	1	1.9	3.2 JT	3.2 JT	UC05-2	3.2	3.2 JT	3.2 JT	0.18 U	7.5 U	C019	1.6	2.2 U	3.3 U
2,4,5-Trichlorophenol	µg/kg	52	2	3.8	4.1 J	5.1 J	C783	4.6	4.6 J	5.1 J	0.6 U	5.3 U	C019; C782	1.4	1.7 U	2.7 U
2,4,6-Trichlorophenol	µg/kg	52	1	1.9	1.3 J	1.3 J	C783	1.3	1.3 J	1.3 J	0.12 U	5.5 U	C019	1.2	1.5 J	2.4 U
2,4-Dichlorophenol	µg/kg	64	0	0	--	--	--	--	--	--	1 UJ	50 U	C783	2.2	0.55 U	4.6 U
2,4-Dimethylphenol	µg/kg	77	5	6.5	6.7 J	2100 J	PGC-05	900	1000 J	2000 J	5.5 UJ	42000 UJ	PGC-06	1000	3.7 U	4700 UJ
2,4-Dinitrophenol	µg/kg	64	0	0	--	--	--	--	--	--	17 UJ	850 U	C783	38	9 U	79 U
2-Chlorophenol	µg/kg	64	0	0	--	--	--	--	--	--	1.9 U	100 U	C783	3.9	1 U	9.3 U
2-Methylphenol	µg/kg	121	2	1.7	6.2 J	6.9 J	C024	6.6	6.6 J	6.9 J	1.5 UJ	8300 U	PGC-06	140	3.6 UJT	210 U
2-Nitrophenol	µg/kg	64	0	0	--	--	--	--	--	--	1.5 UJ	75 U	C783	3.2	0.8 U	6.9 U
4,6-Dinitro-2-methylphenol	µg/kg	64	0	0	--	--	--	--	--	--	1.4 UJ	70 U	C783	2.9	0.75 U	6.5 U
4-Chloro-3-methylphenol	µg/kg	64	0	0	--	--	--	--	--	--	1.4 UJ	70 U	C783	2.9	0.75 U	6.5 U
4-Methylphenol	µg/kg	121	57	47.1	3.4 J	330	C024	81.9	48 J	224 J	1.5 UJ	8300 UJ	PGC-06	169	14 J	330
4-Nitrophenol	µg/kg	64	0	0	--	--	--	--	--	--	18 UJ	900 U	C783	38	9.5 U	83 U
Pentachlorophenol	µg/kg	109	3	2.8	0.24 J	26 T	UC05-2	9.7	3 J	24 J	0.16 U	83000 UJ	PGC-06	1500	30 U	3000 UJ
Phenol	µg/kg	121	40	33.1	2.2 J	200 J	PGC-05	23.8	8.5 J	152 J	2 UJ	25000 U	PGC-06	412	8 J	650 U

Table D1.3-7. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Petroleum																
C10-C12 Aliphatics	mg/kg	12	2	16.7	2.5	5.4	C037	4	4	5.3	2.4 U	5.4	C037	1.7	1.4 U	3.8
C10-C12 Aromatics	mg/kg	12	0	0	--	--	--	--	--	--	2.3 U	2.9 U	C035; C038	1.3	1.3 U	1.5 U
C12-C13 Aromatics	mg/kg	2	0	0	--	--	--	--	--	--	20 UT	33 U	C035	13	13 U	16 U
C12-C16 Aliphatics	mg/kg	12	3	25	3.9	16	C037	9.6	8.8	15	2.4 U	16	C037	3.4	1.4 U	12
C12-C16 Aromatics	mg/kg	12	0	0	--	--	--	--	--	--	2.3 U	2.9 U	C035; C038	1.3	1.3 U	1.5 U
C16-C21 Aliphatics	mg/kg	12	6	50	2.8	47	C037	16	6.6	43	2.4 U	47	C037	8.7	2.1	38
C16-C21 Aromatics	mg/kg	12	3	25	3.2	15	C037	7.5	4.2	14	2.4 U	15	C037	2.8	1.4 U	9.1
C21-C34 Aliphatics	mg/kg	12	12	100	15.5 T	340	C037	92	48.5	258	15.5 T	340	C037	92	48.5	258
C21-C34 Aromatics	mg/kg	12	11	91.7	3.5	140	C034	28	9.4	110	2.4 U	140	C034	26	7.7	100
C5-C6 Aliphatics	mg/kg	2	0	0	--	--	--	--	--	--	20 UT	33 U	C035	13	13 U	16 U
C6-C8 Aliphatics	mg/kg	2	0	0	--	--	--	--	--	--	20 UT	33 U	C035	13	13 U	16 U
C8-C10 Aliphatics	mg/kg	12	2	16.7	2.6	6.6	C037	4.6	4.6	6.4	2.4 U	6.6	C037	1.9	1.4 U	4.4
C8-C10 Aromatics	mg/kg	12	0	0	--	--	--	--	--	--	2.3 U	2.9 U	C035; C038	1.3	1.3 U	1.5 U
Decane	mg/kg	2	0	0	--	--	--	--	--	--	2 UT	3.3 U	C035	1.3	1.3 U	1.6 U
Total Petroleum Hydrocarbons (Diesel)	mg/kg	83	63	75.9	1.9 J	19000	PGC-06	2430	430	14800	1.3 UT	19000	PGC-06	1840	130	12900
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	57	47	82.5	4.65 JT	1200 J	C783	237	140 J	852 J	1.3 UT	1200 J	C783	196	110	773 J
Dodecane	mg/kg	2	0	0	--	--	--	--	--	--	2 UT	3.3 U	C035	1.3	1.3 U	1.6 U
Total Petroleum Hydrocarbons (Gasoline)	mg/kg	78	44	56.4	0.92 JT	4800	PGC-06	617	62.5 J	2890	0.75 UT	4800	PGC-06	349	7.85 J	2720
n-Hexane	mg/kg	2	0	0	--	--	--	--	--	--	2 UT	3.3 U	C035	1.3	1.3 U	1.6 U
Octane	mg/kg	2	0	0	--	--	--	--	--	--	2 UT	3.3 U	C035	1.3	1.3 U	1.6 U
Pentane	mg/kg	2	0	0	--	--	--	--	--	--	2 UT	3.3 U	C035	1.3	1.3 U	1.6 U
Total Petroleum Hydrocarbons (Residual)	mg/kg	83	64	77.1	3.6 JT	13000	PGC-06	1940	505	9040	3.2 U	13000	PGC-06	1500	210	8690
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	57	50	87.7	5.25 JT	2300 J	C783	472	335	1380 J	3.1 UT	2300 J	C783	417	290 J	1330 J
Total Petroleum Hydrocarbons	mg/kg	83	71	85.5	0.92 JT	36800 T	PGC-06	4280	589 T	25200	0.92 JT	36800 T	PGC-06	3670	390 T	24300
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	57	50	87.7	6.7 JA	3500 JA	C783	694	495	2120	3.1 UA	3500 JA	C783	611	410 T	2060
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	µg/kg	20	0	0	--	--	--	--	--	--	0.059 U	0.083 U	UC07	0.0369	0.0373 U	0.041 U
1,1,1-Trichloroethane	µg/kg	20	0	0	--	--	--	--	--	--	0.082 U	0.12 U	UC05-1; UC05-2; UC06; UC07	0.053	0.055 U	0.06 U
1,1,2,2-Tetrachloroethane	µg/kg	20	0	0	--	--	--	--	--	--	0.13 U	0.19 U	UC05-1; UC07	0.083	0.083 U	0.095 U
1,1,2-Trichloroethane	µg/kg	20	0	0	--	--	--	--	--	--	0.074 U	0.11 U	UC05-1; UC05-2; UC06; UC07	0.0476	0.0468 U	0.055 U
1,1-Dichloroethane	µg/kg	20	0	0	--	--	--	--	--	--	0.066 U	0.094 U	UC07	0.0416	0.0418 U	0.0461 U
1,1-Dichloroethene	µg/kg	20	0	0	--	--	--	--	--	--	0.09 U	0.13 U	UC05-1; UC05-2; UC06; UC07	0.058	0.058 U	0.065 U
1,2,3-Trichloropropane	µg/kg	20	0	0	--	--	--	--	--	--	0.2 U	0.28 U	UC05-1; UC07	0.12	0.13 U	0.14 U
1,2-Dichloroethane	µg/kg	20	0	0	--	--	--	--	--	--	0.11 U	0.15 U	UC05-1; UC05-2; UC06; UC07	0.068	0.068 U	0.075 U
1,2-Dichloropropane	µg/kg	20	0	0	--	--	--	--	--	--	0.072 U	0.11 U	UC07	0.0452	0.0453 U	0.0503 U
1,4-Dichloro-trans-2-butene	µg/kg	20	0	0	--	--	--	--	--	--	0.36 U	0.51 U	UC07	0.23	0.23 U	0.25 U
2-Chloroethyl vinyl ether	µg/kg	20	0	0	--	--	--	--	--	--	0.17 U	0.23 U	UC05-1; UC05-2; UC06; UC07	0.1	0.11 U	0.12 U
Acetone	µg/kg	20	0	0	--	--	--	--	--	--	7.9 U	67 U	UC05-1	14	12 U	31 U
Acrylonitrile	µg/kg	20	0	0	--	--	--	--	--	--	0.45 U	0.63 U	UC07	0.28	0.28 U	0.31 U
Benzene	µg/kg	80	20	25	0.12 JT	13000	PGC-06	3030	268 J	9580	0.048 U	13000	PGC-06	793	3.43 U	7860
Bromochloromethane	µg/kg	20	0	0	--	--	--	--	--	--	0.11 U	0.15 U	UC05-1; UC05-2; UC06; UC07; UC08	0.068	0.068 U	0.075 U
Bromodichloromethane	µg/kg	20	0	0	--	--	--	--	--	--	0.044 U	0.062 U	UC07	0.0274	0.0275 U	0.0305 U
Bromoform	µg/kg	20	0	0	--	--	--	--	--	--	0.13 U	0.19 U	UC05-1; UC07	0.083	0.083 U	0.095 U
Bromomethane	µg/kg	20	0	0	--	--	--	--	--	--	0.31 U	0.43 U	UC05-1; UC07	0.19	0.2 U	0.22 U
BTEX	µg/kg	80	32	40	0.12 JT	154000 JT	PGC-06	24400	4.08 J	122000 J	0.12 JT	154000 JT	PGC-06	9840	3.25 U	88600 J
Carbon disulfide	µg/kg	20	4	20	0.084 J	0.11 JT	UC05-2	0.0985	0.1 J	0.109 J	0.073 U	0.11 JT	UC05-1; UC05-2; UC07	0.0571	0.048 U	0.101 J
Carbon tetrachloride	µg/kg	20	0	0	--	--	--	--	--	--	0.054 U	0.077 U	UC07	0.0342	0.0345 U	0.038 U
Chlorobenzene	µg/kg	20	1	5	0.37 J	0.37 J	UC07	0.37	0.37 J	0.37 J	0.065 U	0.37 J	UC07	0.0571	0.0413 U	0.0617 J
Chlorodibromomethane	µg/kg	20	0	0	--	--	--	--	--	--	0.11 U	0.16 U	UC05-1; UC07	0.07	0.073 U	0.08 U

Table D1.3-7. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Chloroethane	µg/kg	20	0	0	--	--	--	--	--	--	0.22 U	0.31 U	UC05-1; UC07	0.14	0.14 U	0.16 U
Chloroform	µg/kg	20	0	0	--	--	--	--	--	--	0.086 U	0.13 U	UC07	0.0559	0.0575 U	0.0603 U
Chloromethane	µg/kg	20	0	0	--	--	--	--	--	--	0.081 U	0.12 U	UC05-1; UC05-2; UC06; UC07	0.0525	0.0525 U	0.06 U
cis-1,2-Dichloroethene	µg/kg	20	0	0	--	--	--	--	--	--	0.11 U	0.15 U	UC05-1; UC05-2; UC06; UC07	0.068	0.068 U	0.075 U
cis-1,3-Dichloropropene	µg/kg	20	0	0	--	--	--	--	--	--	0.067 U	0.095 U	UC07	0.0423	0.0428 U	0.047 U
Dichlorodifluoromethane	µg/kg	20	0	0	--	--	--	--	--	--	0.064 U	0.091 U	UC07	0.0403	0.0408 U	0.0446 U
Ethylbenzene	µg/kg	80	20	25	0.33 J	55000	PGC-06	13000	1630	34100	0.055 U	55000	PGC-06	3290	3.5 U	30100
Ethylene dibromide	µg/kg	20	0	0	--	--	--	--	--	--	0.066 U	0.094 U	UC07	0.0416	0.0418 U	0.0461 U
Isopropylbenzene	µg/kg	20	3	15	0.24 J	0.78	UC07	0.52	0.54 J	0.756 J	0.092 U	0.78	UC07	0.129	0.0625 U	0.552 J
m,p-Xylene	µg/kg	80	14	17.5	0.9 J	60000	PGC-06	19000	4000	55000	0.12 U	60000	PGC-06	3500	3.5 U	34000
Methyl iodide	µg/kg	20	0	0	--	--	--	--	--	--	0.36 U	0.51 U	UC07	0.23	0.23 U	0.25 U
Methyl isobutyl ketone	µg/kg	20	0	0	--	--	--	--	--	--	0.54 U	0.77 U	UC07	0.34	0.35 U	0.38 U
Methyl n-butyl ketone	µg/kg	20	0	0	--	--	--	--	--	--	3.8 U	5.4 U	UC07	2.4	2.4 U	2.7 U
Methyl tert-butyl ether	µg/kg	22	3	13.6	0.11 J	0.15 JT	UC05-2	0.133	0.14 J	0.149 J	0.077 U	3300 U	C035	121	0.055 U	950 J
Methylene bromide	µg/kg	20	0	0	--	--	--	--	--	--	0.076 U	0.11 U	UC05-1; UC05-2; UC06; UC07; UC08	0.0487	0.048 U	0.055 U
Methylene chloride	µg/kg	20	0	0	--	--	--	--	--	--	1.6 U	5.7 U	UC06	1.7	1.7 U	2.7 U
o-Xylene	µg/kg	80	23	28.8	0.26 J	39000	PGC-06	7780	7	25800	0.062 U	39000	PGC-06	2270	3.25 U	21100
Styrene	µg/kg	20	0	0	--	--	--	--	--	--	0.12 U	0.31 U	UC04	0.078	0.07 U	0.12 U
Tetrachloroethene	µg/kg	20	0	0	--	--	--	--	--	--	0.092 U	0.13 U	UC05-1; UC05-2; UC06; UC07; UC08	0.0601	0.06 U	0.065 U
Toluene	µg/kg	80	18	22.5	0.25 J	3900	PGC-05	640	94 J	3140	0.076 U	3900	PGC-05	179	3.3 U	1100 J
trans-1,2-Dichloroethene	µg/kg	20	0	0	--	--	--	--	--	--	0.064 U	0.091 U	UC07	0.0403	0.0408 U	0.0446 U
trans-1,3-Dichloropropene	µg/kg	20	0	0	--	--	--	--	--	--	0.07 U	0.1 U	UC07	0.0443	0.0448 U	0.0491 U
Trichloroethene	µg/kg	20	0	0	--	--	--	--	--	--	0.088 U	0.13 U	UC05-1; UC05-2;	0.0573	0.0575 U	0.065 U
Trichlorofluoromethane	µg/kg	20	0	0	--	--	--	--	--	--	0.38 U	0.54 U	UC07	0.24	0.24 U	0.27 U
Vinyl chloride	µg/kg	20	0	0	--	--	--	--	--	--	0.16 U	0.22 U	UC05-1; UC07	0.097	0.098 U	0.11 U
Xylene	µg/kg	80	23	28.8	0.26 JT	86000 T	PGC-06	19600	8.5 JT	84000	0.12 UT	86000 T	PGC-06	5700	3.4 U	53800
Zidell Data Only																
Grain Size																
Clay	percent	7	7	100	11.6	30.5	WRS37	20.8	20.7	30.4	11.6	30.5	WRS37	20.8	20.7	30.4
Fines	percent	10	10	100	3.1	89 T	WRS37	37.4	25.1	87.7	3.1	89 T	WRS37	37.4	25.1	87.7
Gravel	percent	10	10	100	0	64.9	WRS46	6.49	0	35.7	0	64.9	WRS46	6.49	0	35.7
Sand	percent	10	10	100	11	96.9	WRS22	56.2	61.3	95.3	11	96.9	WRS22	56.2	61.3	95.3
Silt	percent	7	7	100	3.4	58.8	WRS37	30.7	23.9	57.9	3.4	58.8	WRS37	30.7	23.9	57.9
Conventionals																
Phosphorus	mg/kg	15	15	100	702	1560	WRS06	1070	1050	1390	702	1560	WRS06	1070	1050	1390
Metals																
Antimony	mg/kg	30	0	0	--	--	--	--	--	--	10 UJ	17 U	WRS34	5.8	5.3 UJ	7.8 U
Arsenic	mg/kg	30	20	66.7	2	7.5	WRS46	3.5	3	5.1	2	7.5	WRS46	2.7	3	4.6
Barium	mg/kg	15	15	100	113	509	WRS07	196	177	338	113	509	WRS07	196	177	338
Beryllium	mg/kg	15	0	0	--	--	--	--	--	--	2 U	2 U	WRS05; WRS06; WRS07; WRS08	1	1 U	1 U
Cadmium	mg/kg	30	14	46.7	1	3.6	WRS46	2.15	1.95	3.54	1	3.6	WRS46	1.28	0.7 U	3.41
Chromium	mg/kg	30	30	100	14	143	WRS06	36	29.5	75.4	14	143	WRS06	36	29.5	75.4
Copper	mg/kg	30	30	100	14	1050	WRS07	82.1	40.5	169	14	1050	WRS07	82.1	40.5	169
Lead	mg/kg	30	21	70	2.9 T	972	WRS07	81.4	25	115	2.1 U	972	WRS07	59.4	15.5	113
Mercury	mg/kg	30	15	50	0.0255 T	1.3	WRS07	0.2135	0.093	0.67	0.016 U	1.3	WRS07	0.1479	0.1 U	0.373
Nickel	mg/kg	30	30	100	16	151	WRS06	31.2	26	54.6	16	151	WRS06	31.2	26	54.6
Selenium	mg/kg	15	0	0	--	--	--	--	--	--	1 U	1 U	WRS05; WRS06; WRS07; WRS08	0.5	0.5 U	0.5 U
Silver	mg/kg	15	0	0	--	--	--	--	--	--	4 U	4 U	WRS05; WRS06; WRS07; WRS08	2	2 U	2 U
Thallium	mg/kg	15	0	0	--	--	--	--	--	--	1 U	1 U	WRS05; WRS06; WRS07; WRS08	0.5	0.5 U	0.5 U
Zinc	mg/kg	30	30	100	41	2270 J	WRS07	207	120 J	344 J	41	2270 J	WRS07	207	120 J	344 J

Table D1.3-7. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Butyltins																
Butyltin ion	µg/kg	8	2	25	0.72 T	1.3	WRS31	1.01	1.01	1.271	0.0015 U	1.3	WRS31	0.4807	0.3775 U	1.097
Dibutyltin ion	µg/kg	8	0	0	--	--	--	--	--	--	0.002 U	1.2 U	WRS34	0.413	0.463 U	0.565 U
Tetrabutyltin	µg/kg	8	0	0	--	--	--	--	--	--	0.001 U	0.6 U	WRS34	0.207	0.23 U	0.284 U
Tributyltin ion	µg/kg	23	13	56.5	1	14000	WRS06	1697	11	9980	0.0015 U	14000	WRS06	959.5	3	6625
PCB Aroclors																
Aroclor 1016	µg/kg	12	0	0	--	--	--	--	--	--	110 U	170 U	WRS34	66	65 U	80 U
Aroclor 1221	µg/kg	12	0	0	--	--	--	--	--	--	110 U	170 U	WRS34	66	65 U	80 U
Aroclor 1232	µg/kg	12	0	0	--	--	--	--	--	--	110 U	170 U	WRS34	66	65 U	80 U
Aroclor 1242	µg/kg	12	0	0	--	--	--	--	--	--	110 U	170 U	WRS34	66	65 U	80 U
Aroclor 1248	µg/kg	12	0	0	--	--	--	--	--	--	110 U	170 U	WRS34	66	65 U	80 U
Aroclor 1254	µg/kg	12	0	0	--	--	--	--	--	--	110 U	170 U	WRS34	66	65 U	80 U
Aroclor 1260	µg/kg	12	2	16.7	140	190	WRS28	170	170	190	110 U	190	WRS28	81	65 U	160
Aroclor 1262	µg/kg	8	0	0	--	--	--	--	--	--	110 U	150 U	WRS25; WRS28	63	63 U	75 U
Aroclor 1268	µg/kg	8	0	0	--	--	--	--	--	--	110 U	150 U	WRS25; WRS28	63	63 U	75 U
Aroclors	µg/kg	12	2	16.7	140 T	190 T	WRS28	170	170	190	110 UT	190 T	WRS28	81	65 U	160
PCBs[c]																
Total PCBs	µg/kg	12	2	16.7	140 T	190 T	WRS28	170	170	190	110 UT	190 T	WRS28	81	65 U	160
Polycyclic Aromatic Hydrocarbons																
2-Methylnaphthalene	µg/kg	12	4	33.3	5.8	26	WRS46	14	12	25	3.5 U	26	WRS46	6.1	2.5 U	21
Acenaphthene	µg/kg	12	3	25	5.8	11	WRS25	8.9	10	11	3.5 U	11	WRS25	3.9	2.5 U	10
Acenaphthylene	µg/kg	12	4	33.3	5.9	28	WRS25	13	8.7	25	3.5 U	28	WRS25	5.7	2.5 U	18
Anthracene	µg/kg	12	2	16.7	9.7	12	WRS46	11	11	12	3.5 U	12	WRS46	3.7	2.5 U	11
Benzo(a)anthracene	µg/kg	12	6	50	6.6 T	31	WRS46	13	11	27	3.5 U	31	WRS46	7.7	4.8	21
Benzo(a)pyrene	µg/kg	12	8	66.7	4.8	24	WRS46	12	10	20	3.5 U	24	WRS46	8.4	8.7	18
Benzo(b)fluoranthene	µg/kg	12	6	50	6	17	WRS25	12	13	16	3.5 U	17	WRS25	7.2	4.5	15
Benzo(g,h,i)perylene	µg/kg	12	4	33.3	7.3	16 T	WRS22	11	11	15	3.5 U	16 T	WRS22	5.2	2.5 U	14
Benzo(k)fluoranthene	µg/kg	12	6	50	6.2	38	WRS46	14	9	32	3.5 U	38	WRS46	8	4.4	25
Chrysene	µg/kg	12	4	33.3	6.5	31	WRS46	15	10	28	3.5 U	31	WRS46	6.3	2.5 U	21
Dibenzo(a,h)anthracene	µg/kg	12	1	8.3	14 T	14 T	WRS22	14	14 T	14 T	3.5 U	14 T	WRS22	3.3	2.4 U	7.9
Fluoranthene	µg/kg	12	8	66.7	5 T	91	WRS46	27	16	76	3.8 UT	91	WRS46	19	6.4	67
Fluorene	µg/kg	12	2	16.7	8.9	15	WRS25	12	12	15	3.5 U	15	WRS25	3.9	2.5 U	12
Total HPAHs	µg/kg	12	10	83.3	4.8 T	309 T	WRS46	91.3	80.2	245	3.9 UT	309 T	WRS46	76.4	51.5	231
Indeno(1,2,3-cd)pyrene	µg/kg	12	5	41.7	6.8	15 T	WRS22	11	9.7	15	3.5 U	15 T	WRS22	5.8	2.8 U	14
Total LPAHs	µg/kg	12	5	41.7	5.9 T	208 T	WRS25	90.1	58.8 T	195	3.5 UT	208 T	WRS25	38.8	2.75 U	172
Naphthalene	µg/kg	12	3	25	15	70	WRS25	37	25	66	3.5 U	70	WRS25	11	2.5 U	45
Phenanthrene	µg/kg	12	4	33.3	19	60	WRS46	40	41	60	3.5 U	60	WRS46	15	2.5 U	58
Pyrene	µg/kg	12	7	58.3	5.4 T	74	WRS46	28	23	66	3.5 U	74	WRS46	17	6.1	60
Total BaPEq	µg/kg	12	9	75	0.091 T	31 T	WRS22	14.2	12 T	30.6	0.091 T	31 T	WRS22	11.1	10	30.5
Total cPAHs	µg/kg	12	9	75	4.8 T	140 T	WRS46	50	41 T	120	3.5 UT	140 T	WRS46	38	26	110
Total PAHs	µg/kg	12	10	83.3	4.8 T	451 T	WRS46	136.3	97.8 J	416.8	3.9 UT	451 T	WRS46	113.9	54.4	409.2

Table D1.3-7. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Petroleum																
Total Petroleum Hydrocarbons (Diesel)	mg/kg	24	2	8.3	98	160	WRS37	130	130	160	10 U	210 U	WRS31	22	5 U	100
Total Petroleum Hydrocarbons (Gasoline)	mg/kg	15	0	0	--	--	--	--	--	--	10 U	10 U	WRS05; WRS06; WRS07; WRS08	5	5 U	5 U
Jet fuel A	mg/kg	15	0	0	--	--	--	--	--	--	10 U	10 U	WRS05; WRS06; WRS07; WRS08	5	5 U	5 U
Kerosene	mg/kg	15	0	0	--	--	--	--	--	--	10 U	10 U	WRS05; WRS06; WRS07; WRS08	5	5 U	5 U
Mineral spirits	mg/kg	15	0	0	--	--	--	--	--	--	10 U	10 U	WRS05; WRS06; WRS07; WRS08	5	5 U	5 U
Motor oil	mg/kg	9	9	100	42	900	WRS31	229	110	688	42	900	WRS31	229	110	688
Total Petroleum Hydrocarbons	mg/kg	24	24	100	42 A	1630	WRS06	493	314	1390	42 A	1630	WRS06	493	314	1390

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

[c] Total PCBs are total PCB congeners whenever available and total Aroclors if not.

-- data not available.

BaPEq - benzo(a)pyrene equivalent
BTEX - benzene, toluene, ethylbenzene, and xylene
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PAH - polycyclic aromatic hydrocarbon
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-8. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Grainsize																
>9 Phi clay	percent	21	21	100	0.48	7.85	DG09	4.61	5.52 T	7.47	0.48	7.85	DG09	4.61	5.52 T	7.47
8-9 Phi clay	percent	21	21	100	0.28	3.76	GCR01E-ALT	2.55	2.72	3.73	0.28	3.76	GCR01E-ALT	2.55	2.72	3.73
Coarse sand	percent	21	21	100	0.25	5.85	DG12	1.39	0.747 T	3.79 T	0.25	5.85	DG12	1.39	0.747 T	3.79 T
Coarse silt	percent	21	21	100	0.54	51.8	DG06	24.2	25.5	50.1	0.54	51.8	DG06	24.2	25.5	50.1
Fine gravel	percent	21	21	100	0.02	2.47 T	GCRSP01W	0.497	0.29	1.14 T	0.02	2.47 T	GCRSP01W	0.497	0.29	1.14 T
Fine sand	percent	21	21	100	0.99	39.4	GCR01E-ALT	13.2	9.87	38.9	0.99	39.4	GCR01E-ALT	13.2	9.87	38.9
Fine silt	percent	21	21	100	0.5	12.8	DG07	6.33	7.36	11.4	0.5	12.8	DG07	6.33	7.36	11.4
Fines	percent	21	21	100	2.13 T	95.4 T	DG03	53.3	59.9 T	94.5 T	2.13 T	95.4 T	DG03	53.3	59.9 T	94.5 T
Medium gravel	percent	21	21	100	0	3.09	DG18	0.275	0.05	0.627 T	0	3.09	DG18	0.275	0.05	0.627 T
Medium sand	percent	21	21	100	0.29	71.2	DG12	10.1	3.53 T	41.6	0.29	71.2	DG12	10.1	3.53 T	41.6
Medium silt	percent	21	21	100	0.11	23.8	DG07	11.6	14	19.4	0.11	23.8	DG07	11.6	14	19.4
Very coarse sand	percent	21	21	100	0.1	2.41 T	GCRSP01W	0.634	0.47	1.81	0.1	2.41 T	GCRSP01W	0.634	0.47	1.81
Very fine sand	percent	21	21	100	1	43.3 T	GCRSP01W	24.5	24.4	43	1	43.3 T	GCRSP01W	24.5	24.4	43
Very fine silt	percent	21	21	100	0	9.02	DG07	3.98	4.5	6.58	0	9.02	DG07	3.98	4.5	6.58
Conventionals																
Acid Volatile Sulfides	mg/kg	4	2	50	14.8	65	WR-BC-07	39.9	39.9	62.5	0.7 U	65	WR-BC-07	20.1	7.58	57.5
Specific Gravity	NA	17	17	100	1.21	1.75 T	DG11-2	1.56	1.56	1.73	1.21	1.75 T	DG11-2	1.56	1.56	1.73
Total organic carbon	percent	25	25	100	0.13	2.63	DG07	1.16	1.15 T	2.44	0.13	2.63	DG07	1.16	1.15 T	2.44
Total solids	percent	25	25	100	37	81.4	GCR01E-ALT	59.6	59.9	77.2	37	81.4	GCR01E-ALT	59.6	59.9	77.2
Metals																
Aluminum	mg/kg	21	21	100	10600	37700	DG07	19600	19500	30300	10600	37700	DG07	19600	19500	30300
Antimony	mg/kg	21	21	100	0.05 J	0.31 J	DG08	0.141	0.14 J	0.21 J	0.05 J	0.31 J	DG08	0.141	0.14 J	0.21 J
Arsenic	mg/kg	25	25	100	0.6 J	6.36	DG15	3.7	4.12	5.38	0.6 J	6.36	DG15	3.7	4.12	5.38
Cadmium	mg/kg	25	24	96	0.08	1.63	DG08	0.477	0.305	0.99	0.08	1.63	DG08	0.459	0.3 T	0.986
Chromium	mg/kg	25	25	100	10.4 J	42.2	DG07	24.7	27	36.7	10.4 J	42.2	DG07	24.7	27	36.7
Copper	mg/kg	25	25	100	8	45.7	DG07	25.5	27 T	41.4	8	45.7	DG07	25.5	27 T	41.4
Lead	mg/kg	25	25	100	3.23	27.7	DG15	11.7	12.1	21.6	3.23	27.7	DG15	11.7	12.1	21.6
Manganese	mg/kg	4	4	100	263	512	GCA01E	343	299	481	263	512	GCA01E	343	299	481
Mercury	mg/kg	25	25	100	0.011 J	7.11 J	DG15	0.3344	0.054 T	0.1216 J	0.011 J	7.11 J	DG15	0.3344	0.054 T	0.1216 J
Nickel	mg/kg	25	25	100	9	31.7	DG03	21.4	21.6	31	9	31.7	DG03	21.4	21.6	31
Selenium	mg/kg	21	15	71.4	0.04 J	0.25	DG07	0.16	0.17	0.23	0.04 J	0.25	DG07	0.13	0.15 T	0.22
Silver	mg/kg	25	25	100	0.033	0.21	WR-BC-07	0.1265	0.139	0.2086	0.033	0.21	WR-BC-07	0.1265	0.139	0.2086
Thallium	mg/kg	4	2	50	0.089	0.131 T	GCRSP01W	0.11	0.11	0.1289	0.0615 U	0.131 T	GCRSP01W	0.07115	0.06143	0.1247
Zinc	mg/kg	25	25	100	47.6	188	DG15	98.2	99.5 T	160	47.6	188	DG15	98.2	99.5 T	160
Butyltins																
Butyltin ion	µg/kg	4	1	25	0.63 J	0.63 J	GSP01E	0.63	0.63 J	0.63 J	0.037 U	0.63 J	GSP01E	0.195	0.065 U	0.551 J
Dibutyltin ion	µg/kg	4	4	100	0.28 J	1.2 J	GSP01E	0.64	0.54 J	1.1 J	0.28 J	1.2 J	GSP01E	0.64	0.54 J	1.1 J
Tetrabutyltin	µg/kg	4	0	0	--	--	--	--	--	--	0.086 U	0.12 UT	GCRSP01W	0.0509	0.0503 U	0.0593 U
Tributyltin ion	µg/kg	4	4	100	0.37 J	1.2 J	GSP01E	0.85	0.92 J	1.2 J	0.37 J	1.2 J	GSP01E	0.85	0.92 J	1.2 J
PCB Aroclors																
Aroclor 1016	µg/kg	25	0	0	--	--	--	--	--	--	1.4 U	88 U	DG15	3.9	1.6 U	6.2 U
Aroclor 1221	µg/kg	25	0	0	--	--	--	--	--	--	1.4 U	10 UJ	WR-BC-01; WR-BC-07; WR-BC-08	2.1	1.6 U	5 UJ
Aroclor 1232	µg/kg	25	0	0	--	--	--	--	--	--	1.4 U	97 U	DG15	4.3	1.6 U	9.8 U
Aroclor 1242	µg/kg	25	0	0	--	--	--	--	--	--	1.4 U	99 U	DG15	4.1	1.6 U	5 U
Aroclor 1248	µg/kg	25	1	4	140	140	DG15	140	140	140	1.3 U	140	DG15	7.5	1.5 U	5 U
Aroclor 1254	µg/kg	25	11	44	2.3 J	130	DG15	18	5.9 J	74	1.4 U	130	DG15	9.3	4.9 J	15 J
Aroclor 1260	µg/kg	25	10	40	1.7 J	76	DG15	13	5.9 J	49	1.4 U	76	DG15	6.5	2.7 U	14 J
Aroclor 1262	µg/kg	21	0	0	--	--	--	--	--	--	1.3 U	64 U	DG15	2.9	1.5 U	2.3 U
Aroclor 1268	µg/kg	21	1	4.8	66	66	DG15	66	66	66	1.3 U	66	DG15	4.5	1.5 U	2.3 U
Aroclors	µg/kg	25	14	56	4 JT	410 T	DG15	38	7.4 J	160	1.4 UT	410 T	DG15	22	5 UT	29 J

Table D1.3-8. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB Congeners																
PCB001	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.6 UT	GCRSP01W	5.27	6.15 U	6.29 U
PCB002	pg/g	4	1	25	16.9 T	16.9 T	GCRSP01W	16.9	16.9 T	16.9 T	4.94 U	16.9 T	GCRSP01W	7.92	6.15 U	15.3
PCB003	pg/g	4	1	25	14.3 T	14.3 T	GCRSP01W	14.3	14.3 T	14.3 T	4.94 U	14.3 T	GCRSP01W	7.27	6.15 U	13.1
PCB004 & 010	pg/g	4	0	0	--	--	--	--	--	--	9.88 U	24.8 UT	GCRSP01W	10.5	12.3 U	12.4 U
PCB005 & 008	pg/g	4	1	25	11.5	11.5	GCA01E	11.5	11.5	11.5	11.5	24.8 UT	GCRSP01W	12.1	12.3 U	12.4 U
PCB006	pg/g	4	0	0	--	--	--	--	--	--	9.88 U	24.8 UT	GCRSP01W	10.5	12.3 U	12.4 U
PCB007 & 009	pg/g	4	0	0	--	--	--	--	--	--	9.88 U	24.8 UT	GCRSP01W	10.5	12.3 U	12.4 U
PCB011	pg/g	4	2	50	28.9	117 T	GCRSP01W	73	73	113	24.4 U	117 T	GCRSP01W	42.6	20.6	104
PCB012 & 013	pg/g	4	0	0	--	--	--	--	--	--	9.88 U	24.8 UT	GCRSP01W	10.5	12.3 U	12.4 U
PCB014	pg/g	4	0	0	--	--	--	--	--	--	9.88 U	24.8 UT	GCRSP01W	10.5	12.3 U	12.4 U
PCB015	pg/g	4	1	25	14	14	GCA01E	14	14	14	14	24.8 UT	GCRSP01W	12.7	12.4 U	13.8
PCB016 & 032	pg/g	4	4	100	14.7	45.4 JT	GCRSP01W	23.3	16.5	41.1 J	14.7	45.4 JT	GCRSP01W	23.3	16.5	41.1 J
PCB017	pg/g	4	2	50	10.4	33.2 JT	GCRSP01W	21.8	21.8 J	32.1 J	10.4	33.2 JT	GCRSP01W	14	8.3	29.8 J
PCB018	pg/g	4	4	100	18.7	70.9 JT	GCRSP01W	34.1	23.3	64.4 J	18.7	70.9 JT	GCRSP01W	34.1	23.3	64.4 J
PCB019	pg/g	4	1	25	23.2 T	23.2 T	GCRSP01W	23.2	23.2 T	23.2 T	4.94 U	23.2 T	GCRSP01W	9.49	6.15 U	20.7
PCB020 & 021 & 033	pg/g	4	3	75	16.2	50 T	GCRSP01W	27.6	16.6	46.7	16.2	50 T	GCRSP01W	23.9	16.4	45
PCB022	pg/g	4	3	75	14.3	36.3 T	GCRSP01W	21.8	14.8	34.2	12.2 U	36.3 T	GCRSP01W	17.9	14.6	33.1
PCB023	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB024 & 027	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB025	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB026	pg/g	4	2	50	6.38	18.1 T	GCRSP01W	12.2	12.2	17.5	6.38	18.1 T	GCRSP01W	9.2	6.29	16.3
PCB028	pg/g	4	4	100	39.1	80.3 T	GCRSP01W	54.8	49.8	75.8	39.1	80.3 T	GCRSP01W	54.8	49.8	75.8
PCB029	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB030	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB031	pg/g	4	3	75	31.6	66.7 T	GCRSP01W	43.5	32.2	63.3	25.7 UJ	66.7 T	GCRSP01W	35.8	31.9	61.5
PCB034	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB035	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB036	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB037	pg/g	4	3	75	18.8	42.6 T	GCRSP01W	27.7	21.7	40.5	12.2 U	42.6 T	GCRSP01W	22.3	20.3	39.5
PCB038	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB039	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB040	pg/g	4	3	75	16.4	24.8 T	GCRSP01W	21.9	24.4	24.8	12.2 U	24.8 T	GCRSP01W	17.9	20.4	24.7
PCB041 & 064 & 071 & 072	pg/g	4	4	100	38.2	120 T	GCRSP01W	84	88.9	116	38.2	120 T	GCRSP01W	84	88.9	116
PCB042 & 059	pg/g	4	4	100	17.4	43.4 T	GCRSP01W	31.9	33.5	42.2	17.4	43.4 T	GCRSP01W	31.9	33.5	42.2
PCB043 & 049	pg/g	4	4	100	45.9	112 T	GCRSP01W	83.3	87.7	109	45.9	112 T	GCRSP01W	83.3	87.7	109
PCB044	pg/g	4	4	100	55.2	164 T	GCRSP01W	111	113	157	55.2	164 T	GCRSP01W	111	113	157
PCB045	pg/g	4	2	50	13.3	17.8 T	GCRSP01W	15.6	15.6	17.6	12.2 U	17.8 T	GCRSP01W	11.2	10.4 J	17.1
PCB046	pg/g	4	1	25	6	6	GCA01E	6	6	6	6	12.4 U	GCRSP01W; GSP01E	6.13	6.15 U	6.2 U
PCB047	pg/g	4	4	100	22.1	58.4 T	GCRSP01W	40.1	39.9	55.7	22.1	58.4 T	GCRSP01W	40.1	39.9	55.7
PCB048 & 075	pg/g	4	3	75	14.8	26.3 T	GCRSP01W	19.5	17.5	25.4	12.2 U	26.3 T	GCRSP01W	16.2	16.2	25
PCB050	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB051	pg/g	4	2	50	5.88	14.3 T	GCRSP01W	10.1	10.1	13.9	5.88	14.3 T	GCRSP01W	8.12	6.15 U	13.1
PCB052 & 069	pg/g	4	4	100	55.4	174 T	GCRSP01W	115	115	166	55.4	174 T	GCRSP01W	115	115	166
PCB053	pg/g	4	2	50	16.1	25.9 T	GCRSP01W	21	21	25.4	12.2 U	25.9 T	GCRSP01W	14	12.1 J	24.4
PCB054	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB055	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB056 & 060	pg/g	4	4	100	19.2	73	GCA01E	54	62	71.7	19.2	73	GCA01E	54	62	71.7
PCB057	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB058	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB061 & 070	pg/g	4	4	100	54.7	119 T	GCRSP01W	97.2	108	118	54.7	119 T	GCRSP01W	97.2	108	118
PCB062	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB063	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB065	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB066 & 076	pg/g	4	4	100	47.6	119	GCA01E	93.9	105	117	47.6	119	GCA01E	93.9	105	117

Table D1.3-8. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB067	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB068	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB073	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB074	pg/g	4	4	100	19.3	50.7	GCA01E	40.9	46.8	50.7	19.3	50.7	GCA01E	40.9	46.8	50.7
PCB077	pg/g	4	4	100	5.83 J	14.8	GCA01E	11.5	12.6 J	14.6	5.83 J	14.8	GCA01E	11.5	12.6 J	14.6
PCB078	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB079	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB080	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB081	pg/g	4	1	25	5.65 JT	5.65 JT	GCRSP01W	5.65	5.65 JT	5.65 JT	0.618 U	5.65 JT	GCRSP01W	1.92	0.868 U	4.95 J
PCB082	pg/g	4	3	75	27.5	51.5 T	GCRSP01W	35.9	28.7	49.2	12.2 U	51.5 T	GCRSP01W	28.5	28.1	48.1
PCB083	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB084 & 092	pg/g	4	4	100	24.8	110 T	GCRSP01W	62.2	57	102	24.8	110 T	GCRSP01W	62.2	57	102
PCB085 & 116	pg/g	4	3	75	32.9	42.9 T	GCRSP01W	38.1	38.4	42.5	12.2 U	42.9 T	GCRSP01W	30.1	35.7	42.2
PCB086	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB087 & 117 & 125	pg/g	4	4	100	18.6	95.6 T	GCRSP01W	53.7	50.3	89.3	18.6	95.6 T	GCRSP01W	53.7	50.3	89.3
PCB088 & 091	pg/g	4	3	75	26.4	46.7 T	GCRSP01W	34.3	29.7	45	12.2 U	46.7 T	GCRSP01W	27.2	28.1	44.2
PCB089	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB090 & 101	pg/g	4	4	100	56	283 T	GCRSP01W	151	132	261	56	283 T	GCRSP01W	151	132	261
PCB093	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB094	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB095 & 098 & 102	pg/g	4	4	100	49.3	223 T	GCRSP01W	119	102	205	49.3	223 T	GCRSP01W	119	102	205
PCB096	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB097	pg/g	4	4	100	20.3	87.3 T	GCRSP01W	48.9	44	81	20.3	87.3 T	GCRSP01W	48.9	44	81
PCB099	pg/g	4	4	100	34.3	127 T	GCRSP01W	79.8	78.9	120	34.3	127 T	GCRSP01W	79.8	78.9	120
PCB100	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB103	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB104	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB105	pg/g	4	4	100	18.9	103 T	GCRSP01W	55.5	50.1	96.1	18.9	103 T	GCRSP01W	55.5	50.1	96.1
PCB106 & 118	pg/g	4	4	100	45.3	247 T	GCRSP01W	131	117	228	45.3	247 T	GCRSP01W	131	117	228
PCB107 & 109	pg/g	4	2	50	9.32	17.2 T	GCRSP01W	13.3	13.3	16.8	9.32	17.2 T	GCRSP01W	9.71	7.76	16
PCB108 & 112	pg/g	4	2	50	7.99	15.7 T	GCRSP01W	11.8	11.8	15.3	7.99	15.7 T	GCRSP01W	9	7.1	14.5
PCB110	pg/g	4	4	100	70.2	361 T	GCRSP01W	187	158	332	70.2	361 T	GCRSP01W	187	158	332
PCB111 & 115	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB113	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB114	pg/g	4	1	25	6.99 JT	6.99 JT	GCRSP01W	6.99	6.99 JT	6.99 JT	3.19 U	6.99 JT	GCRSP01W	3.17	2.05 U	6.28 J
PCB119	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB120	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB121	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB122	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB123	pg/g	4	3	75	3.5 J	4.29 JT	GCRSP01W	3.9	3.92 J	4.25 J	1.2 U	4.29 JT	GCRSP01W	3.08	3.71 J	4.23 J
PCB124	pg/g	4	2	50	5.87	15.1 T	GCRSP01W	10.5	10.5	14.6	5.87	15.1 T	GCRSP01W	8.32	6.15 U	13.8
PCB126	pg/g	4	0	0	--	--	--	--	--	--	1.81 U	5.73 UT	GCRSP01W	2.03	2.18 U	2.79 U
PCB127	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB128 & 162	pg/g	4	3	75	21.6	51.5 T	GCRSP01W	32.1	23.2	48.7	12.2 U	51.5 T	GCRSP01W	25.6	22.4	47.3
PCB129	pg/g	4	1	25	6.38	6.38	GCA01E	6.38	6.38	6.38	6.38	12.4 U	GCRSP01W; GSP01E	6.22	6.2 U	6.35
PCB130	pg/g	4	2	50	9.46	25.9 T	GCRSP01W	17.7	17.7	25.1	9.46	25.9 T	GCRSP01W	11.9	7.83	23.4
PCB131	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB132 & 161	pg/g	4	4	100	13.6	94.4 T	GCRSP01W	44.5	34.9	85.7	13.6	94.4 T	GCRSP01W	44.5	34.9	85.7
PCB133 & 142	pg/g	4	1	25	15.5 T	15.5 T	GCRSP01W	15.5	15.5 T	15.5 T	4.94 U	15.5 T	GCRSP01W	7.57	6.15 U	14.1
PCB134 & 143	pg/g	4	2	50	6.9	19.3 T	GCRSP01W	13.1	13.1	18.7	6.9	19.3 T	GCRSP01W	9.63	6.55	17.4
PCB135	pg/g	4	3	75	16.2	51.5 T	GCRSP01W	29.1	19.6	48.3	12.2 U	51.5 T	GCRSP01W	23.4	17.9	46.7
PCB136	pg/g	4	3	75	16.9	53.7 T	GCRSP01W	29.2	16.9	50	12.2 U	53.7 T	GCRSP01W	23.4	16.9	48.2
PCB137	pg/g	4	2	50	7.5	20.1 T	GCRSP01W	13.8	13.8	19.5	7.5	20.1 T	GCRSP01W	9.98	6.85	18.2
PCB138 & 163 & 164	pg/g	4	4	100	45.1	327 T	GCRSP01W	160	134	298	45.1	327 T	GCRSP01W	160	134	298
PCB139 & 149	pg/g	4	4	100	42.3	293 T	GCRSP01W	136	104	265	42.3	293 T	GCRSP01W	136	104	265

Table D1.3-8. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB140	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB141	pg/g	4	3	75	28.6	75.2 T	GCRSP01W	44.7	30.4	70.7	12.2 U	75.2 T	GCRSP01W	35.1	29.5	68.5
PCB144	pg/g	4	2	50	6.65	21.3 T	GCRSP01W	14	14	20.6	6.65	21.3 T	GCRSP01W	10.1	6.43	19.1
PCB145	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB146 & 165	pg/g	4	3	75	20.6	57.9 T	GCRSP01W	33.6	22.2	54.3	12.2 U	57.9 T	GCRSP01W	26.7	21.4	52.5
PCB147	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB148	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB150	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB151	pg/g	4	4	100	14.2	97.9 T	GCRSP01W	44.1	32.2	88.3	14.2	97.9 T	GCRSP01W	44.1	32.2	88.3
PCB152	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB153	pg/g	4	4	100	49.9	356 T	GCRSP01W	173	143	324	49.9	356 T	GCRSP01W	173	143	324
PCB154	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB155	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB156	pg/g	4	4	100	5.11 J	31.4 T	GCRSP01W	15.6	12.9	28.6	5.11 J	31.4 T	GCRSP01W	15.6	12.9	28.6
PCB157	pg/g	4	3	75	3.64 J	8.9 JT	GCRSP01W	5.62	4.32 J	8.44 J	1.36 U	8.9 JT	GCRSP01W	4.39	3.98 J	8.21 J
PCB158 & 160	pg/g	4	3	75	14.2	36.5 T	GCRSP01W	21.8	14.7	34.3	12.2 U	36.5 T	GCRSP01W	17.9	14.5	33.2
PCB159	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB166	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB167	pg/g	4	3	75	6.93	13.1 JT	GCRSP01W	9.05	7.13 J	12.5 J	1.25 U	13.1 JT	GCRSP01W	6.95	7.03 J	12.2 J
PCB168	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB169	pg/g	4	0	0	--	--	--	--	--	--	0.47 U	3.91 U	GCR01E-ALT	0.924	0.753 U	1.81 U
PCB170	pg/g	4	2	50	43.3	99 T	GCRSP01W	71.2	71.2	96.2	12.2 U	99 T	GCRSP01W	43.1	33.6 J	90.6
PCB171	pg/g	4	3	75	9.96	26.7 T	GCRSP01W	16.9	14	25.4	9.96	26.7 T	GCRSP01W	14.2	12	24.8
PCB172	pg/g	4	2	50	7.29	21 T	GCRSP01W	14.1	14.1	20.3	7.29	21 T	GCRSP01W	10.1	6.75	18.9
PCB173	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB174	pg/g	4	3	75	49.3	114 T	GCRSP01W	75.4	62.9	109	12.2 U	114 T	GCRSP01W	58.1	56.1	106
PCB175	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB176	pg/g	4	2	50	5.84	18.9 T	GCRSP01W	12.4	12.4	18.2	5.84	18.9 T	GCRSP01W	9.26	6.15 U	17
PCB177	pg/g	4	3	75	30.4	71.6 T	GCRSP01W	45.6	34.7	67.9	12.2 U	71.6 T	GCRSP01W	35.7	32.6	66.1
PCB178	pg/g	4	2	50	11.5	28.4 T	GCRSP01W	20	20	27.6	11.5	28.4 T	GCRSP01W	13.1	8.85	25.9
PCB179	pg/g	4	3	75	23.5	58.8 T	GCRSP01W	36.9	28.4	55.8	12.2 U	58.8 T	GCRSP01W	29.2	26	54.2
PCB180	pg/g	4	4	100	31.1	248 T	GCRSP01W	133	126	232	31.1	248 T	GCRSP01W	133	126	232
PCB181	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB182 & 187	pg/g	4	4	100	22.7	164 T	GCRSP01W	83.9	74.4	151	22.7	164 T	GCRSP01W	83.9	74.4	151
PCB183	pg/g	4	3	75	30.7	73.1 T	GCRSP01W	45.6	33.1	69.1	12.2 U	73.1 T	GCRSP01W	35.8	31.9	67.1
PCB184	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB185	pg/g	4	2	50	5.36	17.4 T	GCRSP01W	11.4	11.4	16.8	5.36	17.4 T	GCRSP01W	8.77	6.15 U	15.7
PCB186	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB188	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB189	pg/g	4	1	25	1.81 J	1.81 J	GCA01E	1.81	1.81 J	1.81 J	0.663 U	2.98 UT	GCRSP01W	1.06	1.06 U	1.76 J
PCB190	pg/g	4	2	50	9.26	27.3 T	GCRSP01W	18.3	18.3	26.4	9.26	27.3 T	GCRSP01W	12.2	7.73	24.6
PCB191	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB192	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB193	pg/g	4	2	50	5.05	15.1 T	GCRSP01W	10.1	10.1	14.6	5.05	15.1 T	GCRSP01W	8.11	6.15 U	13.8
PCB194	pg/g	4	3	75	30.2	47.6 T	GCRSP01W	37.1	33.4	46.2	12.2 U	47.6 T	GCRSP01W	29.3	31.8	45.5
PCB195	pg/g	4	2	50	12.1	22.1 T	GCRSP01W	17.1	17.1	21.6	12.1	22.1 T	GCRSP01W	11.6	9.15	20.6
PCB196 & 203	pg/g	4	2	50	29.8	77.5 T	GCRSP01W	53.7	53.7	75.1	12.2 U	77.5 T	GCRSP01W	33.1	24.3 J	70.3
PCB197	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB198	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB199	pg/g	4	3	75	36.6	67.1 T	GCRSP01W	48	40.3	64.4	12.2 U	67.1 T	GCRSP01W	37.5	38.5	63.1
PCB200	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB201	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB202	pg/g	4	1	25	15.2 T	15.2 T	GCRSP01W	15.2	15.2 T	15.2 T	5.75 UJ	15.2 T	GCRSP01W	7.59	6.15 U	13.9
PCB204	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB205	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U

Table D1.3-8. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCB206	pg/g	4	3	75	13.7	39.7 T	GCRSP01W	22.6	14.4	37.2	12.2 U	39.7 T	GCRSP01W	18.5	14.1	35.9
PCB207	pg/g	4	0	0	--	--	--	--	--	--	4.94 U	12.4 U	GCRSP01W; GSP01E	5.24	6.15 U	6.2 U
PCB208	pg/g	4	1	25	15.9 T	15.9 T	GCRSP01W	15.9	15.9 T	15.9 T	4.94 U	15.9 T	GCRSP01W	7.67	6.15 U	14.4
PCB209	pg/g	4	2	50	18.5	49.7 T	GCRSP01W	34.1	34.1	48.1	12.2 U	49.7 T	GCRSP01W	20.1	12.4	45
Total PCB Congeners	pg/g	4	4	100	1030 JT	6560 JT	GCRSP01W	3450	3110 J	6070 J	1030 JT	6560 JT	GCRSP01W	3450	3110 J	6070 J
PCBs[c]																
Total PCBs	µg/kg	25	16	64	1.03 JT	410 T	DG15	33.7	6.8 J	127	1.03 JT	410 T	DG15	22.5	5 UT	29.2 J
PCB Homologs																
Dichlorobiphenyl homologs	pg/g	4	2	50	54.4 T	117 T	GCRSP01W	85.7	85.7	114	24.4 UT	117 T	GCRSP01W	49	33.4	108
Heptachlorobiphenyl homologs	pg/g	4	4	100	53.8 T	983 T	GCRSP01W	461	403 J	898 J	53.8 T	983 T	GCRSP01W	461	403 J	898 J
Hexachlorobiphenyl homologs	pg/g	4	4	100	170 JT	1650 JT	GCRSP01W	761	613 J	1500 J	170 JT	1650 JT	GCRSP01W	761	613 J	1500 J
Monochlorobiphenyl homologs	pg/g	4	1	25	31.2 T	31.2 T	GCRSP01W	31.2	31.2 T	31.2 T	4.94 UT	31.2 T	GCRSP01W	11.5	6.15 U	27.5
Nonachlorobiphenyl homologs	pg/g	4	3	75	13.7 T	55.6 T	GCRSP01W	27.9	14.4 T	51.5	12.2 UT	55.6 T	GCRSP01W	22.5	14.1	49.4
Octachlorobiphenyl homologs	pg/g	4	3	75	73.7 T	230 T	GCRSP01W	138	109 T	218	12.2 UT	230 T	GCRSP01W	105	91.4	212
Pentachlorobiphenyl homologs	pg/g	4	4	100	338 T	1840 JT	GCRSP01W	992	895 J	1700 J	338 T	1840 JT	GCRSP01W	992	895 J	1700 J
Tetrachlorobiphenyl homologs	pg/g	4	4	100	381 JT	1140 JT	GCRSP01W	820	880	1100 J	381 JT	1140 JT	GCRSP01W	820	880	1100 J
Trichlorobiphenyl homologs	pg/g	4	4	100	83.4 T	467 JT	GCRSP01W	225	176	425 J	83.4 T	467 JT	GCRSP01W	225	176	425 J
PCDD/Fs Homologs																
Heptachlorodibenzofuran homologs	pg/g	21	21	100	0.251	148 T	GCRSP01W	14.421	3.199	46.25	0.251	148 T	GCRSP01W	14.421	3.199	46.25
Heptachlorodibenzo-p-dioxin homologs	pg/g	21	21	100	0.955	214 T	GCRSP01W	34.4807	11.763	189.415	0.955	214 T	GCRSP01W	34.4807	11.763	189.415
Hexachlorodibenzofuran homologs	pg/g	21	20	95.2	0.124	28.9 T	GCRSP01W	3.8614	1.597	12.369	0.011 U	28.9 T	GCRSP01W	3.6778	1.585	11.499
Hexachlorodibenzo-p-dioxin homologs	pg/g	21	20	95.2	0.258	21.016	DG05	3.5236	1.8495	15.871	0.015 U	21.016	DG05	3.3562	1.566	15.6 T
Octachlorodibenzofuran	pg/g	21	20	95.2	0.304 J	210 T	GCRSP01W	20.74	3.8755 J	82.335	0.304 J	210 T	GCRSP01W	19.785	3.552 J	75.616
Octachlorodibenzo-p-dioxin	pg/g	21	20	95.2	11.977	1160 T	GCRSP01W	161.79	62.669	674.3 J	3.255 U	1160 T	GCRSP01W	154.17	56.291	648.74 J
Pentachlorodibenzofuran homologs	pg/g	21	19	90.5	0.066	7.684	DG05	1.028	0.465 J	3.495	0.007 U	7.684	DG05	0.9301	0.447	3.03 T
Pentachlorodibenzo-p-dioxin homologs	pg/g	21	14	66.7	0.02	2.713	DG05	0.424	0.1295	1.6711 J	0.009 U	2.713	DG05	0.28788	0.086	1.11 JT
Tetrachlorodibenzofuran homologs	pg/g	21	17	81	0.017	5.809	DG05	0.5673	0.132	2.162	0.007 U	5.809	DG05	0.4627	0.098	1.25 T
Tetrachlorodibenzo-p-dioxin homologs	pg/g	21	11	52.4	0.015	2.222	DG05	0.33382	0.094	1.36 J	0.00476 U	2.222	DG05	0.17997	0.021	0.498 JT
Total PCDD/F	pg/g	21	21	100	1.563 JT	1780 JT	GCRSP01W	231.6	77.41 JT	957.6 JT	1.563 JT	1780 JT	GCRSP01W	231.6	77.41 JT	957.6 JT
PCDD/Fs																
1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/g	21	21	100	0.079 J	24.5 T	GCRSP01W	2.946	1.001 J	9.373	0.079 J	24.5 T	GCRSP01W	2.946	1.001 J	9.373
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/g	21	21	100	0.42 J	112 T	GCRSP01W	16.066	5.168	73.015 J	0.42 J	112 T	GCRSP01W	16.066	5.168	73.015 J
1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/g	21	8	38.1	0.054 J	1.32 JT	GCRSP01W	0.3554	0.1965 J	1.037 J	0.019 U	1.32 JT	GCRSP01W	0.1579	0.0365 U	0.512 J
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	21	14	66.7	0.053 J	1.1 JT	GCRSP01W	0.281	0.148 J	0.865 J	0.011 U	1.1 JT	GCRSP01W	0.196	0.11 J	0.739 J
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/g	21	7	33.3	0.029 J	0.277 J	DG05	0.126	0.097 JT	0.2518 J	0.01 U	0.277 J	DG05	0.05364	0.0235 U	0.193 JT
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	21	13	61.9	0.027 J	0.346 JT	GCRSP01W	0.1063	0.081 J	0.2434 J	0.012 U	0.401 U	DG05	0.0815	0.0611 J	0.2005 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/g	21	18	85.7	0.046 J	3.09 JT	GCRSP01W	0.5706	0.289 J	1.814 J	0.017 U	3.09 JT	GCRSP01W	0.4937	0.263 J	1.589 J
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	21	0	0	--	--	--	--	--	--	0.011 U	0.151 UT	GCRSP01W	0.01795	0.011 UT	0.0475 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/g	21	14	66.7	0.041 J	0.782 JT	GCRSP01W	0.2799	0.211 J	0.7814 J	0.0144 U	0.782 JT	GCRSP01W	0.202	0.116 U	0.781 J
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	21	5	23.8	0.028 J	0.374 J	DG05	0.1682	0.123 J	0.3506 J	0.007 U	0.374 J	DG05	0.05404	0.0255 U	0.257 JT
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/g	21	10	47.6	0.02 J	0.219 J	DG05	0.0726	0.0545 J	0.1902 J	0.009 U	0.219 J	DG05	0.042189	0.024 J	0.155 JT
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	21	8	38.1	0.0572 J	0.498 JT	GCRSP01W	0.1789	0.156 J	0.4 J	0.01 U	0.498 JT	GCRSP01W	0.08382	0.0365 U	0.218 J
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	21	10	47.6	0.019 J	0.322 J	DG05	0.1036	0.055 J	0.2914 J	0.007 U	0.322 J	DG05	0.05866	0.0285 U	0.254 JT
2,3,7,8-Tetrachlorodibenzofuran	pg/g	21	2	9.5	0.29 JT	0.366 J	DG05	0.328	0.328 J	0.3622 J	0.007 U	0.925 U	DG03	0.1766	0.169 U	0.3845 U
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	21	0	0	--	--	--	--	--	--	0.00476 U	0.108 U	DG05	0.013354	0.0085 U	0.03915 U
TCDD TEQ (ND = 0)	pg/g	21	21	100	0.0051 JT	2.62 JT	GCRSP01W	0.4013	0.164 JT	1.74 JT	0.0051 JT	2.62 JT	GCRSP01W	0.4013	0.164 JT	1.74 JT
Total TCDD TEQ (ND = 0)	pg/g	21	21	100	0.0051 JA	2.64 JT	GCRSP01W	0.4031	0.164 JA	1.74 JA	0.0051 JA	2.64 JT	GCRSP01W	0.4031	0.164 JA	1.74 JA
PCB TEQ																
Total PCB TEQ (ND=0)	pg/g	4	4	100	0.00266 JT	0.0153 JT	GCRSP01W	0.008125	0.00727 J	0.014156 J	0.00266 JT	0.0153 JT	GCRSP01W	0.008125	0.00727 J	0.014156 J

Table D1.3-8. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PBDE Congeners																
PBDE028	µg/kg	5	0	0	--	--	--	--	--	--	0.85 U	1.2 U	DG17	0.47	0.45 U	0.57 U
PBDE047	µg/kg	5	5	100	0.12 J	1.4	DG07	0.59	0.36 J	1.3 J	0.12 J	1.4	DG07	0.59	0.36 J	1.3 J
PBDE099	µg/kg	5	4	80	0.26 J	1.4	DG07	0.67	0.5 J	1.3 J	0.26 J	1.4	DG07	0.62	0.45 U	1.2 J
PBDE100	µg/kg	5	3	60	0.03 J	0.35 J	DG07	0.17	0.14 J	0.33 J	0.03 J	1.2 U	DG17	0.31	0.35 J	0.57 U
PBDE153	µg/kg	5	1	20	0.18 J	0.18 J	DG07	0.18	0.18 J	0.18 J	0.18 J	1.2 U	DG17	0.42	0.45 U	0.57 U
PBDE154	µg/kg	5	1	20	0.22 J	0.22 J	DG07	0.22	0.22 J	0.22 J	0.22 J	1.2 U	DG17	0.43	0.45 U	0.57 U
PBDE183	µg/kg	5	0	0	--	--	--	--	--	--	0.85 U	1.2 U	DG17	0.47	0.45 U	0.57 U
PBDE209	µg/kg	5	4	80	3.6 J	4.5 J	DG07	4	3.9 J	4.4 J	3.6 J	8.9 U	DG04	4.1	4 J	4.5 J
Pesticides																
2,4'-DDD	µg/kg	21	6	28.6	0.49 JT	1.6	DG08	0.78	0.66 J	1.4 J	0.16 U	9.9 U	DG05	0.68	0.43 U	1.6
2,4'-DDE	µg/kg	21	1	4.8	0.64 J	0.64 J	DG08	0.64	0.64 J	0.64 J	0.046 U	4 U	DG05	0.333	0.205 U	0.85 U
2,4'-DDT	µg/kg	21	12	57.1	0.089 J	4 J	DG15	0.697	0.4 J	2.21 J	0.089 J	4 J	DG15	0.55	0.35 NJ	1.75 U
4,4'-DDD	µg/kg	25	20	80	0.19 J	10	DG05	1.5	0.71 J	6.1	0.19 J	10	DG05	1.3	0.65 J	5.3
4,4'-DDE	µg/kg	25	20	80	0.16 J	4.5	DG08	1.5	1.3	3.8 J	0.16 J	4.5	DG08	1.3	1 U	3.4 J
4,4'-DDT	µg/kg	25	13	52	0.49 JT	20 J	DG05	3.3	1.9 J	11 J	0.18 U	20 J	DG05	2	1 U	5.1 J
Aldrin	µg/kg	25	3	12	0.37 J	0.4 J	WR-BC-07; WR-BC-08	0.39	0.4 J	0.4 J	0.12 U	5.6 U	DG05	0.36	0.15 U	1 UJ
alpha-Endosulfan	µg/kg	25	2	8	0.05 JT	1.2 NJ	DG15	0.625	0.625 J	1.14 J	0.037 U	3 U	DG05	0.388	0.155 U	1.16 J
alpha-Hexachlorocyclohexane	µg/kg	25	0	0	--	--	--	--	--	--	0.097 U	4.5 U	DG05	0.445	0.24 U	1 U
beta-Endosulfan	µg/kg	25	2	8	0.41 JT	4.3 NJ	DG15	2.36	2.36 J	4.11 J	0.031 U	4.3 NJ	DG15	0.548	0.18 U	1.52 U
beta-Hexachlorocyclohexane	µg/kg	25	1	4	0.4 J	0.4 J	WR-BC-08	0.4	0.4 J	0.4 J	0.14 U	5.2 U	DG05	0.47	0.28 U	1.1 U
cis-Chlordane	µg/kg	21	0	0	--	--	--	--	--	--	0.031 U	4 U	DG05	0.296	0.21 U	0.85 U
cis-Nonachlor	µg/kg	21	9	42.9	0.17 NJ	2.5 NJ	DG05	0.867	0.28 JT	2.34 J	0.087 U	2.5 NJ	DG05	0.498	0.28 NJ	2.1 J
delta-Hexachlorocyclohexane	µg/kg	25	0	0	--	--	--	--	--	--	0.086 U	2 UJ	WR-BC-01; WR-BC-07; WR-BC-08	0.26	0.055 UT	1 UJ
Dieldrin	µg/kg	25	1	4	0.069 J	0.069 J	GCA01E	0.069	0.069 J	0.069 J	0.03 U	5 U	DG05	0.475	0.265 U	1.08 U
Endosulfan sulfate	µg/kg	25	1	4	2.3	2.3	DG15	2.3	2.3	2.3	0.058 U	2.3	DG15	0.493	0.5 U	1 U
Endrin	µg/kg	25	0	0	--	--	--	--	--	--	0.071 U	3.5 U	DG05	0.383	0.185 U	1 U
Endrin aldehyde	µg/kg	25	1	4	0.061 J	0.061 J	GSP01E	0.061	0.061 J	0.061 J	0.042 U	2 UJ	WR-BC-01; WR-BC-07; WR-BC-08	0.229	0.05 U	1 UJ
Endrin ketone	µg/kg	21	0	0	--	--	--	--	--	--	0.029 U	2.4 U	DG05	0.16	0.075 U	0.6 U
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	25	1	4	2.4 NJT	2.4 NJT	GCRSP01W	2.4	2.4 NJT	2.4 NJT	0.062 U	2.6 U	DG05	0.435	0.15 U	1.24 U
Heptachlor	µg/kg	25	0	0	--	--	--	--	--	--	0.076 U	2 UJ	WR-BC-01; WR-BC-07; WR-BC-08	0.301	0.08 U	1 UJ
Heptachlor epoxide	µg/kg	25	10	40	0.31 J	2.5 J	DG15	0.704	0.45 J	1.8 J	0.068 U	2.5 J	DG15	0.591	0.48 J	1.12 U
Methoxychlor	µg/kg	25	0	0	--	--	--	--	--	--	0.075 U	9.9 U	DG05	0.631	0.12 U	2 U
Mirex	µg/kg	21	3	14.3	0.37 J	0.45 J	DG03	0.41	0.4 J	0.45 J	0.12 U	3.3 U	DG15	0.26	0.085 U	0.9 U
Oxychlordane	µg/kg	21	0	0	--	--	--	--	--	--	0.061 U	6.4 U	DG05	0.49	0.315 U	1.4 U
Total chlordanes	µg/kg	25	15	60	0.067 NJT	4.5 JT	DG15	0.812	0.29 JT	3.1 J	0.067 NJT	10 UA	WR-BC-01; WR-BC-07; WR-BC-08	1.41	0.44 JT	5 U
Total Endosulfan	µg/kg	25	2	8	0.46 JT	7.8 NJT	DG15	4.13	4.13 J	7.43 J	0.058 UT	7.8 NJT	DG15	0.807	0.5 UT	1.52 U
Total DDD	µg/kg	25	20	80	0.19 JT	10 T	DG05	1.7	0.9 J	7.6	0.19 JT	10 T	DG05	1.5	0.8 UT	6.5
Total DDx	µg/kg	25	22	88	0.2 A	30 JT	DG05	5.2	3.1 J	15 J	0.2 A	30 JT	DG05	4.7	3 A	14 J
Total DDE	µg/kg	25	20	80	0.16 JT	5.1 JT	DG08	1.5	1.3	3.9 J	0.16 JT	5.1 JT	DG08	1.4	1.3 JT	3.4 J
Total DDT	µg/kg	25	17	68	0.089 JT	20 JT	DG05	3.06	2.3 NJT	8.56 J	0.089 JT	20 JT	DG05	2.29	1 UA	5.68 J
Total 4,4' DDx	µg/kg	21	18	85.7	0.2 T	30 JT	DG05	5.3	3.4 J	16 J	0.2 T	30 JT	DG05	4.7	3 T	13 T
Toxaphene	µg/kg	25	0	0	--	--	--	--	--	--	4.3 U	220 U	DG05	17	9 U	55 U
trans-Chlordane	µg/kg	21	9	42.9	0.067 NJ	2.4 J	DG15	0.475	0.24 J	1.62 J	0.027 U	9.9 U	DG05	0.484	0.088 J	2.4 J
trans-Nonachlor	µg/kg	21	1	4.8	0.15 JT	0.15 JT	GCRSP01W	0.15	0.15 JT	0.15 JT	0.034 U	1.6 U	DG05	0.124	0.08 U	0.33 U
Polycyclic Aromatic Hydrocarbons																
1-Methylnaphthalene	µg/kg	4	4	100	0.34 J	4 T	GCRSP01W	1.4	0.71 J	3.5 J	0.34 J	4 T	GCRSP01W	1.4	0.71 J	3.5 J
2-Methylnaphthalene	µg/kg	25	24	96	0.57 J	150	DG05	9.6	2.6 J	14	0.5 U	150	DG05	9.3	2.6	14
Acenaphthene	µg/kg	25	24	96	0.43 J	780 J	DG05	36	3 J	14	0.24 U	780 J	DG05	35	2.6 J	14
Acenaphthylene	µg/kg	25	24	96	0.43 J	130	DG05	8.5	3.1 J	13	0.33 U	130	DG05	8.2	3 J	13

Table D1.3-8. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Anthracene	µg/kg	25	24	96	1 J	350	DG05	21	6.7	17	0.33 U	350	DG05	20	6.4	17
Benzo(a)anthracene	µg/kg	25	24	96	3 J	940	DG05	65	17	140	0.24 U	940	DG05	62	15	130
Benzo(a)pyrene	µg/kg	25	24	96	5	1400	DG05	98.7	27	220 J	0.33 U	1400	DG05	94.7	23	214 J
Benzo(b)fluoranthene	µg/kg	25	24	96	5.1	820	DG05	71	28 J	210 J	0.71 U	820	DG05	68	25 J	200 J
Benzo(b+k)fluoranthene	µg/kg	4	4	100	13 T	163 T	WR-BC-07	60	32	146	13 T	163 T	WR-BC-07	60	32	146
Benzo(e)pyrene	µg/kg	4	4	100	4.8	160 T	GCRSP01W	44	6.3	140	4.8	160 T	GCRSP01W	44	6.3	140
Benzo(g,h,i)perylene	µg/kg	25	24	96	5.3	1200	DG05	82	19	190 J	0.34 U	1200	DG05	79	19	190 J
Benzo(k)fluoranthene	µg/kg	25	24	96	2.7	820	DG05	56	14	79 J	0.49 U	820	DG05	54	13	79 J
C1-Chrysene	µg/kg	4	4	100	5.4	120 T	GCRSP01W	34	5.8	100	5.4	120 T	GCRSP01W	34	5.8	100
C1-Dibenzothiophene	µg/kg	4	1	25	6.9 T	6.9 T	GCRSP01W	6.9	6.9 T	6.9 T	0.21 U	6.9 T	GCRSP01W	1.8	0.15 U	5.9
C1-Fluoranthene/pyrene	µg/kg	4	4	100	6.6	160 T	GCRSP01W	47	10	140	6.6	160 T	GCRSP01W	47	10	140
C1-Fluorene	µg/kg	4	2	50	1.7 J	5.6 T	GCRSP01W	3.7	3.7 J	5.4 J	0.5 U	5.6 T	GCRSP01W	2	1 J	5 J
C1-Phenanthrene/anthracene	µg/kg	4	4	100	1.6 J	52 T	GCRSP01W	16	5.9	46	1.6 J	52 T	GCRSP01W	16	5.9	46
C2-Chrysene	µg/kg	4	3	75	2.6	86 T	GCRSP01W	31	3.9	78	0.37 U	86 T	GCRSP01W	23	3.3	74
C2-Dibenzothiophene	µg/kg	4	2	50	1.3 J	23 T	GCRSP01W	12	12 J	22 J	0.21 U	23 T	GCRSP01W	6.1	0.72 J	20 J
C2-Fluoranthene/pyrene	µg/kg	4	4	100	3.5	110 T	GCRSP01W	31	5.5	94	3.5	110 T	GCRSP01W	31	5.5	94
C2-Fluorene	µg/kg	4	3	75	1.2 J	19 T	GCRSP01W	7.7	2.9	17	0.5 U	19 T	GCRSP01W	5.8	2.1 J	17
C2-Naphthalene	µg/kg	4	4	100	0.88 J	15 T	GCRSP01W	4.9	1.8 J	13 J	0.88 J	15 T	GCRSP01W	4.9	1.8 J	13 J
C2-Phenanthrene/anthracene	µg/kg	4	4	100	2.4 J	78 T	GCRSP01W	23	6.7	68	2.4 J	78 T	GCRSP01W	23	6.7	68
C3-Chrysene	µg/kg	4	1	25	60 T	60 T	GCRSP01W	60	60 T	60 T	0.25 U	60 T	GCRSP01W	15	0.18 U	51
C3-Dibenzothiophene	µg/kg	4	1	25	37 T	37 T	GCRSP01W	37	37 T	37 T	0.21 U	37 T	GCRSP01W	9.4	0.15 U	31
C3-Fluoranthene/pyrene	µg/kg	4	2	50	2.6	70 T	GCRSP01W	36	36	67	0.82 U	70 T	GCRSP01W	18	1.5	60
C3-Fluorene	µg/kg	4	3	75	0.96 J	31 T	GCRSP01W	11	2.4 J	28 J	0.68 U	31 T	GCRSP01W	8.7	1.7 J	27 J
C3-Naphthalene	µg/kg	4	4	100	0.39 J	8.7 T	GCRSP01W	2.9	1.2 J	7.6 J	0.39 J	8.7 T	GCRSP01W	2.9	1.2 J	7.6 J
C3-Phenanthrene/anthracene	µg/kg	4	4	100	3.5	81 T	GCRSP01W	23	4.4	70	3.5	81 T	GCRSP01W	23	4.4	70
C4-Chrysene	µg/kg	4	1	25	41 T	41 T	GCRSP01W	41	41 T	41 T	0.25 U	41 T	GCRSP01W	10	0.18 U	35
C4-Naphthalene	µg/kg	4	2	50	1.8 J	15 T	GCRSP01W	8.4	8.4 J	14 J	0.37 U	15 T	GCRSP01W	4.3	1 J	13 J
C4-Phenanthrene/anthracene	µg/kg	4	3	75	1.3 J	36 T	GCRSP01W	13	2.5 J	33 J	1.1 U	36 T	GCRSP01W	10	1.9 J	31 J
Chrysene	µg/kg	25	24	96	3 J	1200	DG05	86	26	170	0.6 U	1200	DG05	82	23	170
Dibenzo(a,h)anthracene	µg/kg	25	24	96	0.5 J	140	DG05	11	3.4	31 J	0.39 U	140	DG05	11	3 J	30 J
Dibenzothiophene	µg/kg	4	3	75	0.35 J	5 T	GCRSP01W	2.1	0.82 J	4.6 J	0.21 U	5 T	GCRSP01W	1.6	0.59 J	4.4 J
Fluoranthene	µg/kg	25	25	100	0.54 J	2400	DG05	150	37	260	0.54 J	2400	DG05	150	37	260
Fluorene	µg/kg	25	24	96	0.59 J	430	DG05	21	3 J	13	0.28 U	430	DG05	21	3	13
Total HPAHs	µg/kg	25	25	100	0.54 JT	13000 T	DG05	864	240 T	1680	0.54 JT	13000 T	DG05	864	240 T	1680
Indeno(1,2,3-cd)pyrene	µg/kg	25	24	96	4	1000	DG05	73	18	180 J	0.36 U	1000	DG05	70	17	180 J
Total LPAHs	µg/kg	25	25	100	0.84 JT	4900 JT	DG05	248	36 JT	160 J	0.84 JT	4900 JT	DG05	248	36 JT	160 J
Naphthalene	µg/kg	25	20	80	0.84 J	370	DG05	27	8.1 J	48	0.63 U	370	DG05	22	6.5	29
Perylene	µg/kg	4	4	100	5.9	69 T	GCRSP01W	24	10	61	5.9	69 T	GCRSP01W	24	10	61
Phenanthrene	µg/kg	25	24	96	3.7	2700	DG05	140	21	100	0.49 U	2700	DG05	130	20	100
Pyrene	µg/kg	25	24	96	5 J	2900	DG05	190	52	300	0.53 U	2900	DG05	180	50	300
Total BaPEq	µg/kg	25	24	96	7 JT	1830 T	DG05	132	37.7	304 J	0.39 UT	1830 T	DG05	127	32.1 T	296 J
Total cPAHs	µg/kg	25	24	96	29 JT	6300 T	DG05	460	150 J	1000 J	0.71 UT	6300 T	DG05	440	130 T	980 J
Total PAHs	µg/kg	25	25	100	1.4 JT	18000 JT	DG05	1120	273 T	1870	1.4 JT	18000 JT	DG05	1120	273 T	1870
Phthalates																
Bis(2-ethylhexyl) phthalate	µg/kg	21	10	47.6	7.1 J	170	DG07	64	57	140	7.1 J	170	DG07	38	19 J	110
Butylbenzyl phthalate	µg/kg	21	12	57.1	2.8 J	9.6	GCR01E-ALT	5.6	6 J	8.4 J	2.2 U	9.6	GCR01E-ALT	3.8	3.2 J	7.4 JT
Dibutyl phthalate	µg/kg	21	19	90.5	5.6 J	36 T	GCRSP01W	10	8.1 J	16	4.5 U	36 T	GCRSP01W	9.5	8.1 J	14
Diethyl phthalate	µg/kg	21	4	19	1.7 J	4.8 JT	GCRSP01W	3	2.8 J	4.5 J	1.7 J	9.5 U	DG07	3.2	3 U	4.8 U
Dimethyl phthalate	µg/kg	21	2	9.5	2.8 JT	5.6 J	GCA01E	4.2	4.2 J	5.5 J	1 U	5.6 J	GCA01E	1.8	1.6 U	2.8 JT
Di-n-octyl phthalate	µg/kg	21	0	0	--	--	--	--	--	--	1.7 U	3.3 U	DG07	1.1	1.1 U	1.5 U
Semivolatile Organic Compounds																
1,2,4-Trichlorobenzene	µg/kg	21	0	0	--	--	--	--	--	--	2.2 U	4.1 U	DG07	1.4	1.3 U	1.8 U
1,2-Dichlorobenzene	µg/kg	21	0	0	--	--	--	--	--	--	2 U	3.6 U	DG07	1.3	1.2 U	1.6 U
1,3-Dichlorobenzene	µg/kg	21	0	0	--	--	--	--	--	--	2.4 U	4.4 U	DG07	1.5	1.5 U	2 U
1,4-Dichlorobenzene	µg/kg	21	0	0	--	--	--	--	--	--	0.29 U	5.2 U	DG07	1.3	1.5 UT	2.3 U

Table D1.3-8. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
2,4-Dinitrotoluene	µg/kg	21	0	0	--	--	--	--	--	--	1.5 U	7.6 U	DG07	2.2	2.4 U	3.4 U
2,6-Dinitrotoluene	µg/kg	21	0	0	--	--	--	--	--	--	2 U	7.6 U	DG07	2.3	2.4 U	3.4 U
2-Chloronaphthalene	µg/kg	21	0	0	--	--	--	--	--	--	1.6 U	9.8 U	DG07	2.8	3.1 U	4.3 U
2-Nitroaniline	µg/kg	21	0	0	--	--	--	--	--	--	3.2 U	7.3 U	DG07	2.3	2.3 U	3.3 U
3,3'-Dichlorobenzidine	µg/kg	20	0	0	--	--	--	--	--	--	3.7 U	10 U	DG07	3.1	3.1 U	4.5 U
3-Nitroaniline	µg/kg	20	0	0	--	--	--	--	--	--	2.5 U	7.1 U	DG07	2.2	2.2 U	3.2 U
4-Bromophenyl phenyl ether	µg/kg	21	0	0	--	--	--	--	--	--	1.6 U	3.8 U	DG07	1.2	1.2 U	1.7 U
4-Chloroaniline	µg/kg	20	0	0	--	--	--	--	--	--	1.9 U	5.7 U	DG07	1.8	1.8 U	2.6 U
4-Chlorophenyl phenyl ether	µg/kg	21	0	0	--	--	--	--	--	--	1.4 U	5.5 U	DG07	1.6	1.7 U	2.4 U
4-Nitroaniline	µg/kg	21	0	0	--	--	--	--	--	--	1.8 U	9.2 U	DG07	2.7	2.9 U	4.1 U
Aniline	µg/kg	20	2	10	7.1 J	15 JT	GCRSP01W	11	11 J	15 J	1.5 U	15 JT	GCRSP01W	2.3	1.3 U	7.5 J
Azobenzene	µg/kg	21	0	0	--	--	--	--	--	--	1.1 U	6.5 U	DG07	1.9	2.1 U	2.9 U
Benzoic acid	µg/kg	19	2	10.5	180 JT	200 J	DG04	190	190 J	200 J	96 U	260 UJ	DG07	100	90 U	180 J
Benzyl alcohol	µg/kg	21	6	28.6	3 J	270	DG04	54	12 J	210 J	3 J	270	DG04	18	3.3 U	21 J
Bis(2-chloroethoxy) methane	µg/kg	21	0	0	--	--	--	--	--	--	1.5 U	3.6 U	DG07	1.1	1.1 U	1.6 U
Bis(2-chloroethyl) ether	µg/kg	21	0	0	--	--	--	--	--	--	1.9 U	6.5 U	DG07	2	2.1 U	2.9 U
Bis(2-chloroisopropyl) ether	µg/kg	21	0	0	--	--	--	--	--	--	1.8 U	3.3 U	DG07	1.2	1.1 U	1.5 U
Carbazole	µg/kg	21	9	42.9	2 J	27	DG05	6.5	3.8 J	19 J	1.3 U	27	DG05	3.4	1.6 U	6.9 J
Dibenzofuran	µg/kg	25	20	80	0.5 J	47	DG05	4.5	2.1 J	7.3	0.25 U	47	DG05	3.8	2 J	5.1
Hexachlorobenzene	µg/kg	21	1	4.8	0.19 JT	0.19 JT	GCRSP01W	0.19	0.19 JT	0.19 JT	0.068 U	5.7 U	DG07	0.472	0.075 U	2.55 U
Hexachlorobutadiene	µg/kg	21	0	0	--	--	--	--	--	--	0.14 U	3.6 U	DG12	0.49	0.42 U	1.2 U
Hexachlorocyclopentadiene	µg/kg	21	0	0	--	--	--	--	--	--	22 U	41 U	DG07	14	14 U	18 U
Hexachloroethane	µg/kg	21	1	4.8	1.2	1.2	DG07	1.2	1.2	1.2	0.16 U	2.8 U	DG05	0.39	0.27 U	1.2
Isophorone	µg/kg	21	0	0	--	--	--	--	--	--	1 U	4.4 U	DG07	1.3	1.4 U	2 U
Nitrobenzene	µg/kg	21	0	0	--	--	--	--	--	--	2.2 U	5.5 U	DG07	1.7	1.7 U	2.4 U
N-Nitrosodimethylamine	µg/kg	21	0	0	--	--	--	--	--	--	6.1 U	17 U	DG07	5.3	5.5 U	7.5 U
N-Nitrosodiphenylamine	µg/kg	21	1	4.8	7.1 JT	7.1 JT	GCRSP01W	7.1	7.1 JT	7.1 JT	1.6 U	7.1 JT	GCRSP01W	2.1	1.9 U	3 U
N-Nitrosodipropylamine	µg/kg	21	0	0	--	--	--	--	--	--	2.4 U	8.7 U	DG07	2.6	2.7 U	3.9 U
Phenols																
2,3,4,5-Tetrachlorophenol	µg/kg	21	0	0	--	--	--	--	--	--	0.26 U	1.7 U	DG07	0.5	0.55 U	0.75 U
2,3,5,6-Tetrachlorophenol	µg/kg	21	0	0	--	--	--	--	--	--	0.21 U	0.82 U	DG07	0.25	0.26 U	0.36 U
2,4,5-Trichlorophenol	µg/kg	21	0	0	--	--	--	--	--	--	0.71 U	6.1 U	GCR01E-ALT	0.62	0.47 U	0.75 U
2,4,6-Trichlorophenol	µg/kg	21	0	0	--	--	--	--	--	--	0.14 U	1.1 U	DG07	0.31	0.33 U	0.47 U
2,4-Dichlorophenol	µg/kg	21	0	0	--	--	--	--	--	--	1 U	4.9 U	DG07	1.5	1.6 U	2.2 U
2,4-Dimethylphenol	µg/kg	21	0	0	--	--	--	--	--	--	5.5 U	15 U	DG07	4.7	4.6 U	7 U
2,4-Dinitrophenol	µg/kg	21	0	0	--	--	--	--	--	--	17 U	98 U	DG07	29	31 U	43 U
2-Chlorophenol	µg/kg	21	0	0	--	--	--	--	--	--	2 U	4.6 U	DG07	1.5	1.5 U	2.1 U
2-Methylphenol	µg/kg	21	1	4.8	35	35	DG04	35	35	35	1.5 U	35	DG04	4.2	2.9 U	4.6 U
2-Nitrophenol	µg/kg	21	0	0	--	--	--	--	--	--	1.5 U	7.1 U	DG07	2.1	2.2 U	3.2 U
3,4-Dichlorophenol	µg/kg	1	0	0	--	--	--	--	--	--	0.88 U	0.88 U	GCA01E	0.44	0.44 U	0.44 U
3,5-Dichlorophenol	µg/kg	1	0	0	--	--	--	--	--	--	2.7 U	2.7 U	GCA01E	1.4	1.4 U	1.4 U
4,6-Dinitro-2-methylphenol	µg/kg	21	0	0	--	--	--	--	--	--	1.4 U	4.6 U	DG07	1.4	1.5 U	2.1 U
4-Chloro-3-methylphenol	µg/kg	21	0	0	--	--	--	--	--	--	1.4 U	5.7 U	DG07	1.7	1.8 U	2.6 U
4-Methylphenol	µg/kg	21	11	52.4	4.2 JT	89	DG07	23	11	73	1.5 U	89	DG07	13	4.2 JT	57
4-Nitrophenol	µg/kg	21	0	0	--	--	--	--	--	--	18 U	82 U	DG07	24	26 U	36 U
Pentachlorophenol	µg/kg	21	13	61.9	0.47 NJ	4.1 J	DG07	1.2	0.77 J	3.1 J	0.2 U	4.1 J	DG07	0.85	0.71 NJ	2.5 J
Phenol	µg/kg	21	14	66.7	5.1 J	73 T	GCRSP01W	19	15 J	44 J	2.8 U	73 T	GCRSP01W	14	8.6 J	29 J
Petroleum																
Total Petroleum Hydrocarbons (Diesel)	mg/kg	17	16	94.1	5 J	130 JT	DG05	36	34 J	94 J	1.9 U	130 JT	DG05	34	33 JT	92 J
Total Petroleum Hydrocarbons (Gasoline)	mg/kg	17	3	17.6	1.3 J	5.5 JT	DG05	3.3	3.2 J	5.3 J	0.9 U	5.5 JT	DG05	1	0.55 U	3.7 J
Total Petroleum Hydrocarbons (Residual)	mg/kg	17	16	94.1	36 J	440 J	DG03	220	230 J	430 J	4.3 U	440 J	DG03	210	210 JT	420 J
Total Petroleum Hydrocarbons	mg/kg	17	17	100	1.3 JT	480 JT	DG03	240	240 JT	470 J	1.3 JT	480 JT	DG03	240	240 JT	470 J

Table D1.3-8. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	µg/kg	6	0	0	--	--	--	--	--	--	0.082 U	0.11 U	DG14; DG15	0.048	0.0473 U	0.055 U
1,1,1-Trichloroethane	µg/kg	6	0	0	--	--	--	--	--	--	0.12 U	0.16 U	DG15	0.068	0.068 U	0.079 U
1,1,2,2-Tetrachloroethane	µg/kg	6	0	0	--	--	--	--	--	--	0.19 U	0.24 U	DG15	0.11	0.11 U	0.12 U
1,1,2-Trichloroethane	µg/kg	6	0	0	--	--	--	--	--	--	0.11 U	0.14 U	DG15	0.062	0.063 U	0.069 U
1,1-Dichloroethane	µg/kg	6	0	0	--	--	--	--	--	--	0.093 U	0.13 U	DG15	0.0558	0.0575 U	0.0638 U
1,1-Dichloroethene	µg/kg	6	0	0	--	--	--	--	--	--	0.13 U	0.17 U	DG15	0.074	0.075 U	0.084 U
1,2,3-Trichloropropane	µg/kg	6	0	0	--	--	--	--	--	--	0.28 U	0.36 U	DG15	0.16	0.16 U	0.18 U
1,2-Dichloroethane	µg/kg	6	0	0	--	--	--	--	--	--	0.15 U	0.2 U	DG15	0.087	0.088 U	0.099 U
1,2-Dichloropropane	µg/kg	6	0	0	--	--	--	--	--	--	0.11 U	0.14 U	DG15	0.061	0.06 U	0.069 U
1,4-Dichloro-trans-2-butene	µg/kg	6	0	0	--	--	--	--	--	--	0.51 U	0.66 U	DG15	0.29	0.29 U	0.33 U
2-Chloroethyl vinyl ether	µg/kg	6	0	0	--	--	--	--	--	--	0.23 U	0.3 U	DG15	0.13	0.14 U	0.15 U
Acetone	µg/kg	6	0	0	--	--	--	--	--	--	9 U	12 U	DG14; DG15	5.3	5.2 U	6 U
Acrylonitrile	µg/kg	6	0	0	--	--	--	--	--	--	0.63 U	0.82 U	DG15	0.36	0.36 U	0.4 U
Benzene	µg/kg	6	1	16.7	0.082 J	0.082 J	DG18	0.082	0.082 J	0.082 J	0.069 U	0.088 U	DG15	0.0465	0.0408 U	0.0725 J
Bromochloromethane	µg/kg	6	0	0	--	--	--	--	--	--	0.15 U	0.2 U	DG15	0.088	0.088 U	0.099 U
Bromodichloromethane	µg/kg	6	0	0	--	--	--	--	--	--	0.061 U	0.08 U	DG15	0.035	0.035 U	0.0395 U
Bromoform	µg/kg	6	0	0	--	--	--	--	--	--	0.19 U	0.24 U	DG15	0.11	0.11 U	0.12 U
Bromomethane	µg/kg	6	0	0	--	--	--	--	--	--	0.43 U	0.56 U	DG15	0.25	0.25 U	0.28 U
BTEX	µg/kg	6	1	16.7	0.082 JT	0.082 JT	DG18	0.082	0.082 JT	0.082 JT	0.082 JT	0.22 UT	DG15	0.097	0.0975 U	0.109 U
Carbon disulfide	µg/kg	6	0	0	--	--	--	--	--	--	0.11 U	0.14 U	DG15	0.062	0.063 U	0.069 U
Carbon tetrachloride	µg/kg	6	0	0	--	--	--	--	--	--	0.076 U	0.1 U	DG15	0.0437	0.0438 U	0.0493 U
Chlorobenzene	µg/kg	6	0	0	--	--	--	--	--	--	0.092 U	0.12 U	DG14; DG15	0.0538	0.055 U	0.06 U
Chlorodibromomethane	µg/kg	6	0	0	--	--	--	--	--	--	0.16 U	0.2 U	DG15	0.089	0.09 U	0.099 U
Chloroethane	µg/kg	6	0	0	--	--	--	--	--	--	0.31 U	0.4 U	DG15	0.18	0.18 U	0.2 U
Chloroform	µg/kg	6	0	0	--	--	--	--	--	--	0.12 U	0.16 U	DG15	0.071	0.073 U	0.079 U
Chloromethane	µg/kg	6	0	0	--	--	--	--	--	--	0.12 U	0.15 U	DG14; DG15	0.068	0.068 U	0.075 U
cis-1,2-Dichloroethene	µg/kg	6	0	0	--	--	--	--	--	--	0.15 U	0.2 U	DG15	0.087	0.088 U	0.099 U
cis-1,3-Dichloropropene	µg/kg	6	0	0	--	--	--	--	--	--	0.095 U	0.13 U	DG15	0.056	0.0575 U	0.0638 U
Dichlorodifluoromethane	µg/kg	6	0	0	--	--	--	--	--	--	0.09 U	0.12 U	DG14; DG15	0.0527	0.0523 U	0.06 U
Ethylbenzene	µg/kg	6	0	0	--	--	--	--	--	--	0.078 U	0.11 U	DG15	0.0453	0.0448 U	0.0533 U
Ethylene dibromide	µg/kg	6	0	0	--	--	--	--	--	--	0.093 U	0.13 U	DG15	0.0558	0.0575 U	0.0638 U
Isopropylbenzene	µg/kg	6	0	0	--	--	--	--	--	--	0.13 U	0.17 U	DG15	0.076	0.078 U	0.084 U
m,p-Xylene	µg/kg	6	0	0	--	--	--	--	--	--	0.17 U	0.22 U	DG15	0.098	0.098 U	0.11 U
Methyl iodide	µg/kg	6	0	0	--	--	--	--	--	--	0.51 U	0.66 U	DG15	0.29	0.29 U	0.33 U
Methyl isobutyl ketone	µg/kg	6	0	0	--	--	--	--	--	--	0.76 U	1 U	DG15	0.44	0.44 U	0.49 U
Methyl n-butyl ketone	µg/kg	6	0	0	--	--	--	--	--	--	5.4 U	7 U	DG15	3.1	3.1 U	3.5 U
Methyl tert-butyl ether	µg/kg	6	0	0	--	--	--	--	--	--	0.11 U	0.15 U	DG15	0.064	0.063 U	0.074 U
Methylene bromide	µg/kg	6	0	0	--	--	--	--	--	--	0.11 U	0.14 U	DG14; DG15	0.063	0.063 U	0.07 U
Methylene chloride	µg/kg	6	0	0	--	--	--	--	--	--	0.91 U	3.1 U	DG18	0.81	0.65 U	1.4 U
o-Xylene	µg/kg	6	0	0	--	--	--	--	--	--	0.087 U	0.12 U	DG15	0.0511	0.0515 U	0.0588 U
Styrene	µg/kg	6	0	0	--	--	--	--	--	--	0.14 U	0.19 U	DG15	0.083	0.083 U	0.094 U
Tetrachloroethene	µg/kg	6	0	0	--	--	--	--	--	--	0.13 U	0.17 U	DG15	0.076	0.078 U	0.084 U
Toluene	µg/kg	6	0	0	--	--	--	--	--	--	0.11 U	0.16 U	DG18	0.067	0.068 U	0.078 U
trans-1,2-Dichloroethene	µg/kg	6	0	0	--	--	--	--	--	--	0.09 U	0.12 U	DG14; DG15	0.0527	0.0523 U	0.06 U
trans-1,3-Dichloropropene	µg/kg	6	0	0	--	--	--	--	--	--	0.099 U	0.13 U	DG14; DG15	0.0583	0.0575 U	0.065 U
Trichloroethene	µg/kg	6	0	0	--	--	--	--	--	--	0.13 U	0.17 U	DG15	0.073	0.073 U	0.084 U
Trichlorofluoromethane	µg/kg	6	0	0	--	--	--	--	--	--	0.54 U	0.7 U	DG15	0.31	0.31 U	0.35 U
Vinyl chloride	µg/kg	6	0	0	--	--	--	--	--	--	0.22 U	0.28 U	DG15	0.12	0.13 U	0.14 U
Xylene	µg/kg	6	0	0	--	--	--	--	--	--	0.17 UT	0.22 UT	DG15	0.098	0.098 U	0.11 U

Table D1.3-8. Summary Statistics for All COIs and Physical Parameters in Surface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

[c] Total PCBs are total PCB congeners whenever available and total Aroclors if not.

-- data not available.

BaPEq - benzo(a)pyrene equivalent
BTEX - benzene, toluene, ethylbenzene, and xylene
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PAH - polycyclic aromatic hydrocarbon
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-9. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Grainsize																
>9 Phi clay	percent	17	17	100	0.12	17.7	DC07	8.16	8.69	12.3	0.12	17.7	DC07	8.16	8.69	12.3
8-9 Phi clay	percent	17	17	100	0	7.53	DC03	4.04	4.15	7.21	0	7.53	DC03	4.04	4.15	7.21
Coarse sand	percent	17	17	100	0.153 T	34.6	DC05	2.77	0.31	9.26	0.153 T	34.6	DC05	2.77	0.31	9.26
Coarse silt	percent	17	17	100	0.08	29.1	DC02	19	19.3	27.1	0.08	29.1	DC02	19	19.3	27.1
Fine gravel	percent	17	17	100	0	4.61	DC03	0.709	0.18	2.71	0	4.61	DC03	0.709	0.18	2.71
Fine sand	percent	17	17	100	0.93	35.9	DC04	6.7	4.03	18.6	0.93	35.9	DC04	6.7	4.03	18.6
Fine silt	percent	17	17	100	0.24	24.5	DC03	13.1	14.1	18.9	0.24	24.5	DC03	13.1	14.1	18.9
Fines	percent	17	17	100	2.47 T	96.4 T	DC03	69.6	79.9 T	91.8	2.47 T	96.4 T	DC03	69.6	79.9 T	91.8
Medium gravel	percent	17	17	100	0 T	0 T	DC02; DC03; DC04; DC05; DC06; DC07	0	0	0	0 T	0 T	DC02; DC03; DC04; DC05; DC06; DC07	0	0	0
Medium sand	percent	17	17	100	0.24	49.4	DC05	6.61	0.91	46.3	0.24	49.4	DC05	6.61	0.91	46.3
Medium silt	percent	17	17	100	0.08	25.8	DC03	18.6	20 T	25.6	0.08	25.8	DC03	18.6	20 T	25.6
Very coarse sand	percent	17	17	100	0.13 T	5.82	DC05	0.919	0.51	3.68	0.13 T	5.82	DC05	0.919	0.51	3.68
Very fine sand	percent	17	17	100	0.45	25.6	DC06	13.8	13.9	23.6	0.45	25.6	DC06	13.8	13.9	23.6
Very fine silt	percent	17	17	100	0.58	12.1	DC03	6.72	6.85	11.1	0.58	12.1	DC03	6.72	6.85	11.1
Conventionals																
Acid Volatile Sulfides	mg/kg	9	8	88.9	0.8	53	WR-GC-04	14	4.8	45	0.8	53	WR-GC-04	13	4.8	44
Specific Gravity	NA	17	17	100	1.41	1.98 T	DC05	1.64	1.63	1.85	1.41	1.98 T	DC05	1.64	1.63	1.85
Total organic carbon	percent	26	26	100	0.05	2.78	DC03	1	0.97	2.13	0.05	2.78	DC03	1	0.97	2.13
Total solids	percent	27	27	100	53.4	82.7	DC05	65	64	76.5	53.4	82.7	DC05	65	64	76.5
Metals																
Aluminum	mg/kg	17	17	100	9960	23200	DC07	16600	16000	21300	9960	23200	DC07	16600	16000	21300
Antimony	mg/kg	17	17	100	0.08 J	2.38 J	DC02	0.567	0.37 J	1.52 J	0.08 J	2.38 J	DC02	0.567	0.37 J	1.52 J
Arsenic	mg/kg	26	26	100	0.6 J	13.3	DC02	4.06	3.75	8.67	0.6 J	13.3	DC02	4.06	3.75	8.67
Cadmium	mg/kg	26	26	100	0.03	1.95	DC02	0.838	0.77	1.83	0.03	1.95	DC02	0.838	0.77	1.83
Chromium	mg/kg	26	26	100	6.6	33.8	DC03	23.2	24.8	32	6.6	33.8	DC03	23.2	24.8	32
Copper	mg/kg	26	26	100	8.9	43.6	DC03	25.7	26.5	38.8	8.9	43.6	DC03	25.7	26.5	38.8
Lead	mg/kg	26	26	100	1.2	37.7	DC02	15.8	14.9	33.2	1.2	37.7	DC02	15.8	14.9	33.2
Mercury	mg/kg	26	26	100	0.006 J	0.282 J	DC03	0.0924	0.0785 J	0.252 J	0.006 J	0.282 J	DC03	0.0924	0.0785 J	0.252 J
Nickel	mg/kg	26	26	100	4.4	20.4 J	DC07	15.9	16.8 J	19.7 J	4.4	20.4 J	DC07	15.9	16.8 J	19.7 J
Selenium	mg/kg	17	15	88.2	0.08 J	0.24	DC07	0.136	0.14	0.191	0.02 U	0.24	DC07	0.121	0.14	0.184
Silver	mg/kg	26	26	100	0.03	0.8	DC03	0.371	0.453	0.658	0.03	0.8	DC03	0.371	0.453	0.658
Zinc	mg/kg	26	26	100	10.8	242	DC02	118	125	209	10.8	242	DC02	118	125	209
PCB Aroclors																
Aroclor 1016	µg/kg	26	0	0	--	--	--	--	--	--	2.1 U	10 UJ	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	2.6	1.4 U	5 U
Aroclor 1221	µg/kg	26	0	0	--	--	--	--	--	--	2.1 U	10 UJ	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	2.6	1.4 U	5 U
Aroclor 1232	µg/kg	26	0	0	--	--	--	--	--	--	2.1 U	10 UJ	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	2.6	1.4 U	5 U
Aroclor 1242	µg/kg	26	1	3.8	29	29	WR-GC-04	29	29	29	2.1 U	29	WR-GC-04	3.5	1.4 U	5 U
Aroclor 1248	µg/kg	26	2	7.7	46 J	150	DC03	98	98 J	140 J	2.1 U	150	DC03	10	1.5 U	36 J
Aroclor 1254	µg/kg	26	11	42.3	8.4 J	100	DC03	37	31 J	79 J	2.1 U	100	DC03	18	5 U	55 J
Aroclor 1260	µg/kg	26	11	42.3	5	83 J	DC03	22	17 J	59 J	2.1 U	83 J	DC03	12	5	35 J
Aroclor 1262	µg/kg	17	0	0	--	--	--	--	--	--	2.1 U	3.1 U	DC03	1.3	1.4 U	1.5 U
Aroclor 1268	µg/kg	17	0	0	--	--	--	--	--	--	2.1 U	3.1 U	DC03	1.3	1.4 U	1.5 U
Aroclors	µg/kg	26	13	50	5 T	250 T	DC03	67	46 JT	180 J	2.1 UT	250 T	DC03	35	5 U	130 J
PCBs[c]	µg/kg															
Total PCBs	µg/kg	26	13	50	5 T	250 T	DC03	67	46 JT	180 J	2.1 UT	250 T	DC03	35	5 U	130 J

Table D1.3-9. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
PCDD/Fs Homologs																
Heptachlorodibenzofuran homologs	pg/g	17	13	76.5	0.053	60.008	DC06	9.169	2.939	35.056	0.011 U	60.008	DC06	7.0139	2.712	26.738
Heptachlorodibenzo-p-dioxin homologs	pg/g	17	14	82.4	0.921	125.493	DC06	23.6172	9.831	77.718	0.289 U	125.493	DC06	19.5267	8.337	66.693
Hexachlorodibenzofuran homologs	pg/g	17	13	76.5	0.033	18.835	DC06	3.5206	1.489	11.342	0.006 U	18.835	DC06	2.6931	1.315	8.8438
Hexachlorodibenzo-p-dioxin homologs	pg/g	17	16	94.1	0.217	14.098	DC06	2.5252	0.887	7.777	0.01 U	14.098	DC06	2.3769	0.783	7.3556
Octachlorodibenzofuran	pg/g	17	10	58.8	0.86 J	87.427	DC06	15.883	4.5585 J	59.86	0.029 U	87.427	DC06	9.4162	2.476 J	38.419
Octachlorodibenzo-p-dioxin	pg/g	17	13	76.5	4.593 J	646.924	DC06	132.843	50.158	426.257	1.659 U	646.924	DC06	101.976	41.137	352.701
Pentachlorodibenzofuran homologs	pg/g	17	12	70.6	0.073	7.946	DC06	2.004	0.8755	5.763	0.004 U	7.946	DC06	1.416	0.512	4.77
Pentachlorodibenzo-p-dioxin homologs	pg/g	17	12	70.6	0.02	1.731	DC06	0.3383	0.112	1.066	0.006 U	1.731	DC06	0.2401	0.043	0.763
Tetrachlorodibenzofuran homologs	pg/g	17	16	94.1	0.05	4.055	DC06	0.7914	0.251	2.806	0.005 U	4.055	DC06	0.745	0.249	2.722
Tetrachlorodibenzo-p-dioxin homologs	pg/g	17	8	47.1	0.042	0.763	DC06	0.234	0.137	0.655	0.005 U	0.763	DC06	0.113	0.008 U	0.517
Total PCDD/F	pg/g	17	17	100	0.093 T	967.3 T	DC06	145	59.31 JT	487.7	0.093 T	967.3 T	DC06	145	59.31 JT	487.7
PCDD/Fs																
1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/g	17	13	76.5	0.029 J	11.676	DC06	2.071	0.866 J	6.7278	0.011 U	11.676	DC06	1.5857	0.717 J	5.0784
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/g	17	12	70.6	0.327 J	47.745	DC06	10.295	4.3495	31.081	0.194 U	47.745	DC06	7.3411	2.889 J	23.506
1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/g	17	6	35.3	0.064 J	1.024 J	DC06	0.3162	0.224 J	0.842 J	0.014 U	1.024 J	DC06	0.1226	0.0195 U	0.4416 J
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	17	10	58.8	0.037 J	1.316 J	DC06	0.3806	0.2055 J	1.035 J	0.006 U	1.316 J	DC06	0.2269	0.113 J	0.816 J
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/g	17	4	23.5	0.052 J	0.217 J	DC06	0.121	0.107 J	0.201 J	0.009 U	0.217 J	DC06	0.0357	0.0085 U	0.134 J
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	17	9	52.9	0.012 J	1 J	DC06	0.244	0.103 J	0.728 J	0.007 U	1 J	DC06	0.139	0.059 J	0.455 J
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/g	17	10	58.8	0.048 J	1.534 J	DC06	0.4398	0.265 J	1.156 J	0.011 U	1.534 J	DC06	0.2635	0.129 J	0.8612 J
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	17	0	0	--	--	--	--	--	--	0.007 U	0.032 U	DC06	0.00865	0.007 U	0.0156 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/g	17	9	52.9	0.063 J	0.697 J	DC06	0.242	0.197 J	0.563 J	0.01 U	0.697 J	DC06	0.14	0.063 J	0.43 J
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	17	7	41.2	0.065 J	0.391 J	DC05	0.198	0.199 J	0.382 J	0.004 U	0.391 J	DC05	0.0851	0.006 U	0.368 J
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/g	17	3	17.6	0.025 J	0.083 J	DC03	0.056	0.06 J	0.0807 J	0.006 U	0.135 U	DC06	0.021	0.007 U	0.0706 J
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	17	5	29.4	0.075 J	0.861 J	DC06	0.329	0.248 J	0.74 J	0.006 U	0.861 J	DC06	0.108	0.0065 U	0.377 J
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	17	8	47.1	0.04 J	0.296 J	DC06	0.121	0.0935 J	0.254 J	0.004 U	0.296 J	DC06	0.0608	0.0365 U	0.201 J
2,3,7,8-Tetrachlorodibenzofuran	pg/g	17	2	11.8	0.459 J	0.506	DC05	0.483	0.483 J	0.504 J	0.005 U	0.506	DC05	0.121	0.11 U	0.468 J
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	17	0	0	--	--	--	--	--	--	0.007 U	0.121 U	DC06	0.0108	0.0045 U	0.0313 U
TCDD TEQ (ND = 0)	pg/g	17	16	94.1	0.00252 T	1.53 JT	DC06	0.2595	0.1135 J	0.86175 J	0.00252 T	1.53 JT	DC06	0.24447	0.108 JT	0.8172 J
Total TCDD TEQ (ND = 0)	pg/g	17	16	94.1	0.00252 A	1.53 JA	DC06	0.2595	0.1135 J	0.86175 J	0.00252 A	1.53 JA	DC06	0.24447	0.108 JA	0.8172 J
Pesticides																
2,4'-DDD	µg/kg	17	11	64.7	0.78 J	7.7 NJ	DC03	3.7	3.2	7.3 J	0.26 U	7.7 NJ	DC03	2.4	2.2	7.1 J
2,4'-DDE	µg/kg	17	5	29.4	0.39 J	3.6	DC03	1.6	1.5	3.2	0.28 U	3.6	DC03	0.67	0.19 U	2.1
2,4'-DDT	µg/kg	17	4	23.5	0.88 J	2.2 J	DC05	1.6	1.6 J	2.2 J	0.17 U	4.2 U	DC03	0.76	0.49 U	2.1 J
4,4'-DDD	µg/kg	26	16	61.5	0.28 J	22	DC03	6.8	6	21	0.15 U	22	DC03	4.4	1.1	18
4,4'-DDE	µg/kg	26	16	61.5	0.23 J	11 NJ	DC03	4.7	4.1	10 J	0.13 U	11 NJ	DC03	3.1	1 U	9.4 J
4,4'-DDT	µg/kg	26	11	42.3	0.28 NJ	36	DC03	7.83	1.5	31 J	0.078 U	36	DC03	3.69	1 U	22.5 J
Aldrin	µg/kg	26	3	11.5	0.2 J	2.8 NJ	DC03	1.2	0.49 J	2.6 J	0.19 U	2.8 NJ	DC03	0.51	0.13 U	1 UJ
alpha-Endosulfan	µg/kg	26	0	0	--	--	--	--	--	--	0.21 U	2 UJ	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	0.45	0.14 U	1 U
alpha-Hexachlorocyclohexane	µg/kg	26	0	0	--	--	--	--	--	--	0.32 U	2 UJ	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	0.48	0.21 U	1 U
beta-Endosulfan	µg/kg	26	1	3.8	0.41 J	0.41 J	DC06	0.41	0.41 J	0.41 J	0.23 U	2 UJ	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	0.48	0.17 U	1 U
beta-Hexachlorocyclohexane	µg/kg	26	1	3.8	1.2	1.2	DC03	1.2	1.2	1.2	0.37 U	2 UJ	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	0.56	0.26 U	1 UJ
cis-Chlordane	µg/kg	17	0	0	--	--	--	--	--	--	0.28 U	0.55 U	DC03	0.18	0.18 U	0.22 U
cis-Nonachlor	µg/kg	17	0	0	--	--	--	--	--	--	0.11 U	3.4 U	DC03	0.49	0.47 U	1.2 U
delta-Hexachlorocyclohexane	µg/kg	26	0	0	--	--	--	--	--	--	0.067 U	2 UJ	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	0.395	0.045 U	1 U
Dieldrin	µg/kg	26	0	0	--	--	--	--	--	--	0.36 U	5 U	WR-BC-03	0.55	0.24 U	1 U

Table D1.3-9. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Endosulfan sulfate	µg/kg	26	3	11.5	0.22 NJ	1 NJ	DC03	0.593	0.56 NJ	0.956 J	0.096 U	2 UJ	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	0.511	0.375 U	1 J
Endrin	µg/kg	26	0	0	--	--	--	--	--	--	0.25 U	2 UJ	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	0.5	0.33 U	1 UJ
Endrin aldehyde	µg/kg	26	3	11.5	0.65 J	1.2	DC03	0.89	0.82 J	1.16 J	0.065 U	2 UJ	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	0.539	0.575 J	1 UJ
Endrin ketone	µg/kg	17	0	0	--	--	--	--	--	--	0.1 U	1.1 U	DC05	0.2	0.095 U	0.51 U
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	26	0	0	--	--	--	--	--	--	0.19 U	2 UJ	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	0.46	0.14 U	1 U
Heptachlor	µg/kg	26	0	0	--	--	--	--	--	--	0.097 U	2 UJ	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	0.414	0.0725 U	1 U
Heptachlor epoxide	µg/kg	26	6	23.1	0.33 J	0.97 J	DC03	0.59	0.49 J	0.95 J	0.16 U	2.5 U	DC03	0.57	0.49 J	1 U
Methoxychlor	µg/kg	26	2	7.7	0.34 NJ	0.39 NJ	DC05	0.37	0.37 J	0.39 J	0.13 U	4 UJ	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	0.84	0.45 J	2 U
Mirex	µg/kg	17	4	23.5	0.28 J	0.91 J	DC03	0.51	0.43 J	0.84 J	0.13 U	1.5 U	DC03	0.22	0.08 U	0.78 J
Oxychlordane	µg/kg	17	1	5.9	2.2 NJ	2.2 NJ	DC03	2.2	2.2 NJ	2.2 NJ	0.45 U	2.2 NJ	DC03	0.4	0.29 U	0.7 J
Total chlordanes	µg/kg	26	5	19.2	0.75 NJT	2.2 NJT	DC03	1.5	1.6 JT	2.1 J	0.45 UT	10 UA	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	2.3	1.3 J	5 U
Total Endosulfan	µg/kg	26	4	15.4	0.22 NJT	1 NJT	DC03	0.55	0.49 J	0.93 J	0.22 NJT	2 UT	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	0.54	0.46 J	1 J
Total DDD	µg/kg	26	16	61.5	0.28 JT	29 T	DC03	9.4	7.1 J	26	0.26 UT	29 T	DC03	6	1.5 J	23 J
Total DDx	µg/kg	26	17	65.4	0.28 NJT	80 NJT	DC03	19	12 A	67 J	0.28 NJT	80 NJT	DC03	13	2.3 J	57 J
Total DDE	µg/kg	26	16	61.5	0.23 JT	15 NJT	DC03	5.2	4.1	12 J	0.23 JT	15 NJT	DC03	3.4	1 U	11 J
Total DDT	µg/kg	26	11	42.3	0.28 NJT	36 T	DC03	8.4	2.7 T	32 J	0.17 UT	36 T	DC03	4	1 U	24 J
Total 4,4'-DDx	µg/kg	26	17	65.4	0.28 JT	69 JT	DC03	16	11 T	59 J	0.15 UT	69 JT	DC03	11	1.9 J	49 J
Toxaphene	µg/kg	26	0	0	--	--	--	--	--	--	11 U	110 U	DC03	16	15 U	36 U
trans-Chlordane	µg/kg	17	4	23.5	0.75 NJ	1.9 J	DC03	1.31	1.3 J	1.86 J	0.078 U	1.9 J	DC03	0.451	0.105 U	1.66 J
trans-Nonachlor	µg/kg	17	0	0	--	--	--	--	--	--	0.11 U	1 U	DC03	0.14	0.07 U	0.45 U
Polycyclic Aromatic Hydrocarbons																
2-Methylnaphthalene	µg/kg	26	19	73.1	2 J	250	DC03	24	6.1	95	0.44 U	250	DC03	17	3.5 J	65 J
Acenaphthene	µg/kg	26	20	76.9	0.48 J	1400	DC03	84	6.9 J	170	0.2 U	1400	DC03	65	2.8 J	91
Acenaphthylene	µg/kg	26	21	80.8	0.3 J	160	DC03	13	4 J	19	0.27 U	160	DC03	10	3	18
Anthracene	µg/kg	26	21	80.8	0.52 J	1300	DC03	74	7.3	72	0.27 U	1300	DC03	60	4	62
Benzo(a)anthracene	µg/kg	26	22	84.6	1 J	840	DC03	66	28	87 J	0.24 U	840	DC03	56	15	87 J
Benzo(a)pyrene	µg/kg	26	23	88.5	0.9 J	770	DC03	73.2	39	123 J	0.32 U	770	DC03	64.8	23.5	122 J
Benzo(b)fluoranthene	µg/kg	26	22	84.6	0.67 J	460	DC03	51	29	81 J	0.67 J	460	DC03	43	18 J	80 J
Benzo(b+k)fluoranthene	µg/kg	9	9	100	3 T	160 T	WR-GC-04	42.3	10 T	145	3 T	160 T	WR-GC-04	42.3	10 T	145
Benzo(g,h,i)perylene	µg/kg	26	23	88.5	0.64 J	530	DC03	58.4	35	120 J	0.34 U	530	DC03	51.7	21.5	119 J
Benzo(k)fluoranthene	µg/kg	26	22	84.6	0.66 J	440	DC03	45	25	79 J	0.48 U	440	DC03	38	17	79 J
Chrysene	µg/kg	26	23	88.5	0.7 J	1100	DC03	84.2	33	119 J	0.6 U	1100	DC03	74.6	21.5	118 J
Dibenzo(a,h)anthracene	µg/kg	26	21	80.8	0.8 J	79	DC03	9.2	5 J	19 J	0.32 U	79	DC03	7.5	3.9	18 J
Fluoranthene	µg/kg	26	23	88.5	0.7 J	2800	DC03	186	55	277 J	0.5 U	2800	DC03	164	41.5	257 J
Fluorene	µg/kg	26	22	84.6	0.28 J	1000	DC03	55	4.1	72	0.23 U	1000	DC03	47	3 J	64
Total HPAHs	µg/kg	26	24	92.3	0.64 JT	11000 T	DC03	824	350	1350	0.64 JT	11000 T	DC03	761	240 J	1320
Indeno(1,2,3-cd)pyrene	µg/kg	26	23	88.5	0.55 J	480	DC03	51.8	30	107 J	0.35 U	480	DC03	45.8	17.5	105 J
Total LPAHs	µg/kg	26	26	100	0.49 JT	12000 T	DC03	576	43 J	853	0.49 JT	12000 T	DC03	576	43 J	853
Naphthalene	µg/kg	27	20	74.1	0.6 J	330	DC03	43	12	270	0.49 U	330	DC03	32	4 J	200
Phenanthrene	µg/kg	26	26	100	0.49 J	7200	DC03	330	20 J	360	0.49 J	7200	DC03	330	20 J	360

Table D1.3-9. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Pyrene	µg/kg	26	24	92.3	0.64 J	3900	DC03	252	82	420	0.53 U	3900	DC03	233	60	400
Total BaPEq	µg/kg	26	23	88.5	1.15 JT	1030 T	DC03	98.4	54.5 T	169 J	0.38 UT	1030 T	DC03	87	31.5 J	167 J
Total cPAHs	µg/kg	26	23	88.5	4.9 JT	4200 T	DC03	370	190 T	610 J	0.7 UT	4200 T	DC03	330	120 J	610 J
Total PAHs	µg/kg	26	26	100	0.49 JT	23000 T	DC03	1339	310 J	2202	0.49 JT	23000 T	DC03	1339	310 J	2202
Phthalates																
Bis(2-ethylhexyl) phthalate	µg/kg	17	16	94.1	3.1 J	39	DC04	11	8.2 J	23 J	2.5 U	39	DC04	10	8.1 J	22 J
Butylbenzyl phthalate	µg/kg	17	0	0	--	--	--	--	--	--	1.9 U	6.2 U	DC04	1.4	1.2 U	2.5 U
Dibutyl phthalate	µg/kg	17	14	82.4	3.8 J	11	DC03	6.5	6.1 J	10	3.8 J	11	DC03	5.7	5.9 J	10
Diethyl phthalate	µg/kg	17	0	0	--	--	--	--	--	--	4.4 U	6 U	DC03	2.7	2.8 U	3 U
Dimethyl phthalate	µg/kg	17	0	0	--	--	--	--	--	--	2.3 U	3.1 U	DC03	1.4	1.5 U	1.6 U
Di-n-octyl phthalate	µg/kg	17	0	0	--	--	--	--	--	--	1.5 U	2.1 U	DC03	0.95	0.95 U	1.1 U
Semivolatile Organic Compounds																
1,2,4-Trichlorobenzene	µg/kg	17	0	0	--	--	--	--	--	--	1.9 U	2.6 U	DC03	1.2	1.2 U	1.3 U
1,2-Dichlorobenzene	µg/kg	17	0	0	--	--	--	--	--	--	1.7 U	2.3 U	DC03	1	1.1 U	1.2 U
1,3-Dichlorobenzene	µg/kg	17	0	0	--	--	--	--	--	--	2 U	2.8 U	DC03	1.3	1.3 U	1.4 U
1,4-Dichlorobenzene	µg/kg	18	0	0	--	--	--	--	--	--	0.23 U	0.34 U	DC03	0.15	0.15 U	0.17 U
2,4-Dinitrotoluene	µg/kg	17	0	0	--	--	--	--	--	--	3.5 U	4.8 U	DC03	2.2	2.3 U	2.4 U
2,6-Dinitrotoluene	µg/kg	17	0	0	--	--	--	--	--	--	3.5 U	4.8 U	DC03	2.2	2.3 U	2.4 U
2-Chloronaphthalene	µg/kg	17	0	0	--	--	--	--	--	--	4.5 U	6.2 U	DC03	2.8	2.9 U	3.1 U
2-Nitroaniline	µg/kg	17	0	0	--	--	--	--	--	--	3.4 U	4.6 U	DC03	2.1	2.2 U	2.3 U
3,3'-Dichlorobenzidine	µg/kg	16	0	0	--	--	--	--	--	--	4.7 U	6.4 U	DC03	2.9	3 U	3.2 U
3-Nitroaniline	µg/kg	17	0	0	--	--	--	--	--	--	3.3 U	4.5 U	DC03	2	2.1 U	2.3 U
4-Bromophenyl phenyl ether	µg/kg	17	0	0	--	--	--	--	--	--	1.8 U	2.4 U	DC03; DC04	1.1	1.2 U	1.2 U
4-Chloroaniline	µg/kg	17	0	0	--	--	--	--	--	--	2.7 U	3.6 U	DC03	1.6	1.7 U	1.8 U
4-Chlorophenyl phenyl ether	µg/kg	17	0	0	--	--	--	--	--	--	2.5 U	3.5 U	DC03	1.6	1.6 U	1.8 U
4-Nitroaniline	µg/kg	17	0	0	--	--	--	--	--	--	4.3 U	5.8 U	DC03	2.6	2.7 U	2.9 U
Aniline	µg/kg	17	4	23.5	2.7 J	130	DC03	35	3.6 J	110 J	1.9 U	130	DC03	9.1	1.2 U	29 J
Azobenzene	µg/kg	17	0	0	--	--	--	--	--	--	3 U	4.1 U	DC03	1.9	1.9 U	2.1 U
Benzoic acid	µg/kg	17	0	0	--	--	--	--	--	--	120 U	170 U	DC03	76	80 U	85 U
Benzyl alcohol	µg/kg	17	0	0	--	--	--	--	--	--	4.7 U	6.4 U	DC03	2.9	3 U	3.2 U
Bis(2-chloroethoxy) methane	µg/kg	17	0	0	--	--	--	--	--	--	1.7 U	2.3 U	DC03	1	1.1 U	1.2 U
Bis(2-chloroethyl) ether	µg/kg	17	0	0	--	--	--	--	--	--	3 U	4.1 U	DC03	1.9	1.9 U	2.1 U
Bis(2-chloroisopropyl) ether	µg/kg	17	0	0	--	--	--	--	--	--	1.5 U	2.1 U	DC03	0.95	0.95 U	1.1 U
Carbazole	µg/kg	17	6	35.3	2.5 J	110	DC03	21	2.9 J	84 J	1.7 U	110	DC03	8	1.1 U	25 J
Dibenzofuran	µg/kg	26	19	73.1	0.32 J	140	DC03	12	2.5	40	0.21 U	140	DC03	8.7	2.3 J	24 J
Hexachlorobenzene	µg/kg	17	1	5.9	0.42 J	0.42 J	DC06	0.42	0.42 J	0.42 J	0.096 U	3.3 U	DC05	0.207	0.065 U	0.73 U
Hexachlorobutadiene	µg/kg	17	0	0	--	--	--	--	--	--	0.6 U	0.88 U	DC03	0.38	0.39 U	0.43 U
Hexachlorocyclopentadiene	µg/kg	17	0	0	--	--	--	--	--	--	19 U	26 U	DC03	12	12 U	13 U
Hexachloroethane	µg/kg	17	0	0	--	--	--	--	--	--	0.38 U	1.7 U	DC03	0.38	0.35 U	0.61 U
Isophorone	µg/kg	17	0	0	--	--	--	--	--	--	2 U	2.8 U	DC03	1.3	1.3 U	1.4 U
Nitrobenzene	µg/kg	17	0	0	--	--	--	--	--	--	2.5 U	3.5 U	DC03	1.6	1.6 U	1.8 U
N-Nitrosodimethylamine	µg/kg	17	0	0	--	--	--	--	--	--	7.6 U	11 U	DC03; DC04	4.8	4.9 U	5.5 U
N-Nitrosodiphenylamine	µg/kg	17	0	0	--	--	--	--	--	--	2.8 U	3.8 U	DC03	1.7	1.8 U	1.9 U
N-Nitrosodipropylamine	µg/kg	17	0	0	--	--	--	--	--	--	4 U	5.5 U	DC03	2.5	2.6 U	2.8 U
Phenols																
2,3,4,5-Tetrachlorophenol	µg/kg	17	0	0	--	--	--	--	--	--	0.75 U	1.2 U	DC03	0.49	0.49 U	0.56 U
2,3,5,6-Tetrachlorophenol	µg/kg	17	0	0	--	--	--	--	--	--	0.37 U	3.3 U	DC03	0.32	0.24 U	0.55 U
2,4,5-Trichlorophenol	µg/kg	17	0	0	--	--	--	--	--	--	0.67 U	0.99 U	DC03	0.43	0.43 U	0.48 U
2,4,6-Trichlorophenol	µg/kg	17	0	0	--	--	--	--	--	--	0.48 U	0.7 U	DC03	0.3	0.31 U	0.35 U
2,4-Dichlorophenol	µg/kg	17	0	0	--	--	--	--	--	--	2.3 U	3.1 U	DC03	1.4	1.5 U	1.6 U
2,4-Dimethylphenol	µg/kg	17	0	0	--	--	--	--	--	--	6.9 U	9.4 U	DC03	4.3	4.4 U	4.7 U
2,4-Dinitrophenol	µg/kg	17	1	5.9	60 J	60 J	DC06	60	60 J	60 J	45 U	62 U	DC03	30	29 U	37 J
2-Chlorophenol	µg/kg	17	0	0	--	--	--	--	--	--	2.2 U	2.9 U	DC03; DC04	1.3	1.4 U	1.5 U
2-Methylphenol	µg/kg	17	0	0	--	--	--	--	--	--	4.3 U	5.8 U	DC03	2.6	2.7 U	2.9 U
2-Nitrophenol	µg/kg	17	0	0	--	--	--	--	--	--	3.3 U	4.5 U	DC03	2	2.1 U	2.3 U
4,6-Dinitro-2-methylphenol	µg/kg	17	0	0	--	--	--	--	--	--	2.2 U	2.9 U	DC03; DC04	1.3	1.4 U	1.5 U

Table D1.3-9. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
4-Chloro-3-methylphenol	µg/kg	17	0	0	--	--	--	--	--	--	2.7 U	3.6 U	DC03	1.6	1.7 U	1.8 U
4-Methylphenol	µg/kg	17	5	29.4	9.2 J	24	DC06	13	11	22	3.7 U	24	DC06	5.4	2.3 U	14
4-Nitrophenol	µg/kg	17	0	0	--	--	--	--	--	--	38 U	52 U	DC03	23	24 U	26 U
Pentachlorophenol	µg/kg	17	8	47.1	0.5 J	6 J	DC02	1.4	0.54 J	4.6 J	0.17 U	6 J	DC02	0.73	0.12 U	2.8 J
Phenol	µg/kg	17	17	100	2.8 J	12 J	DC03; DC06	7.1	7.4 J	12 J	2.8 J	12 J	DC03; DC06	7.1	7.4 J	12 J
Petroleum																
Total Petroleum Hydrocarbons (Diesel)	mg/kg	17	17	100	2 JT	370 J	DC03	62	35 J	270 J	2 JT	370 J	DC03	62	35 J	270 J
Total Petroleum Hydrocarbons (Gasoline)	mg/kg	18	7	38.9	1.4 J	37 J	DC03	8.8	1.9 J	30 J	0.72 U	37 J	DC03	3.9	0.85 U	18 J
Total Petroleum Hydrocarbons (Residual)	mg/kg	17	14	82.4	7.4 JT	680 J	DC03	220	150 J	670 J	7.4 JT	680 J	DC03	180	130 J	660 J
Total Petroleum Hydrocarbons	mg/kg	17	17	100	2.4 JT	1100 JT	DC03	250	170 JT	970 J	2.4 JT	1100 JT	DC03	250	170 JT	970 J
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane	µg/kg	18	0	0	--	--	--	--	--	--	0.066 U	0.097 U	DC03	0.042	0.0425 U	0.0477 U
1,1,1-Trichloroethane	µg/kg	18	0	0	--	--	--	--	--	--	0.092 U	0.14 U	DC03	0.0609	0.06 U	0.07 U
1,1,2,2-Tetrachloroethane	µg/kg	18	0	0	--	--	--	--	--	--	0.15 U	0.22 U	DC03	0.094	0.095 U	0.11 U
1,1,2-Trichloroethane	µg/kg	18	0	0	--	--	--	--	--	--	0.083 U	0.13 U	DC03	0.0542	0.055 U	0.0608 U
1,1-Dichloroethane	µg/kg	18	0	0	--	--	--	--	--	--	0.074 U	0.11 U	DC03; DC04	0.048	0.048 U	0.055 U
1,1-Dichloroethene	µg/kg	18	0	0	--	--	--	--	--	--	0.11 U	0.15 U	DC03	0.067	0.065 U	0.075 U
1,2,3-Trichloropropane	µg/kg	18	0	0	--	--	--	--	--	--	0.22 U	0.33 U	DC03	0.14	0.15 U	0.16 U
1,2-Dichloroethane	µg/kg	18	0	0	--	--	--	--	--	--	0.12 U	0.18 U	DC03	0.076	0.078 U	0.086 U
1,2-Dichloropropane	µg/kg	18	0	0	--	--	--	--	--	--	0.08 U	0.12 U	DC03	0.0527	0.055 U	0.06 U
1,4-Dichloro-trans-2-butene	µg/kg	18	0	0	--	--	--	--	--	--	0.4 U	0.59 U	DC03	0.26	0.26 U	0.29 U
2-Chloroethyl vinyl ether	µg/kg	18	0	0	--	--	--	--	--	--	0.19 U	0.27 U	DC03	0.12	0.12 U	0.14 U
Acetone	µg/kg	18	0	0	--	--	--	--	--	--	11 U	120 U	DC07	16	10 U	41 U
Acrylonitrile	µg/kg	18	0	0	--	--	--	--	--	--	0.5 U	0.74 U	DC03	0.32	0.33 U	0.36 U
Benzene	µg/kg	18	0	0	--	--	--	--	--	--	0.054 U	0.079 U	DC03	0.0343	0.0345 U	0.0387 U
Bromochloromethane	µg/kg	18	0	0	--	--	--	--	--	--	0.12 U	0.18 U	DC03	0.079	0.08 U	0.09 U
Bromodichloromethane	µg/kg	18	0	0	--	--	--	--	--	--	0.049 U	0.072 U	DC03	0.0312	0.0315 U	0.0352 U
Bromoform	µg/kg	18	0	0	--	--	--	--	--	--	0.15 U	0.22 U	DC03	0.094	0.095 U	0.11 U
Bromomethane	µg/kg	18	0	0	--	--	--	--	--	--	0.34 U	0.5 U	DC03	0.22	0.22 U	0.25 U
BTEX	µg/kg	18	2	11.1	0.18 JT	1.8 JT	DC03	0.99	0.99 J	1.7 J	0.14 UT	1.8 JT	DC03	0.19	0.09 U	0.42 J
Carbon disulfide	µg/kg	18	6	33.3	0.11 J	0.43 J	DC07	0.203	0.165 J	0.378 J	0.082 U	0.43 J	DC07	0.103	0.055 U	0.252 J
Carbon tetrachloride	µg/kg	18	0	0	--	--	--	--	--	--	0.061 U	0.09 U	DC03	0.0389	0.0395 U	0.0442 U
Chlorobenzene	µg/kg	18	0	0	--	--	--	--	--	--	0.073 U	0.11 U	DC03	0.0468	0.047 U	0.055 U
Chlorodibromomethane	µg/kg	18	0	0	--	--	--	--	--	--	0.13 U	0.18 U	DC03	0.08	0.08 U	0.09 U
Chloroethane	µg/kg	18	0	0	--	--	--	--	--	--	0.25 U	0.36 U	DC03	0.16	0.16 U	0.18 U
Chloroform	µg/kg	18	0	0	--	--	--	--	--	--	0.096 U	0.15 U	DC03	0.0638	0.065 U	0.0708 U
Chloromethane	µg/kg	18	0	0	--	--	--	--	--	--	0.091 U	0.14 U	DC03	0.06	0.06 U	0.07 U
cis-1,2-Dichloroethene	µg/kg	18	0	0	--	--	--	--	--	--	0.12 U	0.18 U	DC03	0.076	0.078 U	0.086 U
cis-1,3-Dichloropropene	µg/kg	18	0	0	--	--	--	--	--	--	0.075 U	0.12 U	DC03	0.0488	0.0488 U	0.0558 U
Dichlorodifluoromethane	µg/kg	18	0	0	--	--	--	--	--	--	0.072 U	0.11 U	DC03	0.0462	0.0465 U	0.055 U
Ethylbenzene	µg/kg	18	0	0	--	--	--	--	--	--	0.062 U	0.091 U	DC03	0.0397	0.04 U	0.0451 U
Ethylene dibromide	µg/kg	18	0	0	--	--	--	--	--	--	0.074 U	0.11 U	DC03; DC04	0.048	0.048 U	0.055 U
Isopropylbenzene	µg/kg	18	2	11.1	0.28 J	2.6	DC03	1.4	1.4 J	2.5 J	0.11 U	2.6	DC03	0.22	0.07 U	0.63 J
m,p-Xylene	µg/kg	18	2	11.1	0.18 J	0.21 J	DC03	0.2	0.2 J	0.21 J	0.14 U	0.21 J	DC03	0.099	0.09 U	0.18 J
Methyl iodide	µg/kg	18	0	0	--	--	--	--	--	--	0.4 U	0.59 U	DC03	0.26	0.26 U	0.29 U
Methyl isobutyl ketone	µg/kg	18	0	0	--	--	--	--	--	--	0.61 U	0.9 U	DC03	0.39	0.4 U	0.44 U
Methyl n-butyl ketone	µg/kg	18	0	0	--	--	--	--	--	--	4.3 U	6.3 U	DC03	2.7	2.8 U	3.1 U
Methyl tert-butyl ether	µg/kg	18	0	0	--	--	--	--	--	--	0.086 U	0.13 U	DC03	0.0575	0.06 U	0.065 U
Methylene bromide	µg/kg	18	0	0	--	--	--	--	--	--	0.085 U	0.13 U	DC03	0.0566	0.055 U	0.065 U
Methylene chloride	µg/kg	18	0	0	--	--	--	--	--	--	0.7 U	4.7 U	DC07	0.94	0.6 U	2.3 U
Methylethyl ketone	µg/kg	16	16	100	2.1 J	24 J	DC07	5.9	3.6 J	18 J	2.1 J	24 J	DC07	5.9	3.6 J	18 J
o-Xylene	µg/kg	18	1	5.6	1.6	1.6	DC03	1.6	1.6	1.6	0.069 U	1.6	DC03	0.13	0.045 U	0.282
Styrene	µg/kg	18	0	0	--	--	--	--	--	--	0.12 U	0.17 U	DC03	0.074	0.075 U	0.085 U
Tetrachloroethene	µg/kg	18	0	0	--	--	--	--	--	--	0.11 U	0.16 U	DC03	0.069	0.07 U	0.076 U
Toluene	µg/kg	18	0	0	--	--	--	--	--	--	0.085 U	0.17 U	DC07	0.0589	0.0575 U	0.0765 U
trans-1,2-Dichloroethene	µg/kg	18	0	0	--	--	--	--	--	--	0.072 U	0.11 U	DC03	0.0462	0.0465 U	0.055 U

Table D1.3-9. Summary Statistics for All COIs and Physical Parameters in Subsurface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
trans-1,3-Dichloropropene	µg/kg	18	0	0	--	--	--	--	--	--	0.079 U	0.12 U	DC03	0.0522	0.055 U	0.06 U
Trichloroethene	µg/kg	18	0	0	--	--	--	--	--	--	0.098 U	0.15 U	DC03	0.0647	0.065 U	0.075 U
Trichlorofluoromethane	µg/kg	18	0	0	--	--	--	--	--	--	0.43 U	0.63 U	DC03	0.27	0.28 U	0.31 U
Vinyl chloride	µg/kg	18	0	0	--	--	--	--	--	--	0.17 U	0.25 U	DC03	0.11	0.11 U	0.13 U
Xylene	µg/kg	18	2	11.1	0.18 JT	1.8 JT	DC03	0.99	0.99 J	1.7 J	0.14 UT	1.8 JT	DC03	0.19	0.09 U	0.42 J

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

[c] Total PCBs are total PCB congeners whenever available and total Aroclors if not.

-- data not available.
BaPEq - benzo(a)pyrene equivalent
BTEX - benzene, toluene, ethylbenzene, and xylene
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PAH - polycyclic aromatic hydrocarbon
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-10. Summary Statistics for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations							Detected and Not Detected Concentrations						
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location**	**Mean**	**Median[b]**	**Standard Deviation**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th (full DL)[b]**
Metals																		
Cadmium	mg/kg	1551	1403	90	0.0156 J	10.1	T4-UP13	0.413	0.25	0.72	1.26	0.00159 U	10.1	T4-UP13	0.413	0.25	0.699	1.23
Lead	mg/kg	1575	1560	99	1.1 J	13400 T	GWC1	49.2	16 J	357	122	1.1 J	13400 T	GWC1	48.9	16	356	122
Mercury	mg/kg	1527	1398	92	0.005	65.2 T	GWC1	0.145	0.068	1.75	0.268	0.00189 U	65.2 T	GWC1	0.138	0.066	1.67	0.251
Nickel	mg/kg	1511	1494	99	6.22 J	594	PSY27	25.7	23.3	21.8	37 J	6.22 J	594	PSY27	25.7	23.3 T	21.7	37 J
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	264	264	100	0.00000104 JT	0.239 T	G453	0.00526	0.00068 J	0.0204	0.0225 J	0.00000104 JT	0.239 T	G453	0.00526	0.00068 J	0.0204	0.0225 J
Pesticides																		
Gamma-Hexachlorocyclohexane (Lindane)	µg/kg	1195	206	17	0.0031 J	430	07R006	4.42	1.2 J	29.9	7.91 J	0.0031 J	430	07R006	2.31	0.386 U	14.3	6.59 J
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	1661	1581	95	0.86 J	340000	G225	1930	93	12600	5000	0.24 U	340000	G225	1840	85.3	12300	4900
Total HPAHs	µg/kg	1661	1640	99	2.16 JT	4350000 T	G225	19400	985	143000	49600 J	2.16 JT	4350000 T	G225	19100	948 JT	142000	48400 T
Total LPAHs	µg/kg	1661	1582	95	0.65 JT	2910000 T	G225	8060	190	86200	11100	0.65 JT	2910000 T	G225	7690	175 T	84100	10300 JA
Naphthalene	µg/kg	1666	1125	68	0.27 J	73000 J	AN-1-3; G225; G294-1	484	27	4390	587	0.27 J	73000 J	AN-1-3; G225; G294-1	341	19 U	3630	375
Phenanthrene	µg/kg	1661	1576	95	0.53 J	1700000	G225	4420	96	48700	6250	0.53 J	1700000	G225	4190	84	47400	5600
Total cPAHs	µg/kg	1661	1613	97	0.00314 JT	449000 T	G225	2570	130 T	16600	7070	0.00314 JT	449000 T	G225	2500	122 T	16400	6740 T
Phthalates																		
Butylbenzyl phthalate	µg/kg	1504	470	31	2.2 J	2800	G111	60.1	18	192	200	1.6 U	10000 U	GRAB-05	73.7	15.6 UJ	411	239
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	1387	432	31	0.0122 J	340	OSS004	4.14	0.66 J	25.7	6.5 J	0.0122 J	10000 U	GRAB-05	36.7	1.42 UJ	367	22 U
Phenols																		
Pentachlorophenol	µg/kg	1454	266	18	0.27 J	8410 J	52C01	59.2	5.91 J	520	140 J	0.167 U	30500 U	GRAB-05	133	4.7 J	1190	247 J
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	825	767	93	0.046 J	20000 J	G294-1	271	84 J	1150	667 J	0.046 J	20000 J	G294-1	255	83 J	1110	630 J
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	221	186	84	6.2 JT	8100 J	SL004	144	46 J	632	292 J	3.3 U	8100 J	SL004	125	43 J	581	260 J
Total Petroleum Hydrocarbons (Residual)	mg/kg	661	638	97	0.29	18000 J	G453	672	410 J	1450	1560 J	0.29	18000 J	G453	653	402 JT	1420	1500 J
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	221	205	93	7.1 J	9400 J	SL015	291	160 J	924	514 J	7.1 J	9400 J	SL015	273	160 J	892	490 J
Total Petroleum Hydrocarbons	mg/kg	825	789	96	0.34 JT	33100 JT	G294-1	819	455 JA	2390	1890 J	0.34 JT	33100 JT	G294-1	787	442 JA	2340	1850 J
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	221	211	95	7.1 JA	17400 JA	SL004	410	205 JA	1430	785 J	7.1 JA	17400 JA	SL004	393	199 JA	1400	740 JT

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

-- data not available.

cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-11. Summary Statistics for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8).

					Detected Concentrations							Detected and Not Detected Concentrations						
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th (full DL)[b]**
Metals																		
Cadmium	mg/kg	1530	1435	94	0.011 J	43.7	C752	0.415	0.27	1.49	0.863	0.008 UJ	43.7	C752	0.409	0.264 J	1.45	0.892 J
Lead	mg/kg	1597	1589	99	1.54	3330 J	C326	46.6	20	172	131 J	1.54	3330 J	C326	46.5	20	172	131 J
Mercury	mg/kg	1454	1373	94	0.004 J	16.8	C708	0.19	0.089 T	0.625	0.55	0.004 J	16.8	C708	0.182	0.084	0.608	0.519 J
Nickel	mg/kg	1521	1521	100	5.99 J	716	C356	25.5	23.5	29.7	33.3	5.99 J	716	C356	25.5	23.5	29.7	33.3
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	161	155	96	0.0000000696 JT	0.365 JT	C384	0.0105	0.00186 T	0.0399	0.0211 J	0.0000000696 JT	0.365 JT	C384	0.0101	0.00172 T	0.0392	0.0204 JT
Pesticides																		
Gamma-Hexachlorocyclohexane (Lindane)	µg/kg	1220	121	10	0.052 J	172 NJ	C356	5.27	1.3 NJ	17.7	12 J	0.051 U	9900 U	WB-36	27	0.44 U	337	25 J
PAH																		
Benzo(a)pyrene	µg/kg	1715	1508	88	0.16 J	1010000	GP26	6860	104	49200	19000	0.14 U	1010000	GP26	6040	78	46200	17000
Total HPAHs	µg/kg	1715	1615	94	0.15 JT	13400000 T	C302	80600	1090 JT	618000	199000	0.15 JT	13400000 T	C302	75900	879 T	600000	183000
Total LPAHs	µg/kg	1715	1594	93	0.22 JT	39900000 T	C302	172000	330	1770000	110000	0.22 JT	39900000 T	C302	160000	270 T	1700000	92400
Naphthalene	µg/kg	1758	1285	73	0.27 J	20000000	C302	102000	55	1060000	11000	0.17 U	20000000	C302	74800	27	906000	3110
Phenanthrene	µg/kg	1715	1538	90	0.24 J	8500000	C302	44800	170	390000	64000	0.24 J	8500000	C302	40200	130	369000	52300
Total cPAHs	µg/kg	1715	1572	92	0.00017 JT	1310000 T	GP26	8700	131	63100	24800	0.00017 JT	1310000 T	GP26	7980	110 T	60500	22800
Phthalates																		
Butylbenzyl phthalate	µg/kg	1589	264	17	2 J	11800	HA-42	74.6	11	727	160	1.7 U	11800	HA-42	83.5	10 U	465	220 U
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	1367	236	17	0.066 J	14000	OSS004	71.9	0.945 J	916	50.7 J	0.0162 U	14000	OSS004	77.6	1.5 U	531	220 U
Phenols																		
Pentachlorophenol	µg/kg	1379	390	28	0.32 J	5600	C301	36.3	3.85 J	305	65.6	0.16 UT	36000 U	LWMTCLP11C	248	2.6 J	1520	532 U
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	1109	904	82	0.045 J	190000 J	C301	1290	200 J	9400	2900 J	0.045 J	190000 J	C301	1050	130	8500	2100 J
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	250	205	82	1.8 J	88000 J	C662	807	170 J	6170	1720 J	1.3 U	88000 J	C662	663	120 J	5600	1310 J
Total Petroleum Hydrocarbons (Residual)	mg/kg	1020	854	84	0.24	110000 J	C301	1170	550 J	5100	2920 J	0.1 U	110000 J	C301	991	420 J	4680	2400 J
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	250	205	82	3.6 J	15000 J	C662	632	370 J	1390	1560 J	3 U	15000 J	C662	520	275 J	1280	1360 J
Total Petroleum Hydrocarbons	mg/kg	1109	969	87	0.32 JT	321000 JT	C301	2360	680 JA	14500	5240 J	0.1 UT	321000 JT	C301	2070	558 JA	13600	4520 J
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	250	214	86	2.6 JA	103000 JA	C662	1380	518 J	7160	3540 J	2.6 JA	103000 JA	C662	1180	405 J	6640	2460 J

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

-- data not available.
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-12. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Eastern Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Study Area																		
Metals																		
Cadmium	mg/kg	645	576	89	0.03	10.1	T4-UP13	0.509	0.295	0.85	1.63	0.00159 U	10.1	T4-UP13	0.489	0.288	0.815	1.6
Lead	mg/kg	661	647	98	1.1 J	13400 T	GWC1	71.2	18	544	151	1.1 J	13400 T	GWC1	70.1	18.6	538	147
Mercury	mg/kg	641	585	91	0.005	65.2 T	GWC1	0.223	0.073	2.7	0.297	0.005	65.2 T	GWC1	0.207	0.07	2.58	0.279
Nickel	mg/kg	630	621	99	9.2	594	PSY27	25.8	23.3	26.2	34.9	9.2	594	PSY27	25.8	23.3	26	34.5
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	134	134	100	0.00000104 JT	0.122 JT	G092	0.00639	0.000731	0.0191	0.031	0.00000104 JT	0.122 JT	G092	0.00639	0.000731	0.0191	0.031
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	462	84	18	0.0031 J	10.9 JT	G372-1	2.15	0.898	2.7	7.33	0.0031 J	20 UJ	HC-S-16; HC-S-28; HC-S-36; HC-S-39; HC-S-43	1.15	0.26	2.68	6
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	714	670	94	1.3 J	48000	T4-UP13	872	86.4	3560	3960	0.24 U	48000	T4-UP13	819	80.9	3460	3800
Total HPAHs	µg/kg	714	703	98	3.3 JT	420000 T	T4-UP13	7710	916	29700	35700	3.3 JT	420000 T	T4-UP13	7590	885	29500	34800
Total LPAHs	µg/kg	714	666	93	1.35 JT	130000 T	G609	1320	179	6390	4720	1.35 JT	130000 T	G609	1230	140	6180	4630
Naphthalene	µg/kg	714	466	65	0.27 J	3100	RB04	84.7	23	263	320	0.27 J	3100	RB04	61.3	19	216	217
Phenanthrene	µg/kg	714	663	93	0.53 J	87000	G609	764	92.5	4010	2690	0.53 J	87000	G609	710	77	3870	2460
Total cPAHs	µg/kg	714	692	97	0.00314 JT	66600 T	T4-UP13	1220	122	5070	5580	0.00314 JT	66600 T	T4-UP13	1180	115	4990	5480
Phthalates																		
Butylbenzyl phthalate	µg/kg	653	262	40	3 J	2800	G111	78.8	23.1	242	240	1.6 U	2800	G111	59.7	19	190	230
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	552	152	28	0.0122 J	6.18 J	G416	0.938	0.431	1.23	4.12	0.0122 J	400 UJ	HC-S-04; HC-S-05; HC-S-07	8.22	1.28	32.5	20
Phenols																		
Pentachlorophenol	µg/kg	613	120	20	0.53 NJ	8410 J	52C01	105	8.15	770	180	0.174 U	8410 J	52C01	73.5	8.2	367	287
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	363	330	91	0.046 J	2600 J	G609	140	73.1	272	462	0.046 J	2600 J	G609	134	76	260	428
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	62	59	95	6.2 JT	8100 J	SL004	271	46	1090	1320	6.2 JT	8100 J	SL004	260	45	1060	1260
Total Petroleum Hydrocarbons (Residual)	mg/kg	260	246	95	0.29	6700 J	C092	535	395	720	1500	0.29	6700 J	C092	511	380	708	1500
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	62	62	100	20 JT	9400 J	SL015	545	180	1650	918	20 JT	9400 J	SL015	545	180	1650	918
Total Petroleum Hydrocarbons	mg/kg	363	335	92	0.34 JT	8400 JT	C533	535	366	877	1570	0.34 JT	8400 JT	C533	501	342	851	1500
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	62	62	100	26 JA	17400 JA	SL004	803	225	2570	2290	26 JA	17400 JA	SL004	803	225	2570	2290
RM 01.9-03																		
Metals																		
Cadmium	mg/kg	72	60	83	0.103	2.1	RB08	0.55	0.377	0.464	1.6	0.103	2.1	RB08	0.636	0.407	0.466	1.55
Lead	mg/kg	72	66	92	5.1	166	RB09	31.5	16	33.4	109	5.1	166	RB09	30.6	16.2	32.2	108
Mercury	mg/kg	72	64	89	0.005	0.249	G609	0.0713	0.0715	0.0377	0.119	0.005	0.249	G609	0.0669	0.07	0.0384	0.118
Nickel	mg/kg	72	67	93	12.4	60.8	RB09	25.1	23.5	8.29	37.3	12.4	60.8	RB09	25.3	24.6	8.02	36.1
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	26	26	100	0.0000254 JT	0.118 JT	G025	0.0105	0.00107	0.0247	0.0429	0.0000254 JT	0.118 JT	G025	0.0105	0.00107	0.0247	0.0429
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	57	3	5	0.697 J	9.9 NJ	G609	4.69	3.48	4.72	9.26	0.0161 U	9.9 NJ	G609	0.5	0.146	1.39	1.62
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	72	65	90	1.3 J	7800	G609	253	42	1090	270	1.3 J	7800	G609	230	39	1040	253
Total HPAHs	µg/kg	72	67	93	19.7 JT	110000 T	G609	2890	400	14100	2670	19 UT	110000 T	G609	2690	378	13600	2460
Total LPAHs	µg/kg	72	60	83	4.63 JT	130000 T	G609	2540	69.2	16800	746	4.63 JT	130000 T	G609	2120	54.3	15400	731
Naphthalene	µg/kg	72	40	56	3.2	3100	RB04	111	13.5	497	117	0.62 U	3100	RB04	65.8	10	371	48.1
Phenanthrene	µg/kg	72	60	83	1.7 J	87000	G609	1650	33	11200	573	1.7 J	87000	G609	1370	23.5	10300	455
Total cPAHs	µg/kg	72	66	92	1.11 T	10700 T	G609	338	58.5	1460	368	1.11 T	10700 T	G609	311	56.3	1400	356
Phthalates																		
Butylbenzyl phthalate	µg/kg	72	23	32	4.7 J	110	02R015	18	8.2	23	44.9	1.8 U	110	02R015	13.1	7.3	16.1	34.5
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	72	10	14	0.0404 J	3.3	DG13	0.951	0.427	1.09	2.87	0.0171 U	10 U	RB06; RB08	4.18	3.35	3.84	9.9
Phenols																		
Pentachlorophenol	µg/kg	72	3	4	1.8 J	57	G608	20.3	2.2	31.8	51.5	0.37 U	300 U	RB01; RB03; RB06; RB07; RB08; RB10; RB11; RB12	64.8	3.6	119	300

Table D1.3-12. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Eastern Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	41	40	98	0.046 J	2600 J	G609	136	82.5	401	140	0.046 J	2600 J	G609	133	82	397	140
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	8	8	100	39 J	1500 J	G609	228	47.5	514	993	39 J	1500 J	G609	228	47.5	514	993
Total Petroleum Hydrocarbons (Residual)	mg/kg	40	35	88	0.29	1800 J	G609	449	460	292	626	0.29	1800 J	G609	415	445	289	621
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	8	8	100	160 J	850 J	G609	268	185	236	626	160 J	850 J	G609	268	185	236	626
Total Petroleum Hydrocarbons	mg/kg	41	40	98	0.34 JT	4400 JA	G609	529	526	672	713	0.34 JT	4400 JA	G609	517	525	668	710
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	8	8	100	199 JA	2350 JA	G609	495	233	750	1620	199 JA	2350 JA	G609	495	233	750	1620
RM 03-04																		
Metals																		
Cadmium	mg/kg	66	65	98	0.06	2.86	G092	0.352	0.286	0.389	0.894	0.06	2.86	G092	0.35	0.284	0.387	0.892
Lead	mg/kg	66	65	98	5	204	G094	21.6	14.7	28.4	57.7	5	204	G094	21.3	14.5	28.3	57.3
Mercury	mg/kg	80	73	91	0.009 J	0.338	G094	0.0812	0.067	0.0679	0.258	0.009 J	0.338	G094	0.0792	0.064	0.0655	0.253
Nickel	mg/kg	66	65	98	12.4 J	41.3	G092	23.9	23.8	5.44	32.6	12.4 J	41.3	G092	23.8	23.7	5.48	32.5
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	16	16	100	0.00000316 JT	0.122 JT	G092	0.0141	0.00144	0.0322	0.0708	0.00000316 JT	0.122 JT	G092	0.0141	0.00144	0.0322	0.0708
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	60	13	22	0.0031 J	2.61 NJ	G080	1.09	0.593	1.04	2.6	0.0031 J	3 U	SD11; SD12	0.507	0.178	0.797	2.6
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	81	80	99	1.7 J	3800 T	03R005	254	88.5	614	1110	1.7 J	3800 T	03R005	252	87	611	1100
Total HPAHs	µg/kg	81	81	100	17.9 JT	54900 JT	03R005	3120	889	8490	15000	17.9 JT	54900 JT	03R005	3120	889	8490	15000
Total LPAHs	µg/kg	81	79	98	2.87 JT	15000 JT	SED01	749	100	2370	2780	2.87 JT	15000 JT	SED01	731	96.9	2340	2740
Naphthalene	µg/kg	81	49	60	1.4 J	1500 J	SED01	50.3	19	212	65.2	0.47 U	1500 J	SED01	36.2	15	166	64
Phenanthrene	µg/kg	81	79	98	1.4 J	7900	SED01	416	60	1300	1430	1.4 J	7900	SED01	406	54	1290	1400
Total cPAHs	µg/kg	81	80	99	2.83 JT	5540 T	03R005	378	132	913	1660	2.83 JT	5540 T	03R005	374	128	908	1640
Phthalates																		
Butylbenzyl phthalate	µg/kg	66	30	45	5.5 J	1200	G106	99	25	224	290	1.7 U	1200	G106	52.3	14.5	157	213
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	69	26	38	0.0122 J	4.89 J	G106	0.511	0.283	0.942	1.19	0.0122 J	21 UJ	G094	4.2	0.49	6.72	19.6
Phenols																		
Pentachlorophenol	µg/kg	66	10	15	1.1 J	13 J	G094	3.93	3.25	3.66	10	0.53 U	99 UJ	SD006; SD010	20.8	3.9	34.1	97.8
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	32	31	97	8 J	1300 J	C089	152	76	299	770	8 J	1300 J	C089	148	74	296	727
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	7	7	100	45 J	86 J	C099	60.1	56	13.9	81.5	45 J	86 J	C099	60.1	56	13.9	81.5
Total Petroleum Hydrocarbons (Residual)	mg/kg	32	29	91	34 J	6700 J	C092	694	340	1330	2760	25 UT	6700 J	C092	631	320	1280	2450
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	7	7	100	130 J	220 J	C099	181	180	31.3	217	130 J	220 J	C099	181	180	31.3	217
Total Petroleum Hydrocarbons	mg/kg	32	31	97	9.3 JT	7910 JT	C092	803	407	1580	3380	9.3 JT	7910 JT	C092	779	397	1560	3220
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	7	7	100	190 JT	310 JT	C099	242	240	39.6	297	190 JT	310 JT	C099	242	240	39.6	297
RM 04-05																		
Metals																		
Cadmium	mg/kg	108	104	96	0.084	10.1	T4-UP13	1.12	0.493	1.71	4.88	0.00167 U	10.1	T4-UP13	1.08	0.455	1.69	4.56
Lead	mg/kg	116	116	100	1.1 J	1950	T4-UP07	133	33.9	311	517	1.1 J	1950	T4-UP07	133	33.9	311	517
Mercury	mg/kg	93	88	95	0.009 J	0.34 J	HC-S-25	0.0768	0.0735	0.0546	0.15	0.00894 U	0.34 J	HC-S-25	0.0747	0.0702	0.0541	0.143
Nickel	mg/kg	93	93	100	9.21 J	78.1	G111	22.6	21.4	8.52	30.2	9.21 J	78.1	G111	22.6	21.4	8.52	30.2
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	7	7	100	0.00012 JT	0.00338 NT	03R004	0.00145	0.000628	0.00146	0.00338	0.00012 JT	0.00338 NT	03R004	0.00145	0.000628	0.00146	0.00338
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	29	4	14	0.0138 J	0.986 NJ	G111	0.269	0.0391	0.478	0.847	0.0138 J	20 UJ	HC-S-16; HC-S-28; HC-S-36; HC-S-39; HC-S-43	4.43	0.922	7.56	20
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	121	120	99	1.6 J	48000	T4-UP13	3730	769	7670	15200	0.24 U	48000	T4-UP13	3700	740	7650	15000
Total HPAHs	µg/kg	121	121	100	3.3 JT	420000 T	T4-UP13	31900	7290	64200	124000	3.3 JT	420000 T	T4-UP13	31900	7290	64200	124000
Total LPAHs	µg/kg	121	120	99	1.35 JT	57800 T	T4-UP13	3210	884	7210	10400	1.35 JT	57800 T	T4-UP13	3180	867	7190	10300
Naphthalene	µg/kg	121	99	82	0.27 J	1700	T4-UP13	117	48	205	441	0.27 J	1700	T4-UP13	106	34	191	400
Phenanthrene	µg/kg	121	119	98	0.53 J	32000	T4-UP13	1930	540	4190	6520	0.53 J	32000	T4-UP13	1900	540	4170	6400
Total cPAHs	µg/kg	121	121	100	0.143 JT	66600 T	T4-UP13	5340	1110	11100	20800	0.143 JT	66600 T	T4-UP13	5340	1110	11100	20800

Table D1.3-12. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Eastern Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Phthalates																		
Butylbenzyl phthalate	µg/kg	122	43	35	3.8 J	2800	G111	115	22	424	239	1.7 U	2800	G111	124	20	339	400
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	57	7	12	0.0563 J	0.742 J	G112	0.23	0.134	0.241	0.611	0.0563 J	400 UJ	HC-S-04; HC-S-05; HC-S-07	41.9	19	93.5	240
Phenols																		
Pentachlorophenol	µg/kg	57	11	19	2 NJ	8410 J	52C01	782	18	2530	4240	0.43 U	8410 J	52C01	317	60	1140	1200
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	111	81	73	1.96 J	960	HC-S-25	141	68.8	174	480	1.96 J	960	HC-S-25	124	87.2	153	435
Total Petroleum Hydrocarbons (Residual)	mg/kg	66	60	91	7.7 J	2260	T4-IM-09	367	247	403	1200	3.99 U	2260	T4-IM-09	341	225	393	1180
Total Petroleum Hydrocarbons	mg/kg	111	85	77	6.55 A	2830 A	T4-IM-09	411	289	456	1280	3.99 UA	2830 A	T4-IM-09	336	172	421	1120
RM 05-06																		
Metals																		
Cadmium	mg/kg	72	52	72	0.03	0.539 J	G203-2	0.26	0.249	0.112	0.5	0.00777 U	0.725 U	5203	0.277	0.268	0.154	0.508
Lead	mg/kg	72	72	100	4.7	577	SED01	58.6	26.7	93.8	150	4.7	577	SED01	58.6	26.7	93.8	150
Mercury	mg/kg	72	66	92	0.0085 J	4.84	WR-PG-27	0.182	0.0974	0.589	0.29	0.0085 J	4.84	WR-PG-27	0.172	0.0925	0.564	0.255
Nickel	mg/kg	72	70	97	12.3 J	167	SED02	32.9	23.8	29.9	107	12.3 J	167	SED02	32.5	23.6	29.6	107
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	8	8	100	0.000309 JT	0.00736 T	G218	0.00202	0.000959	0.00246	0.00618	0.000309 JT	0.00736 T	G218	0.00202	0.000959	0.00246	0.00618
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	65	14	22	0.15	8.52 NJ	G209	3.02	2.04	2.52	6.98	0.0166 U	8.52 NJ	G209	1.12	0.58	1.58	5
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	72	72	100	4.2 T	2520	52A05	473	310	498	1550	4.2 T	2520	52A05	473	310	498	1550
Total HPAHs	µg/kg	72	72	100	45.1 T	23900 T	52A05	4330	3270	4270	12500	45.1 T	23900 T	52A05	4330	3270	4270	12500
Total LPAHs	µg/kg	72	70	97	26.2 JT	4660 T	SD056	866	599	958	2990	19 UT	4660 T	SD056	842	548	955	2910
Naphthalene	µg/kg	72	62	86	3.26 J	2300	G199	120	54	301	314	3.26 J	2300	G199	106	42.2	281	270
Phenanthrene	µg/kg	72	70	97	9.67 J	2200	SD056	432	293	443	1260	9.67 J	2200	SD056	420	275	442	1250
Total cPAHs	µg/kg	72	72	100	6.17 T	3860 T	52A05	678	454	705	2080	6.17 T	3860 T	52A05	678	454	705	2080
Phthalates																		
Butylbenzyl phthalate	µg/kg	69	21	30	4.4 J	430	G206	49	16	92.6	130	2.1 U	430	G206	39.9	16.7	71.5	190
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	69	25	36	0.119	3.62 J	G209	0.921	0.682	0.819	2.07	0.069 UT	20 U	G203-2; SD042; SD053; SD058	3.77	1.14	6.34	19.6
Phenols																		
Pentachlorophenol	µg/kg	69	24	35	1.8 J	88 J	SD056	18.2	10.4	20.2	47.5	0.57 U	223 U	5003	35	10	55.9	185
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	43	43	100	4.92	360 J	G215	99.8	76	87.9	284	4.92	360 J	G215	99.8	76	87.9	284
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	4	4	100	43 J	76 J	G643	54.8	50	14.5	72.1	43 J	76 J	G643	54.8	50	14.5	72.1
Total Petroleum Hydrocarbons (Residual)	mg/kg	26	26	100	100 J	920 J	G215	504	455	200	803	100 J	920 J	G215	504	455	200	803
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	4	4	100	180 J	240 J	G643	205	200	26.5	236	180 J	240 J	G643	205	200	26.5	236
Total Petroleum Hydrocarbons	mg/kg	43	43	100	4.92 A	1280 JT	G215	405	430	369	1010	4.92 A	1280 JT	G215	405	430	369	1010
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	4	4	100	230 JA	316 JA	G643	260	247	38.7	307	230 JA	316 JA	G643	260	247	38.7	307
RM 06-07																		
Metals																		
Cadmium	mg/kg	59	52	88	0.053	2.01 T	GWC1	0.302	0.228	0.348	0.635	0.053	2.01 T	GWC1	0.296	0.243	0.327	0.573
Lead	mg/kg	59	59	100	4 J	13400 T	GWC1	249	17.5	1740	59.8	4 J	13400 T	GWC1	249	17.5	1740	59.8
Mercury	mg/kg	58	55	95	0.017 J	65.2 T	GWC1	1.42	0.143	8.76	0.901	0.017 J	65.2 T	GWC1	1.35	0.139	8.53	0.897
Nickel	mg/kg	59	59	100	10.2	41	06B030	22.5	22.4	5.44	29.9	10.2	41	06B030	22.5	22.4	5.44	29.9
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	26	26	100	0.00000104 JT	0.0341 JT	BT016	0.00264	0.000472	0.00716	0.0131	0.00000104 JT	0.0341 JT	BT016	0.00264	0.000472	0.00716	0.0131
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	50	5	10	0.0124 J	6.22 NJ	G255	2.62	0.486	3.17	6.17	0.0124 J	6.22 NJ	G255	0.562	0.2	1.18	0.99
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	79	70	89	1.7 J	9500 T	06R040	294	79.5	1140	569	1.7 J	9500 T	06R040	262	58.3	1070	521
Total HPAHs	µg/kg	79	75	95	27 JT	80700 T	06R040	2740	914	9440	6520	13.4 UT	80700 T	06R040	2600	810	9220	5790
Total LPAHs	µg/kg	79	68	86	4.83 JT	28900 T	C293-2	1250	276	4370	2220	4.83 JT	28900 T	C293-2	1080	220	4080	2100
Naphthalene	µg/kg	79	56	71	1.9 J	3000	06R040	144	40.5	405	369	0.75 U	3000	06R040	107	30	345	323
Phenanthrene	µg/kg	79	67	85	1.73 J	14000	C293-2	604	110	2300	976	1.73 J	14000	C293-2	515	70	2120	928
Total cPAHs	µg/kg	79	73	92	1.53 T	12400 T	06R040	388	112	1460	773	1.53 T	12400 T	06R040	360	89	1400	731
Phthalates																		
Butylbenzyl phthalate	µg/kg	59	11	19	3.4 J	18 J	G280; G293	8.51	6	5.87	18	1.6 U	260 U	DM-L	21.7	8.2	43.9	60.1

Table D1.3-12. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Eastern Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	60	18	30	0.1 J	4.12 J	G282	1.06	0.523	1.01	2.7	0.068 U	20 U	06R040; SD060; SD071; SD073; SD074	3.52	1.08	5.9	20
Phenols																		
Pentachlorophenol	µg/kg	76	17	22	0.53 NJ	44	G247	10.7	7.1	12.6	41.6	0.2 U	289 U	SED01-18	39.2	9.2	58.1	143
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	27	27	100	3.07	2400 J	C533	278	63	604	1720	3.07	2400 J	C533	278	63	604	1720
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	7	7	100	6.2 JT	190 J	G671	53.2	39	62	147	6.2 JT	190 J	G671	53.2	39	62	147
Total Petroleum Hydrocarbons (Residual)	mg/kg	21	21	100	54.9 JT	6000 J	C533	902	320	1540	4500	54.9 JT	6000 J	C533	902	320	1540	4500
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	7	7	100	20 JT	440 J	G671	131	93	142	350	20 JT	440 J	G671	131	93	142	350
Total Petroleum Hydrocarbons	mg/kg	27	27	100	3.07 A	8400 JT	C533	979	315	2000	5470	3.07 A	8400 JT	C533	979	315	2000	5470
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	7	7	100	26.2 JA	630 JA	G671	184	129	203	496	26.2 JA	630 JA	G671	184	129	203	496
RM 07-08																		
Metals																		
Cadmium	mg/kg	46	43	93	0.06	1.89 J	DM-J	0.36	0.25	0.395	1.32	0.00803 U	1.89 J	DM-J	0.337	0.244	0.391	1.18
Lead	mg/kg	54	47	87	3.67 J	104 J	4806	18.5	14	16.6	33.5	3.67 J	104 J	4806	18.3	14	15.6	31.8
Mercury	mg/kg	46	41	89	0.018	0.263	DM-I	0.0664	0.06	0.0368	0.106	0.007 UJ	0.263	DM-I	0.063	0.0595	0.0369	0.103
Nickel	mg/kg	46	46	100	13.6 J	98.2 J	4806	27.7	25	13	41.7	13.6 J	98.2 J	4806	27.7	25	13	41.7
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	10	10	100	0.00000342 T	0.00119 T	G347	0.000455	0.000436	0.000357	0.00101	0.00000342 T	0.00119 T	G347	0.000455	0.000436	0.000357	0.00101
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	29	4	14	0.0171 JT	1.05 NJ	G347	0.467	0.401	0.43	0.959	0.0171 JT	1.7 U	GRAB-07	0.436	0.24	0.462	1.42
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	62	53	85	3.4	3900 T	07R004	128	32	532	200	3.4	3900 T	07R004	112	26	493	179
Total HPAHs	µg/kg	62	61	98	49 T	33700 JT	07R004	1190	322	4310	2390	10 UT	33700 JT	07R004	1170	296	4280	2380
Total LPAHs	µg/kg	62	56	90	5.61 JT	5220 JT	07R004	250	63.4	732	558	5.61 JT	5220 JT	07R004	227	50.1	698	553
Naphthalene	µg/kg	62	31	50	1.68 J	150	07R004	22.6	13	28.3	63.5	1.68 J	150	07R004	19.4	17	21.1	44.6
Phenanthrene	µg/kg	62	56	90	1.1 J	2400	07R004	139	32.5	388	377	1.1 J	2400	07R004	127	28.5	370	372
Total cPAHs	µg/kg	62	58	94	0.019 T	5730 T	07R004	173	38	749	314	0.019 T	5730 T	07R004	163	35.6	725	310
Phthalates																		
Butylbenzyl phthalate	µg/kg	46	13	28	3.6 J	48	G347	17.7	17	11.9	36	1.9 U	65 U	DM-J	15.9	19	11.9	28
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	43	15	35	0.1 J	2.22 J	G340	0.669	0.329	0.704	2.01	0.0169 UJT	20 UJ	GRAB-07; SD095; SD096; SD103; SD106; SD108; SD111	7.72	1.32	9.17	20
Phenols																		
Pentachlorophenol	µg/kg	57	7	12	1.2 J	798	4803	207	36.1	303	688	0.22 U	1340 U	SED01-22	95.5	60	207	302
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	19	18	95	11.9	140 J	G676	62.1	56	32.2	115	8.3 U	140 J	G676	59.3	55	33.6	113
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	10	9	90	21 J	120 J	G676	41.1	32	30	87.6	6.4 U	120 J	G676	37.6	31.5	30.4	83.5
Total Petroleum Hydrocarbons (Residual)	mg/kg	16	16	100	51 J	520 J	WR-PG-29	318	295	120	490	51 J	520 J	WR-PG-29	318	295	120	490
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	10	10	100	26 J	300 J	G676	126	125	71.9	233	26 J	300 J	G676	126	125	71.9	233
Total Petroleum Hydrocarbons	mg/kg	19	19	100	11.9 A	597 JT	WR-PG-29	327	345	188	591	11.9 A	597 JT	WR-PG-29	327	345	188	591
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	10	10	100	26 JA	420 JA	G676	163	157	102	316	26 JA	420 JA	G676	163	157	102	316
RM 08-09																		
Metals																		
Cadmium	mg/kg	17	16	94	0.098	0.4	SD138; SD145	0.227	0.212	0.0769	0.4	0.00245 U	0.4	SD138; SD145	0.214	0.207	0.0923	0.4
Lead	mg/kg	17	17	100	10.6 J	17.7	S0601	14.5	14.4	1.91	17.3	10.6 J	17.7	S0601	14.5	14.4	1.91	17.3
Mercury	mg/kg	17	17	100	0.015	0.54	PSY49	0.0969	0.06	0.118	0.236	0.015	0.54	PSY49	0.0969	0.06	0.118	0.236
Nickel	mg/kg	17	17	100	19.8	30.7	G419	25.8	26.5	3.48	30.1	19.8	30.7	G419	25.8	26.5	3.48	30.1
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	5	5	100	0.000195 T	0.00058 JT	BT0271	0.000368	0.000381	0.000144	0.000544	0.000195 T	0.00058 JT	BT0271	0.000368	0.000381	0.000144	0.000544
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	14	3	21	0.0107 JT	2.03 NJ	G438	1.07	1.17	1.01	1.94	0.009 U	2.03 NJ	G438	0.652	0.308	0.729	2.01

Table D1.3-12. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Eastern Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	17	16	94	6.3	62	G433-2	27.5	24.8	15.8	55.3	6.3	62	G433-2	26.5	23.5	15.9	54.8
Total HPAHs	µg/kg	17	17	100	62.7 JT	584 T	G433-2	277	266	152	521	62.7 JT	584 T	G433-2	277	266	152	521
Total LPAHs	µg/kg	17	15	88	7.04 JT	206 T	G438	46.4	27.5	50.8	137	7.04 JT	206 T	G438	43.5	26	48.3	127
Naphthalene	µg/kg	17	4	24	9.84	46	G438	20.7	13.5	17.1	41.5	0.67 UJ	46	G438	11.5	10	10.8	28.4
Phenanthrene	µg/kg	17	15	88	2.9	91	G438	26.2	20	23.7	74.2	2.9	91	G438	25.7	20	22.2	71.8
Total cPAHs	µg/kg	17	17	100	9.79 JT	96.7 T	G433-2	36.9	32.6	23.9	82.5	9.79 JT	96.7 T	G433-2	36.9	32.6	23.9	82.5
Phthalates																		
Butylbenzyl phthalate	µg/kg	17	6	35	5.8 J	34 T	BT0272	15.3	8.35	12.5	32.6	1.8 U	34 T	BT0272	10.9	7.7	9.65	29.5
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	14	8	57	0.184 JT	0.858 J	G419	0.445	0.417	0.221	0.767	0.126 U	24 U	SD145	4.23	0.566	7.68	20.8
Phenols																		
Pentachlorophenol	µg/kg	17	2	12	0.78 J	35.3 J	S0601	18	18	24.4	33.6	0.66 U	120 U	SD145	34.2	4.2	46.7	104
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	4	4	100	35.8	78 JT	BT0272	63	69	19.4	77.7	35.8	78 JT	BT0272	63	69	19.4	77.7
Total Petroleum Hydrocarbons (Residual)	mg/kg	3	3	100	330 J	490 JT	BT0272	403	390	80.8	480	330 J	490 JT	BT0272	403	390	80.8	480
Total Petroleum Hydrocarbons	mg/kg	4	4	100	35.8 A	568 JT	BT0272	369	436	233	555	35.8 A	568 JT	BT0272	369	436	233	555
Swan Island Lagoon																		
Metals																		
Cadmium	mg/kg	124	109	88	0.03	2.8	PSY08	0.514	0.4	0.452	1.42	0.00161 U	2.8	PSY08	0.458	0.353	0.453	1.3
Lead	mg/kg	124	124	100	4.59	110	SD128	33.2	26.4	23.5	80.8	4.59	110	SD128	33.2	26.4	23.5	80.8
Mercury	mg/kg	122	106	87	0.0162 J	0.86	SD128	0.125	0.116	0.106	0.294	0.00943 U	0.86	SD128	0.112	0.1	0.104	0.273
Nickel	mg/kg	124	124	100	9.2	594	PSY27	28	24	51.6	33	9.2	594	PSY27	28	24	51.6	33
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	20	20	100	0.00000778 JT	0.117 JT	G393	0.0101	0.00276	0.0256	0.0223	0.00000778 JT	0.117 JT	G393	0.0101	0.00276	0.0256	0.0223
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	78	13	17	0.00995 J	10.9 JT	G372-1	3.98	4.62	3.4	8.76	0.00735 U	13.4 U	G393	1.66	0.863	2.68	7.19
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	124	112	90	2.2 J	2600	M0304	206	93.9	354	798	2.08 U	2600	M0304	191	88.5	340	776
Total HPAHs	µg/kg	124	123	99	6.73 JT	93000 T	M0304	3050	1230	8810	10200	6.73 JT	93000 T	M0304	3020	1220	8780	10200
Total LPAHs	µg/kg	124	118	95	5.8 T	13400 JT	M0304	556	201	1350	1910	2.08 UT	13400 JT	M0304	530	192	1330	1870
Naphthalene	µg/kg	124	77	62	1.73 J	230	09R001	29.5	22	33	65.2	0.99 U	230	09R001	25.7	18.1	30.4	79.5
Phenanthrene	µg/kg	124	118	95	4.9	11300	M0304	362	108	1090	1220	2.08 U	11300	M0304	345	100	1060	1190
Total cPAHs	µg/kg	124	120	97	0.00314 JT	4360 T	M0304	290	131	535	1200	0.00314 JT	4360 T	M0304	282	124	528	1200
Phthalates																		
Butylbenzyl phthalate	µg/kg	121	88	73	6.6 J	2010 J	PP01M103	120	55	252	394	1.9 U	2010 J	PP01M103	104	44	223	339
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	86	19	22	0.1 J	6.18 J	G416	1.9	1.11	1.92	4.8	0.068 U	34 UJ	G367	6.13	2.57	8.4	20
Phenols																		
Pentachlorophenol	µg/kg	118	29	25	0.81 J	250 JT	09R001	56.8	17	74.1	206	0.174 U	250 JT	09R001	59.5	52	58.5	178
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	54	54	100	3.92	966 JT	PP01M101	176	103	195	511	3.92	966 JT	PP01M101	176	103	195	511
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	2	2	100	45 J	59 J	G696	52	52	9.9	58.3	45 J	59 J	G696	52	52	9.9	58.3
Total Petroleum Hydrocarbons (Residual)	mg/kg	30	30	100	86 JT	1700 J	G415	814	705	434	1500	86 JT	1700 J	G415	814	705	434	1500
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	2	2	100	190 J	240 J	G696	215	215	35.4	238	190 J	240 J	G696	215	215	35.4	238
Total Petroleum Hydrocarbons	mg/kg	54	54	100	3.92 A	2180 JA	G415	628	540	632	1880	3.92 A	2180 JA	G415	628	540	632	1880
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	2	2	100	235 JA	299 JA	G696	267	267	45.3	296	235 JA	299 JA	G696	267	267	45.3	296
RM 09-10																		
Metals																		
Cadmium	mg/kg	39	33	85	0.05	0.344	G487	0.18	0.188	0.0635	0.26	0.00159 U	0.344	G487	0.153	0.179	0.0875	0.247
Lead	mg/kg	39	39	100	7.23 J	55	G487	17.3	12.7	11.3	41.3	7.23 J	55	G487	17.3	12.7	11.3	41.3
Mercury	mg/kg	39	33	85	0.0146 J	0.311	WR-PG-39	0.0582	0.047	0.0494	0.0891	0.0146 J	0.311	WR-PG-39	0.0577	0.05	0.0455	0.0882
Nickel	mg/kg	39	38	97	11.6 JT	28.6	G442	21	21.9	4.84	28	11.6 JT	28.6	G442	20.9	21.8	4.82	28
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	6	6	100	0.0000176 JT	0.000621 JT	G463	0.000344	0.000288	0.000236	0.000621	0.0000176 JT	0.000621 JT	G463	0.000344	0.000288	0.000236	0.000621
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	39	8	21	0.17 NJ	7.31 NJ	G470	1.54	0.695	2.38	5.32	0.0047 U	7.31 NJ	G470	0.99	0.41	1.65	6

Table D1.3-12. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Eastern Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	39	35	90	4.2	110	WR-PG-37	19.7	15	20.2	47.3	1.59 UJ	110	WR-PG-37	18.3	15	19.7	41.1
Total HPAHs	µg/kg	39	39	100	9.21 JT	1040 T	WR-PG-37	194	148	189	447	9.21 JT	1040 T	WR-PG-37	194	148	189	447
Total LPAHs	µg/kg	39	33	85	2.79 JT	139 T	WR-PG-37	29.3	22.2	26.2	67.6	1.55 UJT	139 T	WR-PG-37	26.9	20	24.9	62.3
Naphthalene	µg/kg	39	10	26	2.4	12	WR-PG-37	6.27	6.4	2.93	10.6	1.47 UJ	20 U	09B027	6.53	3.6	5.88	19
Phenanthrene	µg/kg	39	32	82	2.6	77	WR-PG-37	16.5	13.5	13.6	32.2	1.55 UJT	77	WR-PG-37	15.6	14	12.9	31
Total cPAHs	µg/kg	39	38	97	0.241 T	162 T	WR-PG-37	26.3	21.7	29.5	63	0.241 T	162 T	WR-PG-37	26.1	21.6	29.2	60.7
Phthalates																		
Butylbenzyl phthalate	µg/kg	39	17	44	4.2 J	71	GSP10E	13.5	7.1	16.2	36.6	2 UJ	168 UJ	S0506	16.1	7.7	27.8	32.3
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	37	7	19	0.074 J	5.7	WR-PG-39	1.78	0.15	2.35	5.3	0.074 J	5.7	WR-PG-39	1.67	0.45	1.77	4.56
Phenols																		
Pentachlorophenol	µg/kg	39	4	10	1 J	3.4 NJ	G741	1.83	1.45	1.11	3.16	0.22 U	168 UJ	S0506	14.5	3.6	33.4	100
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	21	21	100	4.45 JT	320 J	G731	56.6	41	66.2	130	4.45 JT	320 J	G731	56.6	41	66.2	130
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	4	4	100	26 J	170 J	G731	65.3	32.5	70	150	26 J	170 J	G731	65.3	32.5	70	150
Total Petroleum Hydrocarbons (Residual)	mg/kg	15	15	100	115 JT	810 J	G731	353	340	165	600	115 JT	810 J	G731	353	340	165	600
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	4	4	100	120 J	360 J	G731	201	163	113	337	120 J	360 J	G731	201	163	113	337
Total Petroleum Hydrocarbons	mg/kg	21	21	100	4.45 JA	1130 JA	G731	309	311	270	640	4.45 JA	1130 JA	G731	309	311	270	640
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	4	4	100	146 JA	530 JA	G731	267	195	181	487	146 JA	530 JA	G731	267	195	181	487
RM 10-11																		
Metals																		
Cadmium	mg/kg	18	18	100	0.088	0.67	SD04	0.237	0.221	0.125	0.419	0.088	0.67	SD04	0.237	0.221	0.125	0.419
Lead	mg/kg	18	18	100	9.73	61.3	SD04	18.2	14.5	12	35	9.73	61.3	SD04	18.2	14.5	12	35
Mercury	mg/kg	18	18	100	0.01 J	0.144	G505	0.0653	0.0605	0.027	0.0981	0.01 J	0.144	G505	0.0653	0.0605	0.027	0.0981
Nickel	mg/kg	18	18	100	10.4	31.2	G495	22.1	22.5	6.03	31	10.4	31.2	G495	22.1	22.5	6.03	31
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	6	6	100	0.000312 JT	0.000763 JT	G502	0.000553	0.000582	0.000188	0.000755	0.000312 JT	0.000763 JT	G502	0.000553	0.000582	0.000188	0.000755
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	15	4	27	0.0067 J	9.48 NJ	G495	4.14	3.55	4.39	8.95	0.0067 J	9.48 NJ	G495	1.73	0.48	2.84	7.01
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	22	22	100	7.2	5000	GA-PD02	455	52.5	1210	2980	7.2	5000	GA-PD02	455	52.5	1210	2980
Total HPAHs	µg/kg	22	22	100	72.6 JT	40300 T	GA-PD02	3960	677	9950	26300	72.6 JT	40300 T	GA-PD02	3960	677	9950	26300
Total LPAHs	µg/kg	22	22	100	7.68 JT	5700 T	GA-PD02	614	110	1460	4220	7.68 JT	5700 T	GA-PD02	614	110	1460	4220
Naphthalene	µg/kg	22	14	64	4 J	330	GA-PD02	54.5	12.5	105	291	0.83 U	330	GA-PD02	37.6	10.4	85.9	259
Phenanthrene	µg/kg	22	22	100	2.9	3400	GA-PD02	338	64.5	807	1930	2.9	3400	GA-PD02	338	64.5	807	1930
Total cPAHs	µg/kg	22	22	100	11.9 JT	7050 T	GA-PD02	651	85.8	1710	4320	11.9 JT	7050 T	GA-PD02	651	85.8	1710	4320
Phthalates																		
Butylbenzyl phthalate	µg/kg	18	7	39	3 J	38	WR-PG-61	14.8	11	12.1	33.8	2 UJ	38	WR-PG-61	9.07	3.45	10.4	29.5
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	18	5	28	0.315	1.7	G750	0.667	0.398	0.585	1.47	0.315	15 U	SD02	4.08	2.2	5.03	14.2
Phenols																		
Pentachlorophenol	µg/kg	18	3	17	3.3 NJ	11	WR-PG-63	5.87	3.3	4.45	10.2	1 U	440 U	SD02	75.5	4.4	163	432
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	8	8	100	59 J	100 J	BT033	76	78	15.5	96.2	59 J	100 J	BT033	76	78	15.5	96.2
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	1	1	100	38 J	38 J	G750	38	38	--	38	38 J	38 J	G750	38	38	--	38
Total Petroleum Hydrocarbons (Residual)	mg/kg	8	8	100	200 J	650 J	BT033	444	450	154	629	200 J	650 J	BT033	444	450	154	629
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	1	1	100	170 J	170 J	G750	170	170	--	170	170 J	170 J	G750	170	170	--	170
Total Petroleum Hydrocarbons	mg/kg	8	8	100	272 JT	750 JT	BT033	520	510	163	723	272 JT	750 JT	BT033	520	510	163	723
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	1	1	100	208 JA	208 JA	G750	208	208	--	208	208 JA	208 JA	G750	208	208	--	208
RM 11-11.8																		
Metals																		
Cadmium	mg/kg	24	24	100	0.126	0.678	SL017	0.254	0.218	0.121	0.405	0.126	0.678	SL017	0.254	0.218	0.121	0.405
Lead	mg/kg	24	24	100	10.8	466	G005	86.1	48	105	255	10.8	466	G005	86.1	48	105	255
Mercury	mg/kg	24	24	100	0.024	0.725	SL017	0.0927	0.058	0.14	0.179	0.024	0.725	SL017	0.0927	0.058	0.14	0.179
Nickel	mg/kg	24	24	100	13	73.6	G026	29.2	23.9	14.1	56.9	13	73.6	G026	29.2	23.9	14.1	56.9

Table D1.3-12. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Eastern Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	4	4	100	0.000286 JT	0.0308 T	GCA11E	0.0123	0.00901	0.0148	0.0288	0.000286 JT	0.0308 T	GCA11E	0.0123	0.00901	0.0148	0.0288
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	26	13	50	0.085 J	5.3 NJ	GCRSP11E	0.779	0.48	1.38	2.61	0.051 U	11 U	SL004	1.1	0.295	2.33	4.75
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	25	25	100	12	2400 J	SL004	152	43	471	172	12	2400 J	SL004	152	43	471	172
Total HPAHs	µg/kg	25	25	100	140 JT	29100 JT	SL004	1890	600	5700	2100	140 JT	29100 JT	SL004	1890	600	5700	2100
Total LPAHs	µg/kg	25	25	100	22.6 JT	38100 JT	SL004	1750	153	7580	745	22.6 JT	38100 JT	SL004	1750	153	7580	745
Naphthalene	µg/kg	25	24	96	2.9	670 J	SL004	66.2	10.5	151	339	2.9	670 J	SL004	63.7	9	148	326
Phenanthrene	µg/kg	25	25	100	10	13000 J	SL004	632	61	2580	412	10	13000 J	SL004	632	61	2580	412
Total cPAHs	µg/kg	25	25	100	19 JT	3360 JT	SL004	219	64.8	658	257	19 JT	3360 JT	SL004	219	64.8	658	257
Phthalates																		
Butylbenzyl phthalate	µg/kg	24	3	12	5 J	15	G033	11	13	5.29	14.8	2.1 U	320 U	SL015	46.6	9	84.6	227
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	27	12	44	0.16 J	4.84	G516	0.883	0.31	1.32	2.95	0.093 U	15 U	SD01	1.29	0.27	3.01	4.83
Phenols																		
Pentachlorophenol	µg/kg	24	10	42	1.1 J	51	G012	12.9	6.15	17.1	44.7	0.25 U	440 U	SD01	25	3.05	89.2	48.9
Petroleum																		
Diesel Range Hydrocarbons	mg/kg	3	3	100	45 J	98 J	UG01	74.3	80	27	96.2	45 J	98 J	UG01	74.3	80	27	96.2
Diesel Range Hydrocarbons (silica gel treated)	mg/kg	19	17	89	14 J	8100 J	SL004	730	78.5	1960	2980	14 J	8100 J	SL004	657	50	1860	2340
Residual Range Hydrocarbons	mg/kg	3	3	100	280 J	1500 J	UG01	693	300	699	1380	280 J	1500 J	UG01	693	300	699	1380
Residual Range Hydrocarbons (silica gel treated)	mg/kg	19	19	100	56 J	9400 J	SL015	1370	320	2850	9310	56 J	9400 J	SL015	1370	320	2850	9310
Total Petroleum Hydrocarbons	mg/kg	3	3	100	325 JA	1600 JT	UG01	768	380	721	1480	325 JA	1600 JT	UG01	768	380	721	1480
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	19	19	100	70 JT	17400 JA	SL004	2020	366	4460	11400	70 JT	17400 JA	SL004	2020	366	4460	11400

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

-- data not available.
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-13. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Eastern Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Study Area																		
Metals																		
Cadmium	mg/kg	646	600	93	0.029	4.2	T4-B411-06	0.4	0.278	0.48	1.04	0.017 U	4.2	T4-B411-06	0.382	0.248	0.469	1.03
Lead	mg/kg	701	693	99	1.95	3130 J	T4-PS21	56.4	20.6	161	238	1.95	3130 J	T4-PS21	56	20.4	160	238
Mercury	mg/kg	619	568	92	0.007 J	16.8	C708	0.237	0.088	0.817	0.705	0.006 UJ	16.8	C708	0.22	0.078	0.784	0.651
Nickel	mg/kg	641	641	100	6.14	127	C215	23.5	23.5	7.26	32	6.14	127	C215	23.5	23.5	7.26	32
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	86	86	100	0.0000000755 JT	0.365 JT	C384	0.0128	0.00209	0.0468	0.0494	0.0000000755 JT	0.365 JT	C384	0.0128	0.00209	0.0468	0.0494
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	376	48	13	0.052 J	75 J	C022	4.22	1.73	10.8	9.23	0.051 U	75 J	C022	1.1	0.17	5.16	3.94
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	672	568	85	0.16 J	57000	T4-S3-01	1220	110	4800	4660	0.14 U	57000	T4-S3-01	1030	77	4430	3900
Total HPAHs	µg/kg	672	622	93	0.15 JT	440000 T	T4-S3-01	10500	1080	38500	43000	0.15 JT	440000 T	T4-S3-01	9690	839	37100	42000
Total LPAHs	µg/kg	672	598	89	0.22 JT	333000 T	SED01	3180	320	16700	13000	0.22 JT	333000 T	SED01	2830	219	15800	11600
Naphthalene	µg/kg	685	486	71	0.27 J	10000	C048-R1	171	48	533	648	0.27 J	10000	C048-R1	157	22	565	620
Phenanthrene	µg/kg	672	569	85	0.24 J	200000	SED01	1870	170	10100	7700	0.24 J	200000	SED01	1590	120	9360	7240
Total cPAHs	µg/kg	672	608	90	0.00017 JT	79500 T	T4-S3-01	1600	133	6490	5840	0.00017 JT	79500 T	T4-S3-01	1450	110	6190	5530
Phthalates																		
Butylbenzyl phthalate	µg/kg	654	101	15	2 J	430	C092	43.1	17	72.2	215	1.7 U	4000 U	HC-S-07; HC-S-11; HC-S-42	55.8	10	355	100
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	425	65	15	0.12 J	5.04 J	C062	0.9	0.64	0.886	2.38	0.0162 U	4000 U	HC-S-07; HC-S-11; HC-S-42	59.7	1	439	36
Phenols																		
Pentachlorophenol	µg/kg	447	135	30	0.32 J	190	C708	8.91	4.1	20.4	24.9	0.16 UT	12000 U	HC-S-07; HC-S-11; HC-S-42	181	2.2	1280	175
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	500	363	73	0.049 J	6800 J	C708	355	175	642	1200	0.049 J	6800 J	C708	263	81	568	952
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	83	73	88	2.3 JT	3300 J	C651	339	170	579	1300	1.4 U	3300 J	C651	299	150	554	940
Total Petroleum Hydrocarbons (Residual)	mg/kg	450	343	76	0.28	17000 J	C708	649	410	1260	1690	0.28	17000 J	C708	508	210	1130	1500
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	83	75	90	4.15 JT	11000 J	C708	674	380	1390	1750	3.4 U	11000 J	C708	610	350	1330	1570
Total Petroleum Hydrocarbons	mg/kg	500	407	81	0.33 JT	23800 JA	C708	938	525	1780	2970	0.33 JT	23800 JA	C708	774	307	1640	2600
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	83	77	93	2.7 JA	14000 JA	C708	978	540	1860	2730	2.7 JA	14000 JA	C708	908	490	1810	2060
RM 01.9-03																		
Metals																		
Cadmium	mg/kg	65	64	98	0.081	1.65	DC01-2	0.47	0.393	0.337	1.3	0.081	1.65	DC01-2	0.479	0.4	0.342	1.29
Lead	mg/kg	65	65	100	2.89	117	C019-1	20.6	16.5	16.5	41.2	2.89	117	C019-1	20.6	16.5	16.5	41.2
Mercury	mg/kg	62	61	98	0.012 JT	0.331	DC01-1	0.0923	0.0755	0.0734	0.261	0.012 JT	0.331	DC01-1	0.0919	0.0753	0.0729	0.261
Nickel	mg/kg	64	64	100	6.14	46.5	C015	24	24.3	5.71	31.3	6.14	46.5	C015	24	24.3	5.71	31.3
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	27	27	100	0.000000859 JT	0.0141 T	C019-2	0.00337	0.00173	0.00436	0.0137	0.000000859 JT	0.0141 T	C019-2	0.00337	0.00173	0.00436	0.0137
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	68	6	9	0.25 J	5.31 NJ	C038	1.7	0.665	2.04	4.72	0.062 U	5.31 NJ	C038	0.547	0.18	0.834	1.83
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	67	64	96	2.4 JT	820	C609	131	71	174	566	0.29 U	820	C609	126	58	172	542
Total HPAHs	µg/kg	67	66	99	0.71 JT	8900 T	C609	1350	599	1890	5670	0.71 JT	8900 T	C609	1330	590	1880	5610
Total LPAHs	µg/kg	67	65	97	0.47 JT	6400 T	C609	611	151	1270	2880	0.47 JT	6400 T	C609	593	150	1250	2880
Naphthalene	µg/kg	67	54	81	2.7	510	DC01-1	56	20	95.6	255	0.47 U	510	DC01-1	48	15	88.5	221
Phenanthrene	µg/kg	67	65	97	0.47 J	3900	C609	325	72	712	1600	0.47 J	3900	C609	316	71	703	1580
Total cPAHs	µg/kg	67	66	99	0.00071 JT	1100 T	C609	174	89	233	742	0.00071 JT	1100 T	C609	172	82.1	232	731
Phthalates																		
Butylbenzyl phthalate	µg/kg	68	6	9	2.4 J	23 J	C019-1	9	7.05	7.23	19.5	1.7 UT	33 U	C600	8.9	3.95	9.25	32
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	71	10	14	0.13 J	3.79 J	C022	1.34	0.52	1.37	3.57	0.0183 U	63 U	LWMTCLP1	3.09	1	7.95	11.9
Phenols																		
Pentachlorophenol	µg/kg	69	19	28	1 JT	19	WR-VC-02	3.72	2.6	4.39	10.3	0.16 UT	320 U	LWMTCLP1	11.4	1.1	51.3	16.2
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	58	52	90	0.049 J	1700 J	C015	178	97.5	286	483	0.049 J	1700 J	C015	161	82	275	468
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	16	15	94	11 J	390 J	C609	171	150	101	362	7.4 U	390 J	C609	161	145	106	360
Total Petroleum Hydrocarbons (Residual)	mg/kg	56	46	82	0.28	2300 J	C015	483	393	448	1290	0.28	2300 J	C015	405	320	439	1160
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	16	15	94	23 J	690 J	C609	367	380	155	613	17 U	690 J	C609	345	365	173	608
Total Petroleum Hydrocarbons	mg/kg	58	53	91	0.33 JT	3640 JT	C015	599	452	689	1950	0.33 JT	3640 JT	C015	550	420	677	1740
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	16	15	94	34 JA	1080 JA	C609	538	530	252	975	17 UA	1080 JA	C609	505	510	276	968

Table D1.3-13. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Eastern Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	Units	Sample Count	Detected Sample Count	Percent Detected	Minimum[a]	Maximum[a]	Maximum Location(s)	Mean	Median[b]	Standard Deviation	95th Percentile[b]	Minimum (full DL)[a]	Maximum (full DL)[a]	Maximum Location(s)	Mean (full DL)	Median (full DL)[b]	Standard Deviation (full DL)	95th Percentile[b] (full DL)
RM 03-04																		
Metals																		
Cadmium	mg/kg	74	71	96	0.057	1.95	C092	0.356	0.225	0.332	0.899	0.049 UJ	1.95	C092	0.345	0.225	0.331	0.898
Lead	mg/kg	74	74	100	2.4 T	184	C091	24.8	17.4	31.3	58.7	2.4 T	184	C091	24.8	17.4	31.3	58.7
Mercury	mg/kg	83	82	99	0.01 J	1.35	SED11	0.19	0.0955	0.26	0.656	0.009 U	1.35	SED11	0.188	0.095	0.259	0.652
Nickel	mg/kg	74	74	100	15.6 T	40.5 J	C109	24.9	24.6	5.25	32.7	15.6 T	40.5 J	C109	24.9	24.6	5.25	32.7
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	2	2	100	0.0124 JT	0.125 T	LWMC3	0.0689	0.0689	0.0799	0.12	0.0124 JT	0.125 T	LWMC3	0.0689	0.0689	0.0799	0.12
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	72	9	12	0.62 NJ	9.89 NJ	C067	3.87	3.78	3.03	8.69	0.062 U	13 U	C109	1	0.15	2.25	4.87
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	84	71	85	0.57 J	5400	SED01	647	180	1070	2850	0.25 U	5400	SED01	547	135	1010	2700
Total HPAHs	µg/kg	84	79	94	1.03 JT	283000 T	SED01	12100	1620	37300	47100	0.64 UT	283000 T	SED01	11400	1500	36300	46000
Total LPAHs	µg/kg	84	78	93	0.36 JT	333000 T	SED01	10500	383	43400	38000	0.36 JT	333000 T	SED01	9760	238	41900	34900
Naphthalene	µg/kg	95	57	60	0.66 J	3500	C613	239	75	501	904	0.4 U	3500	C613	144	14	404	614
Phenanthrene	µg/kg	84	74	88	0.42 J	200000	SED01	6590	260	26700	25100	0.38 U	200000	SED01	5810	130	25100	22600
Total cPAHs	µg/kg	84	77	92	0.032 JT	8520 T	SED01	870	218	1570	4230	0.032 JT	8520 T	SED01	797	187	1520	4140
Phthalates																		
Butylbenzyl phthalate	µg/kg	72	12	17	8.8 J	430	C092	96	52.5	123	315	1.7 U	430	C092	23	3.8	59.4	98.6
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	75	7	9	0.15 J	5.04 J	C062	1.05	0.36	1.77	3.73	0.058 UJ	36 U	C067	2.21	0.19	5.52	9.61
Phenols																		
Pentachlorophenol	µg/kg	72	14	19	1.6 J	10 NJ	C610	4.64	3.7	2.95	9.16	0.49 U	98 UJ	SD007; SD013	4.98	0.715	16.1	9.78
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	75	60	80	3.3 J	3500 J	C092	350	170	625	849	3.3 J	3500 J	C092	282	81	575	806
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	10	9	90	7.1 J	650 J	C109	296	340	206	574	3.2 U	650 J	C109	267	280	215	565
Total Petroleum Hydrocarbons (Residual)	mg/kg	74	62	84	6.1 JT	11000 J	C092	770	415	1640	2170	4.4 UT	11000 J	C092	649	192	1520	1750
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	10	9	90	11 J	830 J	C091	433	430	302	814	5.4 U	830 J	C091	390	400	315	812
Total Petroleum Hydrocarbons	mg/kg	75	69	92	3.3 JT	14700 JT	C092	1010	440	2170	2700	3.3 JT	14700 JT	C092	933	315	2100	2550
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	10	9	90	18 JT	1400 JT	C109	730	650	493	1360	5.4 UT	1400 JT	C109	657	615	518	1360
RM 04-05																		
Metals																		
Cadmium	mg/kg	189	188	99	0.037 J	4.2	T4-B411-06	0.465	0.191	0.709	1.74	0.037 J	4.2	T4-B411-06	0.463	0.19	0.708	1.73
Lead	mg/kg	232	232	100	1.95	3130 J	T4-PS21	91	14.2	254	508	1.95	3130 J	T4-PS21	91	14.2	254	508
Mercury	mg/kg	188	168	89	0.008 J	2.15	T4-VC22	0.113	0.063	0.226	0.315	0.008 J	2.15	T4-VC22	0.103	0.0415	0.216	0.309
Nickel	mg/kg	188	188	100	12.2 J	37.4	SD031	20	19.2	4.65	28.7	12.2 J	37.4	SD031	20	19.2	4.65	28.7
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	1	1	100	0.00454 T	0.00454 T	C111-2	0.00454	0.00454	--	0.00454	0.00454 T	0.00454 T	C111-2	0.00454	0.00454	--	0.00454
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	9	2	22	5.78 NJ	10.3 NJ	C112	8.04	8.04	3.2	10.1	0.104 UJ	10.3 NJ	C112	2.05	0.506	3.58	8.49
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	240	190	79	0.16 J	57000	T4-S3-01	3060	250	7950	17600	0.16 J	57000	T4-S3-01	2420	140	7180	16100
Total HPAHs	µg/kg	240	223	93	0.15 JT	440000 T	T4-S3-01	21100	1700	58300	130000	0.15 JT	440000 T	T4-S3-01	19600	1410	56400	128000
Total LPAHs	µg/kg	240	197	82	0.22 JT	51000 T	T4-S3-01	2770	540	6720	13200	0.22 JT	51000 T	T4-S3-01	2290	278	6170	13000
Naphthalene	µg/kg	240	170	71	0.27 J	1700	T4-S3-01	138	54.5	218	557	0.27 J	4000 U	HC-S-07; HC-S-11; HC-S-42	196	24	597	663
Phenanthrene	µg/kg	240	178	74	0.24 J	29000	T4-S3-01	1850	375	4210	8750	0.24 J	29000	T4-S3-01	1390	140	3720	7730
Total cPAHs	µg/kg	240	214	89	0.00017 JT	79500 T	T4-S3-01	3780	264	10500	23400	0.00017 JT	79500 T	T4-S3-01	3370	196	10000	22200
Phthalates																		
Butylbenzyl phthalate	µg/kg	239	29	12	2.5 J	310	C111-2	42	14	74.5	200	2.5 J	4000 U	HC-S-07; HC-S-11; HC-S-42	123	20	579	131
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	30	0	0	--	--	--	--	--	--	--	6 U	4000 U	HC-S-07; HC-S-11; HC-S-42	791	33.5	1490	4000
Phenols																		
Pentachlorophenol	µg/kg	30	9	30	1.2 J	8.6	C112	4.75	4.1	2.59	8.56	1.2 J	12000 U	HC-S-07; HC-S-11; HC-S-42	2370	119	4470	12000
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	211	117	55	7.6	1200	T4-B411-06	221	150	227	638	0.5 U	1200	T4-B411-06	132	31	196	540
Total Petroleum Hydrocarbons (Residual)	mg/kg	168	105	62	5.9 J	1400 J	C111-2	289	180	302	832	5.9 J	1400 J	C111-2	209	84.5	260	667
Total Petroleum Hydrocarbons	mg/kg	211	145	69	5.9 JT	5400 A	T4-B411-06	575	360	758	1980	5.9 JT	5400 A	T4-B411-06	419	98	669	1430

Table D1.3-13. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Eastern Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	Units	Sample Count	Detected Sample Count	Percent Detected	Minimum[a]	Maximum[a]	Maximum Location(s)	Mean	Median[b]	Standard Deviation	95th Percentile[b]	Minimum (full DL)[a]	Maximum (full DL)[a]	Maximum Location(s)	Mean (full DL)	Median (full DL)[b]	Standard Deviation (full DL)	95th Percentile[b] (full DL)
RM 05-06																		
Metals																		
Cadmium	mg/kg	34	32	94	0.06 J	1.03	C202	0.364	0.368	0.249	0.661	0.06 J	1.03	C202	0.352	0.333	0.246	0.655
Lead	mg/kg	34	34	100	2.26 J	426 J	C203	68.6	44.1	96.2	300	2.26 J	426 J	C203	68.6	44.1	96.2	300
Mercury	mg/kg	34	30	88	0.02	0.81	C197	0.312	0.233	0.245	0.643	0.008 U	0.81	C197	0.276	0.185	0.25	0.64
Nickel	mg/kg	33	33	100	13.9 T	127	C215	27.2	23.7	19.2	37.4	13.9 T	127	C215	27.2	23.7	19.2	37.4
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	3	3	100	0.000593 JT	0.059 JT	C203	0.0211	0.00383	0.0328	0.0535	0.000593 JT	0.059 JT	C203	0.0211	0.00383	0.0328	0.0535
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	33	3	9	1.75 NJ	3.35 NJ	C199	2.32	1.87	0.891	3.2	0.062 U	8.2 U	LWMTCLP7	0.925	0.504	1.62	3.77
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	33	32	97	0.78 J	3800	C192	664	370	881	2320	0.41 U	3800	C192	644	360	875	2320
Total HPAHs	µg/kg	33	32	97	12.4 JT	41300 T	C192	7490	4260	9820	26600	1.5 UT	41300 T	C192	7260	3650	9760	26500
Total LPAHs	µg/kg	33	33	100	9.47 JT	25400 T	C192	4370	1510	6290	16800	9.47 JT	25400 T	C192	4370	1510	6290	16800
Naphthalene	µg/kg	35	31	89	3.8	1500	C651	375	195	420	1250	0.42 U	1500	C651	333	190	412	1230
Phenanthrene	µg/kg	33	32	97	4.6	15000	C192	2230	780	3330	8400	2.2 U	15000	C192	2160	730	3300	8300
Total cPAHs	µg/kg	33	32	97	1.04 JT	5040 T	C192	910	516	1180	3110	0.41 UT	5040 T	C192	882	494	1170	3100
Phthalates																		
Butylbenzyl phthalate	µg/kg	33	6	18	2.4 J	35	C199	20.7	24	12	33.3	1.9 U	47 U	C203	13.7	11	12.7	35
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	34	10	29	0.28 J	1.47 J	C203	1.04	1.09	0.384	1.44	0.0166 U	180 U	LWMTCLP7	8.8	1.01	31.1	25.3
Phenols																		
Pentachlorophenol	µg/kg	34	10	29	1.92	16 J	C651	8.92	8.95	4.26	15.1	0.24 U	880 U	LWMTCLP7	34.9	0.705	151	98.4
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	31	23	74	28 J	3700 J	C651	1250	820	1250	3490	11 U	3700 J	C651	930	430	1200	3450
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	2	2	100	42 J	3300 J	C651	1670	1670	2300	3140	42 J	3300 J	C651	1670	1670	2300	3140
Total Petroleum Hydrocarbons (Residual)	mg/kg	30	23	77	9.25 JT	4500 J	C203	1500	1100	1280	3570	7 U	4500 J	C203	1160	905	1280	3470
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	2	2	100	92 J	2100 J	C651	1100	1100	1420	2000	92 J	2100 J	C651	1100	1100	1420	2000
Total Petroleum Hydrocarbons	mg/kg	31	25	81	9.25 JT	7920 JT	C203	2540	1770	2520	6880	9.25 JT	7920 JT	C203	2060	1250	2470	6860
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	2	2	100	134 JA	5400 JA	C651	2770	2770	3720	5140	134 JA	5400 JA	C651	2770	2770	3720	5140
RM 06-07																		
Metals																		
Cadmium	mg/kg	64	64	100	0.055	1.01	C665	0.294	0.254	0.194	0.629	0.055	1.01	C665	0.294	0.254	0.194	0.629
Lead	mg/kg	64	64	100	2.22 J	238	C280	34.8	26.3	42.3	87	2.22 J	238	C280	34.8	26.3	42.3	87
Mercury	mg/kg	52	49	94	0.007 J	4.14	C295	0.575	0.2	0.973	3.02	0.006 U	4.14	C295	0.542	0.162	0.953	3.01
Nickel	mg/kg	64	64	100	11	36.2	SD071	24.1	25	5.59	31.1	11	36.2	SD071	24.1	25	5.59	31.1
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	14	14	100	0.0000000755 JT	0.0204 JT	C291	0.00323	0.00209	0.00512	0.00984	0.0000000755 JT	0.0204 JT	C291	0.00323	0.00209	0.00512	0.00984
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	52	2	4	0.548 NJ	7.99 J	C260	4.27	4.27	5.26	7.62	0.0657 U	7.99 J	C260	0.588	0.245	1.25	1.2
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	54	49	91	0.34 J	1500	C295	198	90	281	632	0.25 U	1500	C295	179	76	273	602
Total HPAHs	µg/kg	54	51	94	0.48 JT	23100 T	C295	2960	1360	4610	12100	0.48 JT	23100 T	C295	2800	1180	4530	12000
Total LPAHs	µg/kg	54	52	96	0.5 JT	42500 T	C293-2	3650	563	8920	28000	0.5 JT	42500 T	C293-2	3520	538	8780	27500
Naphthalene	µg/kg	54	41	76	6.4	1900	C293-1	292	120	419	980	0.65 U	1900	C293-1	223	65	385	889
Phenanthrene	µg/kg	54	50	93	0.41 J	16000	C293-2	1370	280	3200	8630	0.37 U	16000	C293-2	1270	185	3100	8290
Total cPAHs	µg/kg	54	50	93	0.045 JT	2200 T	C295	279	126	402	866	0.045 JT	2200 T	C295	258	121	393	836
Phthalates																		
Butylbenzyl phthalate	µg/kg	53	5	9	2.5 J	18 J	C291	9.14	8.5	5.68	16.4	1.7 U	160 U	C665	14.9	5	34.7	68
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	55	14	25	0.12 J	1.77 J	C260	0.885	0.779	0.449	1.59	0.0162 U	22 U	C293-2	2.5	0.64	5	15.8
Phenols																		
Pentachlorophenol	µg/kg	54	21	39	2.8 J	20	C244	7.58	5.9	4.77	17	0.27 U	98 UJ	SD071; SD074	7.33	1.55	18.5	18.1
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	32	27	84	5.85 JT	1600 J	C293-1; C293-2	514	400	498	1600	4.4 UT	1600 J	C293-1; C293-2	435	285	493	1600
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	3	3	100	200 J	650 J	C665	400	350	229	620	200 J	650 J	C665	400	350	229	620
Total Petroleum Hydrocarbons (Residual)	mg/kg	31	25	81	26 J	1900 J	C293-1	867	910	517	1580	4.1 UT	1900 J	C293-1	700	880	577	1550
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	3	3	100	450 J	710 J	C665	607	660	138	705	450 J	710 J	C665	607	660	138	705
Total Petroleum Hydrocarbons	mg/kg	32	27	84	5.85 JT	3600 JT	C293-1	1340	1320	1020	3200	4.4 UA	3600 JT	C293-1	1140	1140	1050	3130
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	3	3	100	650 JA	1360 JA	C665	1010	1010	355	1330	650 JA	1360 JA	C665	1010	1010	355	1330

Table D1.3-13. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Eastern Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	Units	Sample Count	Detected Sample Count	Percent Detected	Minimum[a]	Maximum[a]	Maximum Location(s)	Mean	Median[b]	Standard Deviation	95th Percentile[b]	Minimum (full DL)[a]	Maximum (full DL)[a]	Maximum Location(s)	Mean (full DL)	Median (full DL)[b]	Standard Deviation (full DL)	95th Percentile[b] (full DL)
RM 07-08																		
Metals																		
Cadmium	mg/kg	25	24	96	0.029	0.5	SD096; SD102	0.263	0.304	0.145	0.492	0.029	0.5	SD096; SD102	0.258	0.3	0.144	0.489
Lead	mg/kg	37	31	84	1.96	204	SED15	32.1	25	36.4	66.7	1.96	204	SED15	30.2	21.5	33.6	66.4
Mercury	mg/kg	26	25	96	0.014 J	0.851	C347	0.163	0.108	0.177	0.42	0.006 UJ	0.851	C347	0.157	0.097	0.176	0.414
Nickel	mg/kg	24	24	100	12.4	30.3 J	C352; SD106	24.3	24.5	5.09	30.2	12.4	30.3 J	C352; SD106	24.3	24.5	5.09	30.2
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	11	11	100	0.000000138 JT	0.00306 JT	C342	0.00108	0.000674	0.00115	0.00295	0.000000138 JT	0.00306 JT	C342	0.00108	0.000674	0.00115	0.00295
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	24	1	4	0.66 NJ	0.66 NJ	C678	0.66	0.66	--	0.66	0.062 U	1.6 U	LWMTCLP15	0.452	0.28	0.433	1.17
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	33	28	85	0.37 J	920	C676	114	64.5	179	328	0.14 U	920	C676	96.7	53	170	282
Total HPAHs	µg/kg	33	31	94	0.95 JT	13000 T	C676; C678	1810	796	3280	9840	0.64 UT	13000 T	C676; C678	1700	713	3200	9200
Total LPAHs	µg/kg	33	31	94	0.75 JT	18000 T	C678	1350	307	3430	5430	0.75 JT	18000 T	C678	1270	269	3330	5000
Naphthalene	µg/kg	33	23	70	3.2	640	C678	123	66	144	381	0.67 U	640	C678	86.6	41.4	132	286
Phenanthrene	µg/kg	33	30	91	0.75 J	10000	C678	801	145	2060	4290	0.75 J	10000	C678	729	120	1970	3860
Total cPAHs	µg/kg	33	29	88	0.00029 JT	1240 T	C676	160	85.6	245	499	0.00029 JT	1240 T	C676	141	77.7	235	453
Phthalates																		
Butylbenzyl phthalate	µg/kg	25	2	8	2.7 J	32 J	C347	17.4	17.4	20.7	30.5	1.8 U	64 U	C678	17.9	13	19	61
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	26	4	15	0.317 J	0.836 J	C342	0.573	0.57	0.245	0.819	0.067 UJ	65 U	LWMTCLP15	7.5	0.659	14.3	23.5
Phenols																		
Pentachlorophenol	µg/kg	26	11	42	0.32 J	110	C678	16.7	2.9	32.5	70	0.18 U	330 U	LWMTCLP15	31.2	2.2	70.7	107
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	20	19	95	1.9 J	2700 J	C347	428	220	623	1260	1.9 J	2700 J	C347	407	205	613	1180
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	9	7	78	6.6 JT	960 J	C678	408	370	320	864	1.4 U	960 J	C678	318	230	330	832
Total Petroleum Hydrocarbons (Residual)	mg/kg	20	18	90	17 J	1800 J	C347	691	625	503	1460	17 J	1800 J	C347	623	580	519	1420
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	9	7	78	21.5 JT	1100 J	C678	646	660	393	1100	3.4 U	1100 J	C678	504	480	442	1100
Total Petroleum Hydrocarbons	mg/kg	20	20	100	1.9 JA	4540 JT	C347	1030	790	1100	2600	1.9 JA	4540 JT	C347	1030	790	1100	2600
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	9	7	78	28.1 JA	2060 JA	C678	1050	1140	698	1960	3.4 UA	2060 JA	C678	821	650	761	1930
RM 08-09																		
Metals																		
Cadmium	mg/kg	6	5	83	0.22 T	0.688	C420	0.388	0.284	0.201	0.65	0.146 U	0.688	C420	0.348	0.266	0.205	0.641
Lead	mg/kg	6	6	100	19.5 JT	70	C420	35.4	30.5	17.9	61.5	19.5 JT	70	C420	35.4	30.5	17.9	61.5
Mercury	mg/kg	5	5	100	0.05	0.173 T	C420	0.12	0.134	0.0566	0.173	0.05	0.173 T	C420	0.12	0.134	0.0566	0.173
Nickel	mg/kg	6	6	100	21.4 JT	32	SD138	26.1	24.6	4.28	31.6	21.4 JT	32	SD138	26.1	24.6	4.28	31.6
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	1	1	100	0.00741 JT	0.00741 JT	C420	0.00741	0.00741	--	0.00741	0.00741 JT	0.00741 JT	C420	0.00741	0.00741	--	0.00741
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	6	0	0 --	--		--	--	--	--	--	0.109 U	0.96 UJ	SD138	0.427	0.372	0.319	0.868
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	5	5	100	27 J	87	C420	63.4	70	26.4	87	27 J	87	C420	63.4	70	26.4	87
Total HPAHs	µg/kg	5	5	100	300 JT	972 T	C420	718	780	282	969	300 JT	972 T	C420	718	780	282	969
Total LPAHs	µg/kg	5	5	100	84 JT	360 T	C420	211	148	126	354	84 JT	360 T	C420	211	148	126	354
Naphthalene	µg/kg	5	4	80	8.6 J	35	SD138	24.2	26.5	11.1	33.8	0.37 U	35	SD138	19.4	26	14.3	33.4
Phenanthrene	µg/kg	5	5	100	47 J	190	C420	119	94	59.5	186	47 J	190	C420	119	94	59.5	186
Total cPAHs	µg/kg	5	5	100	40.5 JT	130 T	C420	95	110	40.5	130	40.5 JT	130 T	C420	95	110	40.5	130
Phthalates																		
Butylbenzyl phthalate	µg/kg	6	4	67	13 J	37	SD138	26.5	28	10.8	36.4	1.9 U	37	SD138	19.1	18	14.3	36
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	6	1	17	0.24 J	0.24 J	C714	0.24	0.24	--	0.24	0.24 J	38 U	C420	11.1	4.6	14.9	33.3
Phenols																		
Pentachlorophenol	µg/kg	6	4	67	1.1 NJ	6.52	C420	2.78	1.75	2.54	5.87	0.7 U	96 UJ	SD138	18	1.75	38.3	73.6
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	4	4	100	105 JT	290 J	C420	184	170	77.6	274	105 JT	290 J	C420	184	170	77.6	274
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	2	2	100	104 JT	160 J	C727	132	132	39.6	157	104 JT	160 J	C727	132	132	39.6	157
Total Petroleum Hydrocarbons (Residual)	mg/kg	4	4	100	360 JT	700 J	C420	505	480	144	672	360 JT	700 J	C420	505	480	144	672
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	2	2	100	255 JT	380 J	C727	318	318	88.4	374	255 JT	380 J	C727	318	318	88.4	374
Total Petroleum Hydrocarbons	mg/kg	4	4	100	465 JA	990 JT	C420	689	650	221	945	465 JA	990 JT	C420	689	650	221	945
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	2	2	100	359 JA	540 JA	C727	450	450	128	531	359 JA	540 JA	C727	450	450	128	531

Table D1.3-13. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Eastern Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Swan Island Lagoon																		
Metals																		
Cadmium	mg/kg	156	119	76	0.048	3.25 J	C384	0.405	0.351	0.4	0.845	0.017 U	3.25 J	C384	0.337	0.23	0.371	0.773
Lead	mg/kg	156	154	99	2.1	711	C708	41.2	23.4	83.1	117	2.1	711	C708	40.8	21.9	82.7	117
Mercury	mg/kg	136	115	85	0.009 J	16.8	C708	0.386	0.111	1.62	0.723	0.009 J	16.8	C708	0.334	0.0855	1.49	0.659
Nickel	mg/kg	155	155	100	10.9	57.3	C708	25.3	24.6	6	35.9	10.9	57.3	C708	25.3	24.6	6	35.9
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	27	27	100	0.000000112 JT	0.365 JT	C384	0.0274	0.00248	0.0783	0.157	0.000000112 JT	0.365 JT	C384	0.0274	0.00248	0.0783	0.157
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	81	16	20	0.13 JT	7.2 J	C708	2.53	1.12	2.58	6.83	0.062 U	7.2 J	C708	0.721	0.14	1.46	3.27
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	123	98	80	0.34 J	3300	C708	223	70.5	545	658	0.14 U	3300	C708	179	51	494	536
Total HPAHs	µg/kg	123	103	84	0.79 JT	43000 T	C708	2610	709	6780	12400	0.64 UT	43000 T	C708	2190	611	6270	5520
Total LPAHs	µg/kg	123	104	85	0.45 JT	12000 T	C708; DMMU1	815	209	2190	2790	0.45 JT	12000 T	C708; DMMU1	691	162	2040	2080
Naphthalene	µg/kg	123	75	61	0.77 J	590	C384	53.7	29	84	136	0.51 U	590	C384	36	16	69.2	120
Phenanthrene	µg/kg	123	103	84	0.45 J	8700	C708	502	120	1460	1770	0.45 J	8700	C708	422	77	1350	1450
Total cPAHs	µg/kg	123	103	84	0.03 JT	4990 T	C708	315	95.6	810	976	0.03 JT	4990 T	C708	265	72	750	775
Phthalates																		
Butylbenzyl phthalate	µg/kg	124	33	27	7.4 J	260	DM-24	48	20	65.9	194	1.9 U	320 U	C708	23.2	10	48.6	121
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	93	12	13	0.21 J	2.13 J	C415	0.908	0.648	0.6	2.06	0.0171 UJ	64 U	LWMTCLP23	5.24	2.8	9.52	19
Phenols																		
Pentachlorophenol	µg/kg	122	35	29	0.92 NJ	190	C708	15.6	5.1	34.5	57.2	0.2 U	320 U	LWMTCLP23	39.5	8.65	54	100
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	54	46	85	1.6 JT	6800 J	C708	419	225	990	850	1.6 JT	6800 J	C708	358	192	924	802
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	16	12	75	48 J	3000 J	C708	467	240	821	1770	1.6 UT	3000 J	C708	351	131	733	1320
Total Petroleum Hydrocarbons (Residual)	mg/kg	52	47	90	5.6 JT	17000 J	C708	973	570	2440	1600	3.9 U	17000 J	C708	881	498	2330	1600
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	16	14	88	4.15 JT	11000 J	C708	1160	375	2850	4700	3.9 U	11000 J	C708	1020	240	2690	3730
Total Petroleum Hydrocarbons	mg/kg	54	49	91	7.2 JA	23800 JA	C708	1340	780	3360	2460	3.9 UA	23800 JA	C708	1210	620	3220	2430
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	16	14	88	4.15 JA	14000 JA	C708	1560	590	3620	6240	3.9 UA	14000 JA	C708	1370	371	3410	5050
RM 09-10																		
Metals																		
Cadmium	mg/kg	9	9	100	0.098	0.588 JT	C454	0.207	0.162	0.151	0.451	0.098	0.588 JT	C454	0.207	0.162	0.151	0.451
Lead	mg/kg	9	9	100	6.52	39.5 T	C454	18.8	18	9.58	33	6.52	39.5 T	C454	18.8	18	9.58	33
Mercury	mg/kg	9	9	100	0.036	0.324	C454	0.102	0.07	0.0887	0.246	0.036	0.324	C454	0.102	0.07	0.0887	0.246
Nickel	mg/kg	9	9	100	18.7	24.7 T	C454	21.2	21.2	2.04	24.3	18.7	24.7 T	C454	21.2	21.2	2.04	24.3
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	9	3	33	0.075 J	2.43 NJ	C454	0.965	0.39	1.28	2.23	0.062 U	2.43 NJ	C454	0.388	0.0805	0.773	1.61
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	9	9	100	0.6 J	200	C743	57.8	42	59.7	156	0.6 J	200	C743	57.8	42	59.7	156
Total HPAHs	µg/kg	9	9	100	8.5 JT	1900 T	C743	602	361	558	1500	8.5 JT	1900 T	C743	602	361	558	1500
Total LPAHs	µg/kg	9	9	100	3.7 JT	700 T	C743	212	100	223	565	3.7 JT	700 T	C743	212	100	223	565
Naphthalene	µg/kg	9	8	89	7.7	110	C454	50.1	26.5	47.5	110	1.3 U	110	C454	44.7	23	47.3	110
Phenanthrene	µg/kg	9	9	100	2.2	340	C743	91.7	57	102	256	2.2	340	C743	91.7	57	102	256
Total cPAHs	µg/kg	9	9	100	0.807 JT	269 T	C743	79.8	56.6	80.1	211	0.807 JT	269 T	C743	79.8	56.6	80.1	211
Phthalates																		
Butylbenzyl phthalate	µg/kg	10	0	0	--	--	--	--	--	--	--	2.1 U	5.1 U	C454	3.43	3.2	0.96	4.97
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	10	3	30	0.13 J	0.427 J	C454	0.232	0.14	0.169	0.398	0.0257 U	5.5 U	C454	1.26	0.135	1.92	4.47
Phenols																		
Pentachlorophenol	µg/kg	10	9	90	0.98 NJ	9	C742	3.16	2.2	2.77	8.08	0.23 U	9	C742	2.87	2.1	2.77	7.97

Table D1.3-13. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Eastern Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	9	9	100	7.4 J	510 J	C454	125	86	154	382	7.4 J	510 J	C454	125	86	154	382
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	5	5	100	2.8 J	93 J	C742	57.4	60	35.1	90.8	2.8 J	93 J	C742	57.4	60	35.1	90.8
Total Petroleum Hydrocarbons (Residual)	mg/kg	9	7	78	43 J	1200 J	C454	376	260	391	993	43 J	1200 J	C454	324	220	356	924
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	5	4	80	100 J	220 J	C742	165	170	59.2	219	17 U	220 J	C742	135	130	83.7	218
Total Petroleum Hydrocarbons	mg/kg	9	9	100	17 JT	1740 JT	C454	422	296	536	1320	17 JT	1740 JT	C454	422	296	536	1320
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	5	5	100	2.8 JA	313 JA	C742	189	190	125	309	2.8 JA	313 JA	C742	189	190	125	309
RM 10-11																		
Metals																		
Cadmium	mg/kg	4	4	100	0.108	0.38	SD04	0.233	0.222	0.112	0.358	0.108	0.38	SD04	0.233	0.222	0.112	0.358
Lead	mg/kg	4	4	100	4.49	29.1	C749	21.9	27.1	11.7	29	4.49	29.1	C749	21.9	27.1	11.7	29
Mercury	mg/kg	4	4	100	0.028	0.13	SD02	0.0753	0.0715	0.0424	0.123	0.028	0.13	SD02	0.0753	0.0715	0.0424	0.123
Nickel	mg/kg	4	4	100	18.5	22.5	C749	20.6	20.7	2.02	22.4	18.5	22.5	C749	20.6	20.7	2.02	22.4
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	2	0	0	--	--	--	--	--	--	--	0.064 U	0.25 U	C749	0.157	0.157	0.132	0.241
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	4	4	100	0.55 J	150	C749	58.9	42.5	64.8	136	0.55 J	150	C749	58.9	42.5	64.8	136
Total HPAHs	µg/kg	4	4	100	9.7 JT	1600 T	C749	674	544	673	1460	9.7 JT	1600 T	C749	674	544	673	1460
Total LPAHs	µg/kg	4	4	100	8.7 JT	660 T	C749	220	105	297	578	8.7 JT	660 T	C749	220	105	297	578
Naphthalene	µg/kg	4	3	75	6 J	93	C749	36.3	10	49.1	84.7	1.3 U	93	C749	27.6	8	43.8	80.6
Phenanthrene	µg/kg	4	4	100	3.5	320	C749	111	60.5	142	281	3.5	320	C749	111	60.5	142	281
Total cPAHs	µg/kg	4	4	100	1.08 JT	214 T	C749	85	62.5	92	194	1.08 JT	214 T	C749	85	62.5	92	194
Phthalates																		
Butylbenzyl phthalate	µg/kg	4	2	50	8 J	9 J	SD04	8.5	8.5	0.707	8.95	3.2 U	9 J	SD04	5.85	5.6	3.09	8.85
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	4	0	0	--	--	--	--	--	--	--	0.068 U	15 U	SD02; SD04	7.56	7.58	8.59	15
Phenols																		
Pentachlorophenol	µg/kg	4	1	25	2 J	2 J	C749	2	2	--	2	0.23 U	450 U	SD02; SD04	226	226	259	450
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	4	4	100	4.4 J	300	SD02	151	150	122	281	4.4 J	300	SD02	151	150	122	281
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	2	2	100	2.7 J	110 J	C749	56.4	56.4	75.9	105	2.7 J	110 J	C749	56.4	56.4	75.9	105
Total Petroleum Hydrocarbons (Residual)	mg/kg	4	4	100	48 J	730	SD02	425	460	282	694	48 J	730	SD02	425	460	282	694
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	2	1	50	260 J	260 J	C749	260	260	--	260	19 U	260 J	C749	140	140	170	248
Total Petroleum Hydrocarbons	mg/kg	4	4	100	52.4 JA	1030 T	SD02	576	610	403	975	52.4 JA	1030 T	SD02	576	610	403	975
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	2	2	100	2.7 JA	370 JA	C749	186	186	260	352	2.7 JA	370 JA	C749	186	186	260	352
RM 11-11.8																		
Metals																		
Cadmium	mg/kg	20	20	100	0.091 T	1.05 JT	C019	0.381	0.24	0.33	0.999	0.091 T	1.05 JT	C019	0.381	0.24	0.33	0.999
Lead	mg/kg	20	20	100	4.76 T	904	C047	123	47	218	552	4.76 T	904	C047	123	47	218	552
Mercury	mg/kg	20	20	100	0.013	1.47	C048-R1	0.338	0.127	0.458	1.28	0.013	1.47	C048-R1	0.338	0.127	0.458	1.28
Nickel	mg/kg	20	20	100	15.7	58	C047	26.3	25.1	10.1	42.7	15.7	58	C047	26.3	25.1	10.1	42.7
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	20	6	30	0.052 J	75 J	C022	13.7	1.7	30.1	57	0.051 U	75 J	C022	7.4	0.415	20.9	61.7
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	20	18	90	5.4	230	C048-R1	96.7	91	61.9	196	0.14 UT	230	C048-R1	87.8	87	64.7	192
Total HPAHs	µg/kg	20	19	95	17 JT	5320 T	C048-R1	1350	1150	1290	3300	0.64 UT	5320 T	C048-R1	1280	1100	1290	3190
Total LPAHs	µg/kg	20	20	100	1.3 JT	21500 T	C048-R1	1510	280	4730	2590	1.3 JT	21500 T	C048-R1	1510	280	4730	2590
Naphthalene	µg/kg	20	20	100	0.89 JT	10000	C048-R1	597	42.5	2220	1380	0.89 JT	10000	C048-R1	597	42.5	2220	1380
Phenanthrene	µg/kg	20	19	95	5 J	3100	C048-R1	364	150	704	1080	0.75 UT	3100	C048-R1	346	135	690	972
Total cPAHs	µg/kg	20	19	95	0.502 JT	350 T	C048-R1	140	130	98.4	287	0.28 UT	350 T	C048-R1	133	130	101	284
Phthalates																		
Butylbenzyl phthalate	µg/kg	20	2	10	2 J	18	C022	10	10	11.3	17.2	2 J	32 U	C003; C009; C012	10.3	3.2	11.9	32
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	21	4	19	0.18	0.29	C009	0.218	0.2	0.0499	0.278	0.093 U	15 U	SD01	1.05	0.093	3.3	3.7
Phenols																		
Pentachlorophenol	µg/kg	20	2	10	1.2 J	3.2 J	C023	2.2	2.2	1.41	3.1	0.85 U	450 U	SD01	25.9	4.15	99.9	33

Table D1.3-13. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Eastern Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	2	2	100	40 J	330 J	UC01	185	185	205	316	40 J	330 J	UC01	185	185	205	316
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	18	16	89	2.3 JT	1900 J	C003	367	145	596	1830	2.3 JT	1900 J	C003	328	103	571	1820
Total Petroleum Hydrocarbons (Residual)	mg/kg	2	2	100	100 J	1500 J	UC01	800	800	990	1430	100 J	1500 J	UC01	800	800	990	1430
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	18	18	100	10 JT	3900 J	C003	822	330	1200	3900	10 JT	3900 J	C003	822	330	1200	3900
Total Petroleum Hydrocarbons	mg/kg	2	2	100	140 JT	1800 JT	UC01	970	970	1170	1720	140 JT	1800 JT	UC01	970	970	1170	1720
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	18	18	100	12.3 JT	5800 JT	C003	1150	398	1760	5720	12.3 JT	5800 JT	C003	1150	398	1760	5720

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

-- data not available.
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-14. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Navigation Channel.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Study Area																		
Metals																		
Cadmium	mg/kg	332	321	97	0.05	2.13 J	DM-B	0.249	0.213	0.227	0.45	0.036 U	2.13 J	DM-B	0.243	0.21	0.227	0.468
Lead	mg/kg	334	334	100	2.4 T	62.7 J	G252	13.5	12.4	7.61	28.1	2.4 T	62.7 J	G252	13.5	12.4	7.61	28.1
Mercury	mg/kg	332	317	95	0.006 J	1.06	DM-C	0.0711	0.059	0.079	0.176	0.006 J	1.06	DM-C	0.0704	0.059	0.0775	0.171
Nickel	mg/kg	334	330	99	10.4 T	35.5 J	RC483-2	22.4	22.7	4.83	30	10.4 T	35.5 J	RC483-2	22.4	22.7	4.86	29.9
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	53	53	100	0.00000197 JT	0.003 T	G664	0.000709	0.000364	0.000802	0.0026	0.00000197 JT	0.003 T	G664	0.000709	0.000364	0.000802	0.0026
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	276	42	15	0.2 J	8.3 NJ	G253	2.17	1.8	1.97	5.9	0.051 U	20 U	WR-BC-21; WR-BC-22	0.985	0.24	2.1	3.56
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	335	329	98	1.3 J	340000	G225	2500	35	20400	3080	1.3 J	340000	G225	2450	34	20200	2990
Total HPAHs	µg/kg	335	335	100	2.2 T	4350000 T	G225	28200	344	252000	26400	2.2 T	4350000 T	G225	28200	344	252000	26400
Total LPAHs	µg/kg	335	331	99	1.7 JT	2910000 T	G225	14600	56	164000	7850	1.7 JT	2910000 T	G225	14400	54	163000	7750
Naphthalene	µg/kg	336	225	67	0.5 J	73000	G225	436	16	4880	520	0.5 J	73000	G225	326	12	4030	313
Phenanthrene	µg/kg	335	329	98	1 J	1700000	G225	8170	33	95300	3960	1 J	1700000	G225	8020	32	94400	3930
Total cPAHs	µg/kg	335	330	99	1.91 JT	449000 T	G225	3280	48.9	26900	4060	1.8 UT	449000 T	G225	3230	45.9	26700	3940
Phthalates																		
Butylbenzyl phthalate	µg/kg	312	108	35	3.3 J	110	G222	19.8	13.5	18.9	54	1.9 UJ	10000 U	GRAB-05	51.1	8.35	567	55.9
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	293	90	31	0.056 J	11	WR-PG-86	1.25	0.631	1.66	4.09	0.016 U	10000 U	GRAB-05	41	0.768	584	21.8
Phenols																		
Pentachlorophenol	µg/kg	309	40	13	0.27 J	59	G756	6.59	4.4	10.4	18.8	0.2 U	30500 U	GRAB-05	117	3.8	1730	100
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	163	156	96	8.2 J	3500 J	G639	142	77	318	485	2.7 U	3500 J	G639	137	75	312	469
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	105	94	90	7.85 JT	1900 J	G639	79.7	45.5	201	181	3.3 U	1900 J	G639	72.1	43	191	154
Total Petroleum Hydrocarbons (Residual)	mg/kg	163	161	99	9.2 J	3400 J	G639	435	400	320	800	9.2 J	3400 J	G639	430	400	321	796
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	105	103	98	7.1 J	1400 J	G639	185	165	158	347	7.1 J	1400 J	G639	182	165	157	344
Total Petroleum Hydrocarbons	mg/kg	163	161	99	9.2 JA	6900 JA	G639	574	470	612	1200	9.2 JA	6900 JA	G639	567	468	612	1190
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	105	103	98	7.1 JA	3300 JA	G639	257	209	340	503	7.1 JA	3300 JA	G639	253	204	338	496
RM 01.9-03																		
Metals																		
Cadmium	mg/kg	10	10	100	0.247 J	0.71	WR-BC-10	0.439	0.358	0.161	0.692	0.247 J	0.71	WR-BC-10	0.439	0.358	0.161	0.692
Lead	mg/kg	10	10	100	9.1	20.7	WR-BC-10	13.9	12.6	3.62	20.3	9.1	20.7	WR-BC-10	13.9	12.6	3.62	20.3
Mercury	mg/kg	10	10	100	0.055	0.09	WR-BC-10	0.0676	0.0645	0.0109	0.0855	0.055	0.09	WR-BC-10	0.0676	0.0645	0.0109	0.0855
Nickel	mg/kg	10	9	90	19.7	30	G005	23.6	22.5	3.44	28.8	19.7	30	G005	23.9	23.7	3.37	28.7
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	3	3	100	0.000276 JT	0.00047 JT	G036	0.000342	0.000281	0.000111	0.000451	0.000276 JT	0.00047 JT	G036	0.000342	0.000281	0.000111	0.000451
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	10	3	30	0.3 J	6.18 NJ	G002	3.22	3.19	2.94	5.88	0.145 U	6.18 NJ	G002	1.64	1.15	1.94	4.83
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	10	10	100	31	459 J	WR-BC-10	133	80	133	365	31	459 J	WR-BC-10	133	80	133	365
Total HPAHs	µg/kg	10	10	100	258 T	2640 T	WR-BC-10	898	649	712	2150	258 T	2640 T	WR-BC-10	898	649	712	2150
Total LPAHs	µg/kg	10	10	100	37.7 JT	256 T	WR-BC-10	133	129	71.1	237	37.7 JT	256 T	WR-BC-10	133	129	71.1	237
Naphthalene	µg/kg	10	9	90	8.9	23 J	WR-BC-09; WR-BC-10	15.4	14	5.33	23	8.9	23 J	WR-BC-09; WR-BC-10	15.2	13.5	5.09	23
Phenanthrene	µg/kg	10	10	100	12	140	G002	65.7	56	42.8	131	12	140	G002	65.7	56	42.8	131
Total cPAHs	µg/kg	10	10	100	43.6 T	609 JT	WR-BC-10	178	108	176	487	43.6 T	609 JT	WR-BC-10	178	108	176	487
Phthalates																		
Butylbenzyl phthalate	µg/kg	7	2	29	5.4 J	17	G606	11.2	11.2	8.2	16.4	3.2 U	17	G606	5.87	3.9	4.95	13.5
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	7	0	0	--	--	--	--	--	--	--	0.17 U	5.5 U	G002; G036	3.35	5.4	2.63	5.5
Phenols																		
Pentachlorophenol	µg/kg	7	1	14	0.83 J	0.83 J	DG02	0.83	0.83	--	0.83	0.32 U	5.1 U	G002; G036	3.1	5	2.44	5.1
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	3	3	100	25 J	59.2 JT	G601	47.7	59	19.7	59.2	25 J	59.2 JT	G601	47.7	59	19.7	59.2
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	2	2	100	25 J	39.3 JT	G601	32.2	32.2	10.1	38.6	25 J	39.3 JT	G601	32.2	32.2	10.1	38.6
Total Petroleum Hydrocarbons (Residual)	mg/kg	3	3	100	210 J	420 J	G606	322	335	106	412	210 J	420 J	G606	322	335	106	412

Table D1.3-14. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Navigation Channel.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	2	2	100	110 J	148 JT	G601	129	129	26.9	146	110 J	148 JT	G601	129	129	26.9	146
Total Petroleum Hydrocarbons	mg/kg	3	3	100	240 JT	479 JA	G606	371	394	121	471	240 JT	479 JA	G606	371	394	121	471
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	2	2	100	135 JA	187 JA	G601	161	161	36.8	184	135 JA	187 JA	G601	161	161	36.8	184
RM 03-04																		
Metals																		
Cadmium	mg/kg	13	13	100	0.114 J	0.41	WR-BC-15	0.243	0.238	0.0732	0.345	0.114 J	0.41	WR-BC-15	0.243	0.238	0.0732	0.345
Lead	mg/kg	13	13	100	5.2	21.2	WR-BC-15	11.8	12	3.74	17.2	5.2	21.2	WR-BC-15	11.8	12	3.74	17.2
Mercury	mg/kg	13	13	100	0.031 J	0.204	G069	0.0737	0.07	0.0432	0.136	0.031 J	0.204	G069	0.0737	0.07	0.0432	0.136
Nickel	mg/kg	13	13	100	17.4	29.2 J	G081	22.6	22.4	3.27	27.4	17.4	29.2 J	G081	22.6	22.4	3.27	27.4
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	1	1	100	0.000528 JT	0.000528 JT	G618	0.000528	0.000528	--	0.000528	0.000528 JT	0.000528 JT	G618	0.000528	0.000528	--	0.000528
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	13	3	23	2.8 NJ	5.95 NJ	G113	3.88	2.89	1.79	5.64	0.062 U	5.95 NJ	G113	1.3	0.22	1.77	4.11
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	13	13	100	37	1100 J	WR-BC-15	292	192	304	800	37	1100 J	WR-BC-15	292	192	304	800
Total HPAHs	µg/kg	13	13	100	290 T	8900 T	WR-BC-15	2330	1230	2450	6450	290 T	8900 T	WR-BC-15	2330	1230	2450	6450
Total LPAHs	µg/kg	13	13	100	48 JT	1100 T	WR-BC-15	376	270	322	832	48 JT	1100 T	WR-BC-15	376	270	322	832
Naphthalene	µg/kg	13	13	100	5.9	310	G056	54	32	80.8	183	5.9	310	G056	54	32	80.8	183
Phenanthrene	µg/kg	13	13	100	17	495 J	WR-BC-15	174	136	156	402	17	495 J	WR-BC-15	174	136	156	402
Total cPAHs	µg/kg	13	13	100	49.3 T	1580 JT	WR-BC-15	400	250	430	1110	49.3 T	1580 JT	WR-BC-15	400	250	430	1110
Phthalates																		
Butylbenzyl phthalate	µg/kg	11	3	27	4.8 J	23 J	G614	12.4	9.5	9.45	21.7	2.2 U	23 J	G614	8.1	3.6	7.44	20
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	11	0	0	--	--	--	--	--	--	--	0.0252 U	6.8 U	G614	2.6	3	2.54	5.9
Phenols																		
Pentachlorophenol	µg/kg	11	2	18	1 NJ	5.7 NJ	G618	3.35	3.35	3.32	5.47	0.33 U	5.7 NJ	G618	2.65	3.2	2.08	5.15
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	5	5	100	13 J	79 J	G611	59.3	71	26.6	77.5	13 J	79 J	G611	59.3	71	26.6	77.5
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	5	4	80	44 JT	54 J	G611	48.8	48.5	4.11	53.3	6.9 U	54 J	G611	40.4	48	19.1	53
Total Petroleum Hydrocarbons (Residual)	mg/kg	5	5	100	90 J	455 JT	G614	341	380	144	444	90 J	455 JT	G614	341	380	144	444
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	5	5	100	28 J	200 J	G618	151	175	69.5	196	28 J	200 J	G618	151	175	69.5	196
Total Petroleum Hydrocarbons	mg/kg	5	5	100	103 JA	527 JA	G614	400	459	169	516	103 JA	527 JA	G614	400	459	169	516
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	5	5	100	28 JA	249 JA	G618	190	219	91.2	246	28 JA	249 JA	G618	190	219	91.2	246
RM 04-05																		
Metals																		
Cadmium	mg/kg	36	36	100	0.071 J	0.4	SD019	0.228	0.224	0.0727	0.351	0.071 J	0.4	SD019	0.228	0.224	0.0727	0.351
Lead	mg/kg	36	36	100	4.38	30.8	C522	12.9	12.2	5.12	22.2	4.38	30.8	C522	12.9	12.2	5.12	22.2
Mercury	mg/kg	36	36	100	0.006 J	0.17	C16/17	0.0617	0.0575	0.027	0.102	0.006 J	0.17	C16/17	0.0617	0.0575	0.027	0.102
Nickel	mg/kg	36	36	100	14.9	31	SD019	22.6	22.7	4.2	30	14.9	31	SD019	22.6	22.7	4.2	30
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	8	8	100	0.000214 JT	0.00221 T	G629	0.000553	0.000322	0.000672	0.00158	0.000214 JT	0.00221 T	G629	0.000553	0.000322	0.000672	0.00158
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	30	6	20	0.2 J	1.96 J	G146	0.579	0.326	0.682	1.58	0.086 U	1.96 J	G146	0.395	0.228	0.489	1.7
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	37	37	100	28	1200	G630	233	150	272	822	28	1200	G630	233	150	272	822
Total HPAHs	µg/kg	37	37	100	196 T	8500 T	G630	1840	1180	1990	6330	196 T	8500 T	G630	1840	1180	1990	6330
Total LPAHs	µg/kg	37	37	100	13.4 JT	1400 T	G629	262	180	279	794	13.4 JT	1400 T	G629	262	180	279	794
Naphthalene	µg/kg	37	30	81	1.6 J	150	G629	29.7	22.5	28.2	74	1.6 J	150	G629	26.6	20	26.2	67
Phenanthrene	µg/kg	37	37	100	4.8	680	G629	126	87	141	436	4.8	680	G629	126	87	141	436
Total cPAHs	µg/kg	37	37	100	37.9 T	1570 T	G630	314	199	362	1100	37.9 T	1570 T	G630	314	199	362	1100
Phthalates																		
Butylbenzyl phthalate	µg/kg	35	11	31	4.4 J	25	GRAB-02	12.3	8.9	7.31	24	2.2 U	25	GRAB-02	10.3	8.1	7.57	21.6
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	36	12	33	0.12 NJ	5.87 J	G131	1.35	0.442	2.01	5.46	0.068 U	20 UJ	GRAB-01; GRAB-02	3.08	0.325	5.5	19.3
Phenols																		
Pentachlorophenol	µg/kg	35	5	14	2.1 J	33	G634	11.7	8.1	12.2	28.3	0.23 U	97 UJ	SD019	9.63	3.7	21.1	61

Table D1.3-14. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Navigation Channel.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	23	23	100	18 J	220 J	C522	95.4	88	48.1	206	18 J	220 J	C522	95.4	88	48.1	206
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	15	15	100	10 J	130 J	G629	55.2	58	26.6	96.4	10 J	130 J	G629	55.2	58	26.6	96.4
Total Petroleum Hydrocarbons (Residual)	mg/kg	23	23	100	79 J	830 J	C167	450	460	165	775	79 J	830 J	C167	450	460	165	775
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	15	15	100	31 J	310 J	G629	192	190	61.6	261	31 J	310 J	G629	192	190	61.6	261
Total Petroleum Hydrocarbons	mg/kg	23	23	100	97 JA	1040 JT	C167	546	525	201	902	97 JA	1040 JT	C167	546	525	201	902
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	15	15	100	41 JA	440 JA	G629	248	268	85.4	343	41 JA	440 JA	G629	248	268	85.4	343
RM 05-06																		
Metals																		
Cadmium	mg/kg	41	36	88	0.054	0.421 JT	G196	0.174	0.162	0.0818	0.275	0.036 UT	0.421 JT	G196	0.16	0.16	0.0863	0.266
Lead	mg/kg	41	41	100	2.4 T	58.4 JT	G196	12.5	11.9	9.04	20	2.4 T	58.4 JT	G196	12.5	11.9	9.04	20
Mercury	mg/kg	41	38	93	0.009 J	0.288	G639	0.0638	0.052	0.0526	0.131	0.009 J	0.288	G639	0.0641	0.053	0.0513	0.121
Nickel	mg/kg	41	38	93	10.4 T	28.1	G229	18.7	19.9	4.78	27.3	10.4 T	29 UT	G196	18.7	19.7	4.97	27.4
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	7	7	100	0.00000197 JT	0.00147 T	G208	0.000477	0.000426	0.000496	0.00121	0.00000197 JT	0.00147 T	G208	0.000477	0.000426	0.000496	0.00121
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	39	9	23	0.52 J	4.7 J	G639	2.57	2.65	1.47	4.54	0.062 U	20 U	WR-BC-21	1.4	0.42	3.29	4.33
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	41	41	100	9.2	340000	G225	14800	470	54300	46000	9.2	340000	G225	14800	470	54300	46000
Total HPAHs	µg/kg	41	41	100	79 JT	4350000 T	G225	177000	3930	689000	558000	79 JT	4350000 T	G225	177000	3930	689000	558000
Total LPAHs	µg/kg	41	40	98	8.8 JT	2910000 T	G225	100000	636	462000	250000	8.8 JT	2910000 T	G225	97900	590	457000	242000
Naphthalene	µg/kg	41	37	90	1.5 J	73000	G225	2230	54	12000	1940	1.5 J	73000	G225	2020	40	11400	1800
Phenanthrene	µg/kg	41	40	98	3.3	1700000	G225	57200	255	269000	142000	3.3	1700000	G225	55800	240	266000	140000
Total cPAHs	µg/kg	41	41	100	12.8 JT	449000 T	G225	19700	627	71700	62900	12.8 JT	449000 T	G225	19700	627	71700	62900
Phthalates																		
Butylbenzyl phthalate	µg/kg	38	8	21	3.7 J	110	G222	23.9	11.5	35.5	80.6	1.9 UJ	750 UJ	G225	51.3	9.4	132	241
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	42	19	45	0.056 J	4.62 J	G229	0.843	0.277	1.12	2.64	0.016 U	420 U	G223	15	0.335	66.5	39
Phenols																		
Pentachlorophenol	µg/kg	39	3	8	4.3 NJ	5.7 J	G644	4.9	4.7	0.721	5.6	0.2 U	350 UT	05R040	13.5	2.8	56.3	32.2
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	23	22	96	50 J	3500 J	G639	415	120	770	1380	5.5 U	3500 J	G639	398	110	757	1350
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	13	12	92	13 J	1900 J	G639	241	56.5	539	1130	6.7 U	1900 J	G639	223	56	520	1060
Total Petroleum Hydrocarbons (Residual)	mg/kg	23	23	100	21 J	3400 J	G639	576	370	678	1190	21 J	3400 J	G639	576	370	678	1190
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	13	13	100	19 J	1400 J	G639	246	150	366	800	19 J	1400 J	G639	246	150	366	800
Total Petroleum Hydrocarbons	mg/kg	23	23	100	21 JA	6900 JA	G639	973	492	1430	2540	21 JA	6900 JA	G639	973	492	1430	2540
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	13	13	100	19 JA	3300 JA	G639	469	211	881	1860	19 JA	3300 JA	G639	469	211	881	1860
RM 06-07																		
Metals																		
Cadmium	mg/kg	46	41	89	0.05	0.406	G326	0.173	0.135	0.109	0.373	0.036 U	0.406	G326	0.159	0.122	0.11	0.369
Lead	mg/kg	48	48	100	2.5	62.7 J	G252	11.7	6.62	11.2	30.1	2.5	62.7 J	G252	11.7	6.62	11.2	30.1
Mercury	mg/kg	46	44	96	0.01 J	0.198 J	G326	0.0457	0.03	0.037	0.1	0.008 UJ	0.198 J	G326	0.0443	0.03	0.0368	0.0998
Nickel	mg/kg	48	48	100	10.8	29.9	G289	18.6	17.2	5.13	27.1	10.8	29.9	G289	18.6	17.2	5.13	27.1
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	9	9	100	0.0000746 JT	0.003 T	G664	0.00154	0.00148	0.00125	0.00298	0.0000746 JT	0.003 T	G664	0.00154	0.00148	0.00125	0.00298
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	37	5	14	0.623 J	8.3 NJ	G253	3.13	1.95	3.22	7.47	0.062 U	20 U	WR-BC-22	1.45	0.27	3.5	4.96
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	48	47	98	3.3	99000 J	WR-BC-22	4120	220	15400	14900	3.3	99000 J	WR-BC-22	4030	210	15300	14500
Total HPAHs	µg/kg	48	48	100	2.2 T	1020000 T	WR-BC-22	42400	2460	160000	145000	2.2 T	1020000 T	WR-BC-22	42400	2460	160000	145000
Total LPAHs	µg/kg	48	48	100	1.7 JT	396000 T	WR-BC-22	16300	1070	61200	61300	1.7 JT	396000 T	WR-BC-22	16300	1070	61200	61300
Naphthalene	µg/kg	48	38	79	0.5 J	5300 J	WR-BC-22	335	89.5	885	996	0.5 J	10000 U	GRAB-05	476	48.5	1610	1350
Phenanthrene	µg/kg	48	47	98	1 J	180000 J	WR-BC-22	8230	270	29300	39200	1 J	180000 J	WR-BC-22	8060	255	29000	38900
Total cPAH	µg/kg	48	47	98	5 JT	128000 JT	WR-BC-22	5310	297	19900	19900	5 JT	128000 JT	WR-BC-22	5200	283	19700	19400

Table D1.3-14. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Navigation Channel.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Phthalates																		
Butylbenzyl phthalate	µg/kg	44	4	9	3.8 J	55 J	GRAB-04	19.7	9.9	23.8	48.4	2 U	10000 U	GRAB-05	242	4	1510	93.8
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	46	16	35	0.118 J	3.45 J	G272	1.46	1.19	1.08	3.08	0.068 U	10000 U	GRAB-05	230	2.54	1470	99.5
Phenols																		
Pentachlorophenol	µg/kg	44	2	5	0.28 J	14 J	G309	7.14	7.14	9.7	13.3	0.2 U	30500 U	GRAB-05	703	0.815	4600	54
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	33	27	82	8.2 J	630 J	G289; G297	189	130	184	591	2.7 U	630 J	G289; G297	156	98	181	552
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	10	5	50	7.85 JT	320 J	C312	145	130	128	300	3.3 U	320 J	C312	74.6	6.58	113	275
Total Petroleum Hydrocarbons (Residual)	mg/kg	33	31	94	9.2 J	1200 J	G289	361	320	303	770	9.2 J	1200 J	G289	341	270	304	762
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	10	10	100	7.1 J	490 J	G664	124	21	182	459	7.1 J	490 J	G664	124	21	182	459
Total Petroleum Hydrocarbons	mg/kg	33	31	94	9.2 JA	1830 JT	G289	528	459	474	1320	9.2 JA	1830 JT	G289	498	380	475	1290
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	10	10	100	7.1 JA	740 JT	C312	196	25	290	727	7.1 JA	740 JT	C312	196	25	290	727
RM 07-08																		
Metals																		
Cadmium	mg/kg	44	44	100	0.08	0.5	SD120	0.262	0.24	0.0967	0.449	0.08	0.5	SD120	0.262	0.24	0.0967	0.449
Lead	mg/kg	44	44	100	5.9	37.6	AN-CTPD-04	15.2	13.5	6.39	30.6	5.9	37.6	AN-CTPD-04	15.2	13.5	6.39	30.6
Mercury	mg/kg	44	41	93	0.03	0.357	G349	0.0689	0.06	0.0485	0.1	0.03	0.357	G349	0.0687	0.06	0.0472	0.1
Nickel	mg/kg	44	44	100	16.1	30.5 J	G375	24.1	23.7	3.51	29.9	16.1	30.5 J	G375	24.1	23.7	3.51	29.9
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	9	9	100	0.00000298 JT	0.00183 T	G381	0.000446	0.000354	0.000543	0.0013	0.00000298 JT	0.00183 T	G381	0.000446	0.000354	0.000543	0.0013
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	33	2	6	0.578 NJ	3.74 NJ	G386	2.16	2.16	2.24	3.58	0.0973 U	9.6 U	SD093	1.15	0.24	1.84	3.24
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	44	43	98	3 J	57	G349	24.9	24	11.3	41.9	3 J	57	G349	24.6	24	11.4	41.9
Total HPAHs	µg/kg	44	44	100	29.7 T	720 T	AN-CTPD-04	267	247	137	516	29.7 T	720 T	AN-CTPD-04	267	247	137	516
Total LPAHs	µg/kg	44	44	100	8 T	510 T	AN-CTPD-04	60.8	36.8	80	169	8 T	510 T	AN-CTPD-04	60.8	36.8	80	169
Naphthalene	µg/kg	45	20	44	1 J	43	G349	14.4	9.45	12	41.1	1 J	43	G349	13.5	10	8.96	31.4
Phenanthrene	µg/kg	44	43	98	4 J	280	AN-CTPD-04	33.3	24	41.5	65.3	4 J	280	AN-CTPD-04	32.9	23	41.1	64.5
Total cPAHs	µg/kg	44	44	100	4.23 JT	82.7 T	G349	33.3	31.2	16.1	55.7	4.23 JT	82.7 T	G349	33.3	31.2	16.1	55.7
Phthalates																		
Butylbenzyl phthalate	µg/kg	41	19	46	4.4 J	82	SD124	23.9	15	22.9	68.5	2.9 U	82	SD124	19.2	17	17.4	57
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	36	17	47	0.11 J	2.82 J	G344	1.17	0.62	0.969	2.72	0.11 J	29 U	AN-CTPD-05	8.41	2.76	9.64	23.3
Phenols																		
Pentachlorophenol	µg/kg	41	2	5	5.2 NJ	5.7 J	G349	5.45	5.45	0.354	5.68	0.3 U	100 UJ	PSY36; PSY37; PSY38; PSY39; PSY40	32.4	5.1	42	100
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	8	8	100	55 J	105 JT	G381	74.9	72.6	14.9	97.3	55 J	105 JT	G381	74.9	72.6	14.9	97.3
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	7	7	100	38.5 JT	68 J	G693	47.5	44	9.85	62.6	38.5 JT	68 J	G693	47.5	44	9.85	62.6
Total Petroleum Hydrocarbons (Residual)	mg/kg	8	8	100	280 J	500 J	G687	391	395	84	497	280 J	500 J	G687	391	395	84	497
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	7	7	100	150 JT	220 J	G693	174	165	27.8	214	150 JT	220 J	G693	174	165	27.8	214
Total Petroleum Hydrocarbons	mg/kg	8	8	100	335 JA	578 JA	G687	466	468	87.1	576	335 JA	578 JA	G687	466	468	87.1	576
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	7	7	100	191 JA	288 JA	G693	221	204	36.7	277	191 JA	288 JA	G693	221	204	36.7	277
RM 08-09																		
Metals																		
Cadmium	mg/kg	49	49	100	0.1	1.89	DM-H	0.281	0.215	0.297	0.5	0.1	1.89	DM-H	0.281	0.215	0.297	0.5
Lead	mg/kg	49	49	100	7.43	20	SD144	12.4	12.2	2.18	16.1	7.43	20	SD144	12.4	12.2	2.18	16.1
Mercury	mg/kg	49	46	94	0.038	0.374	DM-H	0.0742	0.06	0.0597	0.108	0.038	0.374	DM-H	0.0728	0.06	0.0581	0.105
Nickel	mg/kg	49	49	100	19.4	34.3	G435	24.8	24	3.12	30.1	19.4	34.3	G435	24.8	24	3.12	30.1
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	3	3	100	0.000258 JT	0.000659 T	G410-1	0.000491	0.000556	0.000208	0.000649	0.000258 JT	0.000659 T	G410-1	0.000491	0.000556	0.000208	0.000649
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	34	4	12	0.685 J	2.36 NJ	G435	1.31	1.1	0.734	2.19	0.062 U	2.36 NJ	G435	0.404	0.23	0.455	1.06

Table D1.3-14. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Navigation Channel.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	49	49	100	4.9	274	DM-H	22.6	13.7	39	39	4.9	274	DM-H	22.6	13.7	39	39
Total HPAHs	µg/kg	49	49	100	45.9 JT	3140 T	DM-H	255	153	447	453	45.9 JT	3140 T	DM-H	255	153	447	453
Total LPAHs	µg/kg	49	49	100	9.82 JT	340 JA	DM-H	41.8	30.6	59.6	63.2	9.82 JT	340 JA	DM-H	41.8	30.6	59.6	63.2
Naphthalene	µg/kg	49	22	45	3.4	24	PSY42	8.55	7.55	4.58	17	0.85 U	24	PSY42	8.98	8.1	4.79	19
Phenanthrene	µg/kg	49	49	100	3.4	241	DM-H	24.8	15	38.7	49.2	3.4	241	DM-H	24.8	15	38.7	49.2
Total cPAHs	µg/kg	49	49	100	7.17 JT	382 T	DM-H	31.6	19.6	53.8	51	7.17 JT	382 T	DM-H	31.6	19.6	53.8	51
Phthalates																		
Butylbenzyl phthalate	µg/kg	49	21	43	5.1 J	40	PSY41	16.1	9.8	11.7	38	2.8 U	40	PSY41	11.1	6.2	9.89	31.5
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	42	13	31	0.14 J	11	WR-PG-86	1.85	0.71	2.93	6.43	0.068 UJ	19 U	SD144; SD146; SD147	2.9	0.6	5.07	18.6
Phenols																		
Pentachlorophenol	µg/kg	47	4	9	0.96 J	18 J	G443	9.44	9.4	6.97	16.8	0.35 U	100 U	PSY41; PSY42; PSY44; PSY46; PSY48; PSY50	21.7	4.3	37.9	100
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	24	24	100	33 J	110 J	WR-PG-88; WR-PG-90	69.8	69.3	20.4	108	33 J	110 J	WR-PG-88; WR-PG-90	69.8	69.3	20.4	108
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	15	15	100	20 J	54 JT	G722	37.9	40	10.3	49.8	20 J	54 JT	G722	37.9	40	10.3	49.8
Total Petroleum Hydrocarbons (Residual)	mg/kg	24	24	100	180 J	760 J	WR-PG-88	469	465	140	680	180 J	760 J	WR-PG-88	469	465	140	680
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	15	15	100	83 J	220 JT	G722	154	160	38.4	213	83 J	220 JT	G722	154	160	38.4	213
Total Petroleum Hydrocarbons	mg/kg	24	24	100	213 JA	870 JT	WR-PG-88	539	546	160	787	213 JA	870 JT	WR-PG-88	539	546	160	787
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	15	15	100	105 JA	274 JA	G722	192	199	47.9	261	105 JA	274 JA	G722	192	199	47.9	261
Swan Island Lagoon																		
Metals																		
Cadmium	mg/kg	5	5	100	0.1	1.48	DM-22	0.473	0.2	0.574	1.26	0.1	1.48	DM-22	0.473	0.2	0.574	1.26
Lead	mg/kg	5	5	100	11	15.2	PSY34	12.8	12.3	1.6	14.8	11	15.2	PSY34	12.8	12.3	1.6	14.8
Mercury	mg/kg	5	4	80	0.06	0.27	DM-22	0.113	0.061	0.105	0.239	0.05 U	0.27	DM-22	0.1	0.06	0.0949	0.228
Nickel	mg/kg	5	5	100	18.8	28	SD125	24	23	3.68	27.8	18.8	28	SD125	24	23	3.68	27.8
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	1	0	0	--	--	--	--	--	--	--	0.24 U	0.24 U	G700	0.24	0.24	--	0.24
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	5	5	100	16	38	PSY34	28.4	30	8.01	36.6	16	38	PSY34	28.4	30	8.01	36.6
Total HPAHs	µg/kg	5	5	100	190 JT	551 T	PSY34	337	314	137	515	190 JT	551 T	PSY34	337	314	137	515
Total LPAHs	µg/kg	5	5	100	28 T	42 JT	G700	33.3	29.4	6.32	41.2	28 T	42 JT	G700	33.3	29.4	6.32	41.2
Naphthalene	µg/kg	5	1	20	8.7	8.7	G700	8.7	8.7	--	8.7	6.7 U	19 U	SD125	10.9	10	4.74	17.2
Phenanthrene	µg/kg	5	5	100	18	38	PSY34	28.5	29	7.1	36.3	18	38	PSY34	28.5	29	7.1	36.3
Total cPAHs	µg/kg	5	5	100	23.5 JT	50.3 T	PSY34	37.7	37.3	9.6	48.3	23.5 JT	50.3 T	PSY34	37.7	37.3	9.6	48.3
Phthalates																		
Butylbenzyl phthalate	µg/kg	5	4	80	17	52	PSY35	35.9	37.3	15.1	50.7	17	52	PSY35	32.5	31.5	15.1	50.2
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	2	1	50	0.13 J	0.13 J	G700	0.13	0.13	--	0.13	0.13 J	19 U	SD125	9.57	9.57	13.3	18.1
Phenols																		
Pentachlorophenol	µg/kg	4	0	0	--	--	--	--	--	--	--	0.63 U	100 U	PSY34; PSY35	73.9	97.5	48.9	100
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	1	1	100	57 J	57 J	G700	57	57	--	57	57 J	57 J	G700	57	57	--	57
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	1	1	100	51 J	51 J	G700	51	51	--	51	51 J	51 J	G700	51	51	--	51
Total Petroleum Hydrocarbons (Residual)	mg/kg	1	1	100	380 J	380 J	G700	380	380	--	380	380 J	380 J	G700	380	380	--	380
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	1	1	100	200 J	200 J	G700	200	200	--	200	200 J	200 J	G700	200	200	--	200
Total Petroleum Hydrocarbons	mg/kg	1	1	100	437 JA	437 JA	G700	437	437	--	437	437 JA	437 JA	G700	437	437	--	437
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	1	1	100	251 JA	251 JA	G700	251	251	--	251	251 JA	251 JA	G700	251	251	--	251
RM 09-10																		
Metals																		
Cadmium	mg/kg	34	34	100	0.057 J	1.45	DM-D	0.297	0.203	0.33	1.23	0.057 J	1.45	DM-D	0.297	0.203	0.33	1.23
Lead	mg/kg	34	34	100	3.63	31.4	DM-F	12.6	12.3	4.72	18.8	3.63	31.4	DM-F	12.6	12.3	4.72	18.8
Mercury	mg/kg	34	32	94	0.018	0.276	DM-F	0.0704	0.0555	0.0609	0.233	0.018	0.276	DM-F	0.0707	0.0555	0.0593	0.226
Nickel	mg/kg	34	34	100	15.1	35.5 J	RC483-2	24.3	23.6	4.71	30	15.1	35.5 J	RC483-2	24.3	23.6	4.71	30

Table D1.3-14. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Navigation Channel.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	5	5	100	0.000221 JT	0.00163 JT	G739	0.000543	0.000254	0.00061	0.00138	0.000221 JT	0.00163 JT	G739	0.000543	0.000254	0.00061	0.00138
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	28	3	11	0.25	4.98 NJ	G465	2.38	1.9	2.4	4.67	0.062 U	4.98 NJ	G465	0.694	0.198	1.07	2
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	34	34	100	1.3 J	209	DM-F	35.4	13	53.7	160	1.3 J	209	DM-F	35.4	13	53.7	160
Total HPAHs	µg/kg	34	34	100	22 JT	2210 T	DM-F	381	164	545	1550	22 JT	2210 T	DM-F	381	164	545	1550
Total LPAHs	µg/kg	34	34	100	5.5 JT	664 T	PSY77	74.3	27.9	134	335	5.5 JT	664 T	PSY77	74.3	27.9	134	335
Naphthalene	µg/kg	34	14	41	2 J	32	PSY77	11.1	7.75	8.32	28.1	2 J	32	PSY77	9.75	7.55	7.33	24.1
Phenanthrene	µg/kg	34	34	100	2.3 J	393	PSY77	44.3	14.5	80.9	195	2.3 J	393	PSY77	44.3	14.5	80.9	195
Total cPAHs	µg/kg	34	34	100	1.91 JT	301 T	DM-F	49.7	19.3	75.9	223	1.91 JT	301 T	DM-F	49.7	19.3	75.9	223
Phthalates																		
Butylbenzyl phthalate	µg/kg	34	12	35	3.3 J	48 J	GRAB-10	18.9	14.5	13.7	42.5	3.2 UJ	130 U	DM-F	14.7	4.45	23.3	41.5
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	30	4	13	0.17 J	2.05 J	G469	0.848	0.586	0.826	1.84	0.068 U	23 U	SD150	3.85	0.911	6.15	20
Phenols																		
Pentachlorophenol	µg/kg	31	2	6	1.6 NJ	4.5 NJ	G739	3.05	3.05	2.05	4.36	0.37 U	120 U	SD150	14.9	4.3	29.6	80.5
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	12	12	100	11 J	120 J	WR-PG-96	69.1	59	32.6	115	11 J	120 J	WR-PG-96	69.1	59	32.6	115
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	7	6	86	34 J	86 J	G739	43.7	35	20.8	74	5.7 U	86 J	G739	38.2	35	23.8	71.6
Total Petroleum Hydrocarbons (Residual)	mg/kg	12	12	100	58 J	800 J	WR-PG-96	470	425	203	762	58 J	800 J	WR-PG-96	470	425	203	762
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	7	7	100	27 J	310 J	G739	159	160	83	268	27 J	310 J	G739	159	160	83	268
Total Petroleum Hydrocarbons	mg/kg	12	12	100	69 JA	920 JT	WR-PG-96	541	503	233	876	69 JA	920 JT	WR-PG-96	541	503	233	876
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	7	7	100	27 JA	396 JA	G739	196	195	108	338	27 JA	396 JA	G739	196	195	108	338
RM 10-11																		
Metals																		
Cadmium	mg/kg	42	41	98	0.103	2.13 J	DM-B	0.271	0.206	0.331	0.307	0.103	2.13 J	DM-B	0.277	0.211	0.329	0.49
Lead	mg/kg	42	42	100	8.33	47.6	PSY76	17.3	14.4	8.74	35	8.33	47.6	PSY76	17.3	14.4	8.74	35
Mercury	mg/kg	42	41	98	0.02	1.06	DM-C	0.104	0.062	0.16	0.2	0.02	1.06	DM-C	0.102	0.061	0.158	0.2
Nickel	mg/kg	42	42	100	16.8 J	34.8	DM-C	23.9	23.5	4.04	32.7	16.8 J	34.8	DM-C	23.9	23.5	4.04	32.7
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	5	5	100	0.000206 JT	0.00159 T	G506	0.000687	0.000595	0.000539	0.00141	0.000206 JT	0.00159 T	G506	0.000687	0.000595	0.000539	0.00141
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	39	2	5	0.813 NJ	3.16 NJ	G496	1.99	1.99	1.66	3.04	0.062 U	6 U	PSY72	0.935	0.3	1.41	3.44
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	42	40	95	6.3	944	DM-B	54	18	151	87.6	6.3	944	DM-B	52.3	19.5	148	76.6
Total HPAHs	µg/kg	42	42	100	44 T	7910 T	DM-B	517	205	1230	1070	44 T	7910 T	DM-B	517	205	1230	1070
Total LPAHs	µg/kg	42	40	95	20 JT	856 JA	DM-B	80.9	37	138	202	20 JT	856 JA	DM-B	78	36	135	197
Naphthalene	µg/kg	42	30	71	3.4	76.8	DM-B	13.4	8.5	14.3	34.3	0.76 U	76.8	DM-B	13	8.6	12.7	25.8
Phenanthrene	µg/kg	42	40	95	8.9	552	DM-B	47	22.5	88	102	8.9	552	DM-B	45.7	21	86	97.1
Total cPAHs	µg/kg	42	40	95	9.47 JT	1300 T	DM-B	75.9	27.2	209	124	9.47 JT	1300 T	DM-B	73.2	26.5	204	108
Phthalates																		
Butylbenzyl phthalate	µg/kg	38	22	58	5.1 J	103	PSY72	22.4	20.8	20.5	46.2	2.3 UJ	130 U	DM-B	20.4	16	25.2	55.3
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	31	7	23	0.18 J	6.05 J	G490	1.22	0.25	2.18	4.66	0.068 U	20 U	GRAB-11; GRAB-12	2.4	0.27	4.98	13
Phenols																		
Pentachlorophenol	µg/kg	38	15	39	0.98 J	59	G756	7.4	3.8	14.4	24.7	0.26 U	100 U	PSY72; PSY76; T1S-01; T1S-03; T1S-05	25.4	4.15	39.2	100
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	24	24	100	30 J	290 J	G770	78.9	58	53.2	146	30 J	290 J	G770	78.9	58	53.2	146
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	22	22	100	24 J	260 J	G770	60.2	49.5	47.9	93.1	24 J	260 J	G770	60.2	49.5	47.9	93.1
Total Petroleum Hydrocarbons (Residual)	mg/kg	24	24	100	200 J	930 J	G770	443	390	161	663	200 J	930 J	G770	443	390	161	663
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	22	22	100	110 J	630 J	G770	230	210	107	320	110 J	630 J	G770	230	210	107	320
Total Petroleum Hydrocarbons	mg/kg	24	24	100	235 JA	1220 JA	G770	523	447	211	807	235 JA	1220 JA	G770	523	447	211	807
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	22	22	100	134 JA	890 JA	G770	290	264	154	413	134 JA	890 JA	G770	290	264	154	413

Table D1.3-14. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Navigation Channel.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
RM 11-11.8																		
Metals																		
Cadmium	mg/kg	12	12	100	0.075	0.324 T	G028	0.145	0.129	0.0751	0.272	0.075	0.324 T	G028	0.145	0.129	0.0751	0.272
Lead	mg/kg	12	12	100	4.12	50.4 T	G028	16.8	12.2	12.9	38.4	4.12	50.4 T	G028	16.8	12.2	12.9	38.4
Mercury	mg/kg	12	12	100	0.013	0.56	T1S-09	0.0873	0.045	0.151	0.303	0.013	0.56	T1S-09	0.0873	0.045	0.151	0.303
Nickel	mg/kg	12	12	100	11.9 J	28.9	T1S-07	19.3	18.1	5.53	27.9	11.9 J	28.9	T1S-07	19.3	18.1	5.53	27.9
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	3	3	100	0.000194 JT	0.00227 T	G778	0.000906	0.000254	0.00118	0.00207	0.000194 JT	0.00227 T	G778	0.000906	0.000254	0.00118	0.00207
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	12	5	42	0.2 J	4.5 NJ	UG03	1.39	0.3	1.85	3.94	0.051 U	4.5 NJ	UG03	0.865	0.22	1.32	3.07
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	12	10	83	6	61	G028	25.5	17.5	21	58.3	1.8 U	61	G028	23.1	17.5	20.2	57.7
Total HPAHs	µg/kg	12	12	100	13 T	820 JA	UG03	267	132	279	720	13 T	820 JA	UG03	267	132	279	720
Total LPAHs	µg/kg	12	11	92	6.6 JT	166 T	G028	65.3	42	61.7	162	6.6 JT	166 T	G028	61.5	31.6	60.2	161
Naphthalene	µg/kg	12	11	92	0.81 J	38	T1S-09	11	8.6	12.2	32.5	0.81 J	38	T1S-09	11.8	8.95	11.9	32
Phenanthrene	µg/kg	12	11	92	3.3	96	T1S-09	31.8	18	31.2	78	3.3	96	T1S-09	30.9	19	30	76.2
Total cPAHs	µg/kg	12	10	83	8.1 T	104 JA	UG03	41.9	25	37.8	98.6	1.8 UT	104 JA	UG03	36.7	20.8	36.4	97.4
Phthalates																		
Butylbenzyl phthalate	µg/kg	10	2	20	5 J	9 J	G774	7	7	2.83	8.8	1.9 U	32 U	G021	8.59	3.2	10.2	27.5
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	10	1	10	1	1	G774	1	1	--	1	0.068 U	1.2 U	G778	0.4	0.125	0.465	1.11
Phenols																		
Pentachlorophenol	µg/kg	12	4	33	0.27 J	1.4 NJ	G778	0.685	0.535	0.515	1.3	0.27 J	100 U	T1S-07; T1S-09	17.3	0.86	38.6	100
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	7	7	100	8.8 J	83 J	UG03	37.7	23	27.4	76.4	8.8 J	83 J	UG03	37.7	23	27.4	76.4
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	8	5	62	13 JT	160 JT	G028	49.2	28	62.3	134	6.5 U	160 JT	G028	35.8	18.5	50.8	114
Total Petroleum Hydrocarbons (Residual)	mg/kg	7	7	100	58 J	470 J	UG03	226	140	166	437	58 J	470 J	UG03	226	140	166	437
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	8	6	75	40 JT	350 JT	G028	131	100	114	298	33 U	350 JT	G028	106	67	106	277
Total Petroleum Hydrocarbons	mg/kg	7	7	100	66.8 JA	550 JT	UG03	263	160	193	511	66.8 JA	550 JT	UG03	263	160	193	511
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	8	6	75	53 JA	510 JT	G028	172	122	172	425	33 UA	510 JT	G028	137	75	159	391

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

-- data not available.
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-15. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Navigation Channel.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Study Area																		
Metals																		
Cadmium	mg/kg	355	341	96	0.016 J	43.7	C752	0.379	0.24	2.36	0.5	0.016 J	43.7	C752	0.369	0.233	2.31	0.5
Lead	mg/kg	359	359	100	1.54	3330 J	C326	30.6	15	178	46.3	1.54	3330 J	C326	30.6	15	178	46.3
Mercury	mg/kg	352	344	98	0.004 J	1.17	C752	0.0877	0.07	0.106	0.216	0.004 J	1.17	C752	0.0863	0.07	0.105	0.215
Nickel	mg/kg	359	359	100	9.64	523	C299	23.2	21.7	27.1	31.6	9.64	523	C299	23.2	21.7	27.1	31.6
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	28	22	79	0.0000000696 JT	0.0149 T	C752	0.00256	0.00125	0.00387	0.0113	0.0000000696 JT	0.0149 T	C752	0.00204	0.000401	0.00356	0.00967
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	334	29	9	0.1 J	9.6	C521	1.59	0.96	1.92	4.13	0.051 U	15 U	021108WRPB-VC-05	0.96	0.39	1.94	2.41
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	422	366	87	0.25 J	280000 J	GS-C7	3420	39.5	20900	13000	0.14 U	280000 J	GS-C7	2970	26	19500	7380
Total HPAHs	µg/kg	422	394	93	0.37 JT	3300000 JT	GS-C7	38700	329	245000	111000	0.37 JT	3300000 JT	GS-C7	36200	289	237000	95700
Total LPAHs	µg/kg	422	394	93	0.35 JT	9000000 JT	GS-C7	81900	110	618000	58100	0.35 JT	9000000 JT	GS-C7	76500	93	598000	41900
Naphthalene	µg/kg	425	296	70	0.39 J	4300000 J	GS-C7	50400	32	358000	47500	0.17 U	4300000 J	GS-C7	35100	14	300000	1380
Phenanthrene	µg/kg	422	382	91	0.71 J	1900000	GS-C7	20000	52	133000	40200	0.43 U	1900000	GS-C7	18100	40.5	126000	22100
Total cPAHs	µg/kg	422	377	89	0.041 JT	377000 JT	GS-C7	4420	46.5	27600	14500	0.041 JT	377000 JT	GS-C7	3950	37.2	26100	10200
Phthalates																		
Butylbenzyl phthalate	µg/kg	378	110	29	2.6 J	650	WR-VC-23	20.8	8.6	67.6	36.5	1.8 U	1500 U	C521	32.6	6.15	105	111
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	369	35	9	0.068 JT	9.85 J	C305-2	1.22	0.62	1.96	4.5	0.0253 U	1660 U	GP31	22.3	0.49	99.5	99
Phenols																		
Pentachlorophenol	µg/kg	379	98	26	0.36 J	270	C299	10.8	2.6	30	47	0.18 U	8260 U	GP31	86	1.6	459	465
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	246	222	90	0.045 J	23000 J	C521	467	110	1900	900	0.045 J	23000 J	C521	421	96	1810	683
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	86	62	72	1.8 J	570 J	C752	120	83	119	299	1.3 U	570 J	C752	87.4	42.5	114	275
Total Petroleum Hydrocarbons (Residual)	mg/kg	246	220	89	0.24	11000 J	C521	625	460	985	1330	0.1 U	11000 J	C521	560	420	951	1280
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	86	59	69	3.6 J	1100 J	C752	293	270	244	625	3 U	1100 J	C752	204	100	241	615
Total Petroleum Hydrocarbons	mg/kg	246	229	93	0.32 JT	37400 JT	C521	1080	570	3020	1920	0.1 UT	37400 JT	C521	1000	550	2930	1900
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	86	65	76	2.6 JA	1670 JA	C752	381	328	363	878	2.6 JA	1670 JA	C752	289	145	355	858
RM 01.9-03																		
Metals																		
Cadmium	mg/kg	13	13	100	0.187	1.49	021108WRPB-VC-03	0.471	0.313	0.359	1.03	0.187	1.49	021108WRPB-VC-03	0.471	0.313	0.359	1.03
Lead	mg/kg	13	13	100	10.4	30.5	021108WRPB-VC-03	18.7	17.7	7.36	29.2	10.4	30.5	021108WRPB-VC-03	18.7	17.7	7.36	29.2
Mercury	mg/kg	13	13	100	0.043	0.154	021108WRPB-VC-03	0.0804	0.075	0.028	0.123	0.043	0.154	021108WRPB-VC-03	0.0804	0.075	0.028	0.123
Nickel	mg/kg	13	13	100	20.4 J	26	C606	21.8	21.7	1.55	24.7	20.4 J	26	C606	21.8	21.7	1.55	24.7
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	4	4	100	0.000223 JT	0.00232 T	C6011	0.00125	0.00122	0.001	0.00225	0.000223 JT	0.00232 T	C6011	0.00125	0.00122	0.001	0.00225
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	14	0	0 --	--		--	--	--	--	--	0.062 UT	15 U	021108WRPB-VC-05	2.48	0.32	4.93	13.7
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	14	14	100	67	590	021108WRPB-VC-05	234	170	170	551	67	590	021108WRPB-VC-05	234	170	170	551
Total HPAHs	µg/kg	14	14	100	576 T	5650 T	WR-GC-11	2020	1300	1620	4710	576 T	5650 T	WR-GC-11	2020	1300	1620	4710
Total LPAHs	µg/kg	14	14	100	100 T	2400 T	C6012	691	373	719	2010	100 T	2400 T	C6012	691	373	719	2010
Naphthalene	µg/kg	14	14	100	11 J	221 J	WR-GC-11	71.6	35	68.9	188	11 J	221 J	WR-GC-11	71.6	35	68.9	188
Phenanthrene	µg/kg	14	14	100	47	1400 T	C6012	345	185	404	1120	47	1400 T	C6012	345	185	404	1120
Total cPAHs	µg/kg	14	14	100	94.2 T	847 JT	WR-GC-11	328	233	249	816	94.2 T	847 JT	WR-GC-11	328	233	249	816
Phthalates																		
Butylbenzyl phthalate	µg/kg	13	4	31	3.2 J	12	021108WRPB-VC-01	6.28	4.95	3.92	11	2.7 U	16 U	C6011; C6012; C606	7.97	4.6	5.91	16
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	13	2	15	0.24 JT	0.34	C6011	0.29	0.29	0.0707	0.335	0.13 U	15 U	WR-VC-01	1.84	1.2	3.98	6.78
Phenols																		
Pentachlorophenol	µg/kg	13	5	38	1.7 NJ	29 T	021108WRPB-VC-01; C6012	18.3	21	11.9	29	0.92 U	29 T	021108WRPB-VC-01; C6012	8.37	1.7	10.8	29
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	12	10	83	0.045 J	170 J	C6011	66.5	45	71.2	166	0.045 J	170 J	C6011	55.5	21.1	69.4	165
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	4	4	100	28 J	140 J	C6011	100	117	49.5	137	28 J	140 J	C6011	100	117	49.5	137
Total Petroleum Hydrocarbons (Residual)	mg/kg	12	10	83	0.24	500 J	C606	218	250	203	469	0.1 U	500 J	C606	182	110	202	462
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	4	4	100	100 J	290 J	C6011; C606	235	275	91.1	290	100 J	290 J	C6011; C606	235	275	91.1	290
Total Petroleum Hydrocarbons	mg/kg	12	10	83	0.32 JT	660 JA	C606	285	295	272	633	0.1 UT	660 JA	C606	237	131	269	627

Table D1.3-15. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Navigation Channel.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	4	4	100	128 JA	430 JA	C6011	335	392	140	427	128 JA	430 JA	C6011	335	392	140	427
RM 03-04																		
Metals																		
Cadmium	mg/kg	10	10	100	0.119	0.565	C614	0.384	0.372	0.136	0.565	0.119	0.565	C614	0.384	0.372	0.136	0.565
Lead	mg/kg	10	10	100	4.59	31.2	C614	22	22.8	7.67	30.2	4.59	31.2	C614	22	22.8	7.67	30.2
Mercury	mg/kg	10	10	100	0.026	0.15	C614	0.0987	0.1	0.0322	0.14	0.026	0.15	C614	0.0987	0.1	0.0322	0.14
Nickel	mg/kg	10	10	100	17.2	28.7	C614	22.4	20.6	4.14	28.4	17.2	28.7	C614	22.4	20.6	4.14	28.4
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	10	2	20	0.62	0.65 NJ	C614	0.635	0.635	0.0212	0.649	0.14 U	1 U	WR-VC-10	0.476	0.455	0.247	0.843
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	10	10	100	120	410	C617	240	200	104	397	120	410	C617	240	200	104	397
Total HPAHs	µg/kg	10	10	100	1100 T	4540 T	WR-VC-10	2370	2400	1110	4120	1100 T	4540 T	WR-VC-10	2370	2400	1110	4120
Total LPAHs	µg/kg	10	10	100	160 T	1800 T	C617	688	563	540	1530	160 T	1800 T	C617	688	563	540	1530
Naphthalene	µg/kg	10	10	100	19	210	C617	76.6	54.5	58.9	170	19	210	C617	76.6	54.5	58.9	170
Phenanthrene	µg/kg	10	10	100	79	1100	C617	371	270	326	875	79	1100	C617	371	270	326	875
Total cPAHs	µg/kg	10	10	100	172 T	553 T	C617	332	274	138	540	172 T	553 T	C617	332	274	138	540
Phthalates																		
Butylbenzyl phthalate	µg/kg	10	6	60	14 J	31	WR-VC-07	18	14.5	6.78	28.3	3.2 U	31	WR-VC-07	14.9	14.5	7.49	26.1
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	10	0	0	--	--	--	--	--	--	--	0.068 U	6 U	C614; C617	1.65	0.43	2.32	6
Phenols																		
Pentachlorophenol	µg/kg	10	3	30	1.1 J	5 NJ	C614	2.63	1.8	2.08	4.68	0.21 U	9 U	C617	2.05	0.945	2.81	7.2
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	10	10	100	30 J	270 J	C617	177	200	73.5	257	30 J	270 J	C617	177	200	73.5	257
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	5	5	100	23 J	240 J	C617	153	200	98.8	238	23 J	240 J	C617	153	200	98.8	238
Total Petroleum Hydrocarbons (Residual)	mg/kg	10	10	100	64 J	710 J	WR-VC-10	525	545	195	706	64 J	710 J	WR-VC-10	525	545	195	706
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	5	4	80	210 J	510 J	C617	403	445	139	509	41 U	510 J	C617	330	390	202	508
Total Petroleum Hydrocarbons	mg/kg	10	10	100	94 JA	940 JA	C617; WR-VC-08; WR-VC-10	702	750	264	940	94 JA	940 JA	C617; WR-VC-08; WR-VC-10	702	750	264	940
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	5	5	100	23 JA	750 JA	C617	475	590	314	746	23 JA	750 JA	C617	475	590	314	746
RM 04-05																		
Metals																		
Cadmium	mg/kg	33	32	97	0.048	0.468	WR-VC-12	0.289	0.298	0.106	0.458	0.048	0.468	WR-VC-12	0.288	0.295	0.104	0.457
Lead	mg/kg	33	33	100	2.67	48.6	C167	19.6	18.5	9.7	33	2.67	48.6	C167	19.6	18.5	9.7	33
Mercury	mg/kg	33	33	100	0.013 J	0.21	B401-C1	0.0765	0.08	0.0377	0.116	0.013 J	0.21	B401-C1	0.0765	0.08	0.0377	0.116
Nickel	mg/kg	33	33	100	10.4 J	29.6	C167	20.9	19.5	4.7	28.8	10.4 J	29.6	C167	20.9	19.5	4.7	28.8
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	30	3	10	0.76 NJ	1	C621	0.91	0.97	0.131	0.997	0.062 U	2 U	WR-GC-18	0.646	0.46	0.491	1.7
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	36	36	100	0.36 J	3200	C621	403	240	563	1230	0.36 J	3200	C621	403	240	563	1230
Total HPAHs	µg/kg	36	36	100	4.7 JT	33000 T	C621	3860	2310	5680	11000	4.7 JT	33000 T	C621	3860	2310	5680	11000
Total LPAHs	µg/kg	36	36	100	0.79 JT	18000 T	C621	1380	525	3000	3170	0.79 JT	18000 T	C621	1380	525	3000	3170
Naphthalene	µg/kg	37	31	84	17	1600	C621	154	60	291	425	0.47 U	1600	C621	130	50	272	344
Phenanthrene	µg/kg	36	35	97	2	10000	C621	760	300	1690	1690	1.9 U	10000	C621	739	290	1670	1680
Total cPAHs	µg/kg	36	36	100	0.457 JT	4300 T	C621	544	336	756	1670	0.457 JT	4300 T	C621	544	336	756	1670
Phthalates																		
Butylbenzyl phthalate	µg/kg	32	13	41	3.4 J	240	B401-C1	26.4	7.5	64.4	108	2.1 U	240	B401-C1	16	5.85	41.4	25.4
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	32	5	16	0.16 J	0.71 J	WR-VC-12	0.402	0.34	0.219	0.674	0.066 U	200 U	B401-C1	7.52	0.39	35.3	11.3
Phenols																		
Pentachlorophenol	µg/kg	32	13	41	0.95 J	3.9 NJ	C634	2.33	2.4	0.829	3.42	0.21 U	610 U	B401-C1	23.1	1.55	108	33.5
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	31	30	97	2.7 J	420 J	C621	187	205	117	371	2.7 J	420 J	C621	181	190	120	370
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	8	6	75	63 J	330 J	C630	184	165	121	323	1.6 U	330 J	C630	139	83	133	320
Total Petroleum Hydrocarbons (Residual)	mg/kg	31	29	94	6.9 JT	1100 J	C167	530	570	281	918	6.9 JT	1100 J	C167	496	560	301	915
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	8	6	75	98 J	670 J	C630	295	235	230	609	5.8 UT	670 J	C630	223	115	236	584
Total Petroleum Hydrocarbons	mg/kg	31	31	100	2.7 JA	1480 JT	C167	677	710	411	1280	2.7 JA	1480 JT	C167	677	710	411	1280
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	8	6	75	161 JA	1000 JA	C630	480	427	345	918	5.8 UT	1000 JA	C630	362	198	365	885

Table D1.3-15. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Navigation Channel.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
RM 05-06																		
Metals																		
Cadmium	mg/kg	34	28	82	0.045	0.4	WR-VC-34	0.164	0.0825	0.132	0.37	0.045	0.4	WR-VC-34	0.149	0.081	0.124	0.364
Lead	mg/kg	34	34	100	2.04	39.8	WR-VC-17	11.3	4.91	11.3	31.5	2.04	39.8	WR-VC-17	11.3	4.91	11.3	31.5
Mercury	mg/kg	34	34	100	0.008 J	0.11	WR-VC-19	0.0424	0.0285	0.0343	0.0992	0.008 J	0.11	WR-VC-19	0.0424	0.0285	0.0343	0.0992
Nickel	mg/kg	34	34	100	13.3	28.5	C169	18.4	17.8	3.89	27.2	13.3	28.5	C169	18.4	17.8	3.89	27.2
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	4	3	75	0.0000000696 JT	0.00000025 JT	C6442	0.00000018	0.000000219	0.0000000965	0.000000247	0.0000000696 JT	0.00015 UT	C6441	0.0000376	0.000000235	0.0000749	0.000128
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	34	5	15	0.1 J	0.992 NJ	C220	0.512	0.54	0.359	0.934	0.062 U	2 U	WR-GC-19	0.369	0.36	0.371	0.88
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	35	27	77	0.5 J	5800	C221	631	280	1170	2180	0.14 U	5800	C221	487	260	1060	2020
Total HPAHs	µg/kg	35	29	83	1.2 JT	74300 T	C221	6720	2540	14600	26500	0.64 UT	74300 T	C221	5560	2290	13500	26400
Total LPAHs	µg/kg	35	31	89	0.39 JT	43100 T	C221	2730	424	8000	10300	0.39 JT	43100 T	C221	2420	350	7560	9060
Naphthalene	µg/kg	36	23	64	0.39 J	880	C171	109	57	177	210	0.37 UT	880	C171	70.3	33.5	150	210
Phenanthrene	µg/kg	35	27	77	1.5 J	26000	C221	1820	230	5150	7190	0.75 U	26000	C221	1410	180	4570	5710
Total cPAHs	µg/kg	35	29	83	0.05 JT	7500 T	C221	778	385	1470	2790	0.05 JT	7500 T	C221	644	360	1370	2660
Phthalates																		
Butylbenzyl phthalate	µg/kg	33	9	27	3.4 J	650	WR-VC-23	80.3	7.7	214	397	1.9 U	650	WR-VC-23	27.5	4.5	112	28.4
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	34	6	18	0.068 JT	1.21 J	C221	0.623	0.661	0.442	1.14	0.063 U	7.8 U	C171	0.792	0.16	1.8	5.08
Phenols																		
Pentachlorophenol	µg/kg	34	6	18	1.2 J	5.4 J	C652	2.25	1.7	1.58	4.6	0.19 U	5.4 J	C652	0.837	0.52	0.978	1.94
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	33	26	79	1.8 JT	1400 J	C221	179	78.5	276	410	1.5 U	1400 J	C221	141	64	255	354
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	15	5	33	1.8 J	46 J	C652	24	30	17.3	42.8	1.5 U	46 J	C652	9.06	1.7	14.3	34.8
Total Petroleum Hydrocarbons (Residual)	mg/kg	33	26	79	6.9 J	1900 J	C221	366	255	417	830	3.5 U	1900 J	C221	290	81.5	398	774
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	15	5	33	3.6 J	78 J	C652	25.4	4.4	32.7	69.8	3.5 U	78 J	C652	13.8	4.4	20.3	49.3
Total Petroleum Hydrocarbons	mg/kg	33	28	85	1.8 JA	3300 JT	C221	507	281	670	1140	1.8 JA	3300 JT	C221	430	140	642	1130
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	15	7	47	4.2 JA	124 JA	C652	35.3	12	45.2	107	3.5 UA	124 JA	C652	19	4.9	33.6	84.1
RM 06-07																		
Metals																		
Cadmium	mg/kg	62	60	97	0.041	0.524	C664	0.185	0.123	0.149	0.439	0.041	0.524	C664	0.184	0.128	0.147	0.437
Lead	mg/kg	66	66	100	2.01	3330 J	C326	63.2	6.6	409	36.7	2.01	3330 J	C326	63.2	6.6	409	36.7
Mercury	mg/kg	61	56	92	0.004 J	0.38	C314	0.0839	0.052	0.0892	0.307	0.004 J	0.38	C314	0.0788	0.044	0.0872	0.303
Nickel	mg/kg	66	66	100	10.4 J	523	C299	26.9	18.5	62.2	29.1	10.4 J	523	C299	26.9	18.5	62.2	29.1
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	2	2	100	0.00011 JT	0.00361 T	C664	0.00186	0.00186	0.00247	0.00344	0.00011 JT	0.00361 T	C664	0.00186	0.00186	0.00247	0.00344
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	45	6	13	0.76 NJ	9.6	C521	3.57	2.7	3.22	8.29	0.062 U	12 U	WR-VC-52	1.63	0.6	2.75	8.55
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	110	83	75	0.25 J	280000 J	GS-C7	14500	300	42200	75800	0.14 U	280000 J	GS-C7	11000	106	37200	58800
Total HPAHs	µg/kg	110	99	90	0.66 JT	3300000 JT	GS-C7	149000	1680	473000	952000	0.62 UT	3300000 JT	GS-C7	134000	974	451000	762000
Total LPAHs	µg/kg	110	100	91	0.48 JT	9000000 JT	GS-C7	321000	1050	1200000	2120000	0.48 JT	9000000 JT	GS-C7	292000	586	1150000	1970000
Naphthalene	µg/kg	111	85	77	0.6 J	4300000 J	GS-C7	175000	170	654000	1180000	0.17 U	4300000 J	GS-C7	134000	71	577000	955000
Phenanthrene	µg/kg	110	95	86	1.2 J	1900000	GS-C7	79200	541	258000	520000	0.43 U	1900000	GS-C7	68400	250	241000	404000
Total cPAHs	µg/kg	110	86	78	0.041 JT	377000 JT	GS-C7	18600	315	55700	100000	0.041 JT	377000 JT	GS-C7	14600	113	49800	77500
Phthalates																		
Butylbenzyl phthalate	µg/kg	87	2	2	9.4	12	WR-VC-62	10.7	10.7	1.84	11.9	1.9 U	1500 U	C521	101	84.2	189	267
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	87	8	9	0.947 J	9.85 J	C305-2	3.36	2.24	3.18	8.72	0.06 U	1660 U	GP31	84.4	56	192	315
Phenols																		
Pentachlorophenol	µg/kg	87	10	11	1.2 J	270	C299	40.8	5.75	83.8	180	0.21 U	8260 U	GP31	333	7.2	917	732
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	42	35	83	2.1 J	23000 J	C521	2230	260	4430	8490	1.3 U	23000 J	C521	1860	205	4120	8330
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	6	2	33	11 J	280 J	C664	146	146	190	267	1.3 U	280 J	C664	49.9	2.75	113	213
Total Petroleum Hydrocarbons (Residual)	mg/kg	42	34	81	3.1 J	11000 J	C521	1520	665	2230	5040	3.1 J	11000 J	C521	1230	393	2080	4940
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	6	3	50	10 J	540 J	C664	190	21	303	488	3 U	540 J	C664	97.5	7.95	217	410
Total Petroleum Hydrocarbons	mg/kg	42	37	88	2.1 JA	37400 JT	C521	3660	880	6970	12600	2.1 JA	37400 JT	C521	3230	553	6640	12200

Table D1.3-15. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Navigation Channel.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	6	3	50	10 JT	820 JA	C664	287	32	461	741	3 UA	820 JA	C664	146	7.95	330	623
RM 07-08																		
Metals																		
Cadmium	mg/kg	36	32	89	0.034 J	0.6	SD120	0.302	0.3	0.113	0.5	0.034 J	0.6	SD120	0.279	0.291	0.124	0.5
Lead	mg/kg	36	36	100	2.06	67	PSY36C	20.8	23	13	37.3	2.06	67	PSY36C	20.8	23	13	37.3
Mercury	mg/kg	35	33	94	0.019	0.251	C349	0.091	0.08	0.0508	0.213	0.019	0.251	C349	0.0887	0.08	0.0502	0.213
Nickel	mg/kg	36	36	100	15.2	32.8	C381	24.4	25	4.45	31.5	15.2	32.8	C381	24.4	25	4.45	31.5
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	30	5	17	1 NJ	3.76 NJ	C357	2.24	2.21	0.994	3.47	0.0693 U	11 UJ	WB-12; WB-15; WB-20	2.33	0.724	3.57	11
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	35	29	83	7.2	1300 J	PSY36C	91	28	244	288	0.36 U	1300 J	PSY36C	76.6	26	224	194
Total HPAHs	µg/kg	35	32	91	0.68 JT	13600 T	PSY36C	947	278	2510	3970	0.68 JT	13600 T	PSY36C	867	251	2410	3660
Total LPAHs	µg/kg	35	31	89	0.71 JT	5950 T	PSY36C	413	66.1	1160	2180	0.71 JT	5950 T	PSY36C	366	60.5	1090	2110
Naphthalene	µg/kg	35	21	60	5.3	260	PSY39C	36.5	19	55.5	97	0.51 U	260	PSY39C	25.2	14	44.9	69
Phenanthrene	µg/kg	35	31	89	0.71 J	3700 J	PSY36C	236	31	717	1300	0.71 J	3700 J	PSY36C	210	29	677	1300
Total cPAHs	µg/kg	35	30	86	2.02 T	1820 JT	PSY36C	124	39.3	338	401	0.42 UT	1820 JT	PSY36C	107	36.1	315	281
Phthalates																		
Butylbenzyl phthalate	µg/kg	36	16	44	5.2 J	23 J	PSY36C	12	9.85	5.96	20.8	1.8 U	23 J	PSY36C	9.09	7.1	6.55	20
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	30	4	13	0.1 NJ	3.59 J	C341	1.45	1.05	1.52	3.25	0.059 U	20 U	SD116; SD120	4.41	2.25	5.79	19.6
Phenols																		
Pentachlorophenol	µg/kg	36	3	8	2.6 J	47	WR-VC-68	19	7.4	24.4	43	0.46 U	100 UJ	PSY36C; PSY39C	28.5	1.1	42.2	100
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	10	9	90	7.8 J	210 J	WR-VC-68; WR-VC-72	140	180	76.4	210	5 U	210 J	WR-VC-68; WR-VC-72	126	140	83.7	210
Total Petroleum Hydrocarbons (Residual)	mg/kg	10	10	100	36 J	690 J	WR-VC-64	447	525	250	681	36 J	690 J	WR-VC-64	447	525	250	681
Total Petroleum Hydrocarbons	mg/kg	10	10	100	36 JT	890 JT	WR-VC-64	573	663	333	886	36 JT	890 JT	WR-VC-64	573	663	333	886
RM 08-09																		
Metals																		
Cadmium	mg/kg	21	21	100	0.183	0.448	C449	0.251	0.24	0.0584	0.313	0.183	0.448	C449	0.251	0.24	0.0584	0.313
Lead	mg/kg	21	21	100	11	31.9	C449	16.4	14.2	5.78	29.7	11	31.9	C449	16.4	14.2	5.78	29.7
Mercury	mg/kg	20	20	100	0.05	0.305	C449	0.0903	0.07	0.0676	0.253	0.05	0.305	C449	0.0903	0.07	0.0676	0.253
Nickel	mg/kg	21	21	100	20.2 J	32	C449	25.1	24.4	2.84	28.9	20.2 J	32	C449	25.1	24.4	2.84	28.9
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	26	0	0 --	--		--	--	--	--	--	0.114 U	2 U	WR-VC-05	0.736	0.2	0.747	1.78
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	29	26	90	4.7	37 J	PSY50C	15.6	13.5	8.78	32.5	2.8 U	37 J	PSY50C	14.3	13	9.17	32.2
Total HPAHs	µg/kg	29	29	100	8.9 T	336 T	PSY50C	151	123	85.6	308	8.9 T	336 T	PSY50C	151	123	85.6	308
Total LPAHs	µg/kg	29	28	97	7.3 T	668 T	PSY50C	56.6	27.8	122	75.3	3.2 UT	668 T	PSY50C	54.8	26.5	120	75.1
Naphthalene	µg/kg	29	17	59	3.7	23	C15-17	9.98	10	4.98	18.2	2.8 U	23	C15-17	8.06	6.6	4.92	16.2
Phenanthrene	µg/kg	29	28	97	5.5	655 J	PSY50C	39.5	14	121	35.6	3.2 U	655 J	PSY50C	38.3	13	119	35.4
Total cPAHs	µg/kg	29	28	97	2.3 T	46.5 T	C400	19.7	17.4	12.4	44.8	2.3 T	46.5 T	C400	19.1	17.4	12.6	44.8
Phthalates																		
Butylbenzyl phthalate	µg/kg	30	17	57	2.9 J	19	WR-VC-08	9.43	8.5	5.64	17.4	2.7 U	19	WR-VC-08	8.06	4.95	5.49	16.6
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	29	0	0 --	--		--	--	--	--	--	0.0271 UT	18 U	C400	6.69	4.1	6.25	15.6
Phenols																		
Pentachlorophenol	µg/kg	30	8	27	2.9 J	47	WR-VC-09	17.7	15.5	13.1	38.3	0.7 U	100 UJ	PSY50C	16.8	14.5	24.7	76.1
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	2	2	100	90.5 JT	270 J	C720	180	180	127	261	90.5 JT	270 J	C720	180	180	127	261
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	2	2	100	77 JT	230 J	C720	154	154	108	222	77 JT	230 J	C720	154	154	108	222
Total Petroleum Hydrocarbons (Residual)	mg/kg	2	2	100	425 JT	910 J	C720	668	668	343	886	425 JT	910 J	C720	668	668	343	886
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	2	2	100	270 JT	580 J	C720	425	425	219	565	270 JT	580 J	C720	425	425	219	565
Total Petroleum Hydrocarbons	mg/kg	2	2	100	516 JA	1180 JA	C720	848	848	470	1150	516 JA	1180 JA	C720	848	848	470	1150
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	2	2	100	347 JA	810 JA	C720	579	579	327	787	347 JA	810 JA	C720	579	579	327	787
Swan Island Lagoon																		
Metals																		
Cadmium	mg/kg	8	8	100	0.166	0.5	SD125	0.284	0.3	0.109	0.441	0.166	0.5	SD125	0.284	0.3	0.109	0.441
Lead	mg/kg	8	8	100	9.85	38	SD125	23	20.9	11.1	37.9	9.85	38	SD125	23	20.9	11.1	37.9
Mercury	mg/kg	8	8	100	0.069	0.33	PSY34C	0.128	0.085	0.092	0.285	0.069	0.33	PSY34C	0.128	0.085	0.092	0.285
Nickel	mg/kg	8	8	100	19	33 J	SD125	23.2	21.8	4.53	30.2	19	33 J	SD125	23.2	21.8	4.53	30.2

Table D1.3-15. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Navigation Channel.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	4	0	0	--	--	--	--	--	--	--	0.08 U	1 UJ	C04-06	0.311	0.0825	0.459	0.863
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	8	8	100	12	150	SD125	66	63	48.6	132	12	150	SD125	66	63	48.6	132
Total HPAHs	µg/kg	8	8	100	134 JT	1710 T	SD125	742	641	566	1520	134 JT	1710 T	SD125	742	641	566	1520
Total LPAHs	µg/kg	8	8	100	36.5 JT	544 T	SD125	185	149	171	443	36.5 JT	544 T	SD125	185	149	171	443
Naphthalene	µg/kg	8	7	88	4.7 J	51	SD125	18.6	11	17.1	45	4.7 J	51	SD125	17.5	10.5	16.2	44
Phenanthrene	µg/kg	8	8	100	14	310	SD125	105	86	96.6	254	14	310	SD125	105	86	96.6	254
Total cPAHs	µg/kg	8	8	100	19.5 JT	199 T	SD125	93	88.9	65.3	178	19.5 JT	199 T	SD125	93	88.9	65.3	178
Phthalates																		
Butylbenzyl phthalate	µg/kg	8	6	75	5.7 J	24	SD125	17.1	20	6.63	23	5.7 J	24	SD125	15.3	16.5	6.5	22.6
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	5	0	0	--	--	--	--	--	--	--	1.2 U	20 U	SD125	5.6	1.3	8.16	16.9
Phenols																		
Pentachlorophenol	µg/kg	8	0	0	--	--	--	--	--	--	--	18 U	100 U	PSY34C	59.9	60.5	42.6	100
RM 09-10																		
Metals																		
Cadmium	mg/kg	35	35	100	0.126	0.4	SD150	0.243	0.239	0.0527	0.336	0.126	0.4	SD150	0.243	0.239	0.0527	0.336
Lead	mg/kg	35	35	100	8.33	26.6	C739	14.9	13.2	4.75	24.6	8.33	26.6	C739	14.9	13.2	4.75	24.6
Mercury	mg/kg	35	35	100	0.025 J	0.143	C739	0.0631	0.059	0.0212	0.0985	0.025 J	0.143	C739	0.0631	0.059	0.0212	0.0985
Nickel	mg/kg	35	35	100	13.9 J	35.8 J	RC483-2	25.5	24.5	5.05	33.9	13.9 J	35.8 J	RC483-2	25.5	24.5	5.05	33.9
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	4	4	100	0.00109 JT	0.00608 T	C739	0.00271	0.00183	0.0023	0.00551	0.00109 JT	0.00608 T	C739	0.00271	0.00183	0.0023	0.00551
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	34	1	3	0.36 NJ	0.36 NJ	C739	0.36	0.36	--	0.36	0.062 U	2.1 U	WR-VC-03	0.454	0.3	0.479	1.6
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	38	35	92	5.1	330	C739	29.4	14	55	75.9	2.7 U	330	C739	27.3	13	53.3	75.5
Total HPAHs	µg/kg	38	38	100	26.6 T	4600 T	C739	325	160	730	697	26.6 T	4600 T	C739	325	160	730	697
Total LPAHs	µg/kg	38	38	100	3.7 T	600 T	C739	58.3	38.7	94.1	92.1	3.7 T	600 T	C739	58.3	38.7	94.1	92.1
Naphthalene	µg/kg	38	23	61	2.7	22	C739	10.9	10	5.21	19.8	0.76 U	22	C739	8.95	8.85	5.5	19.2
Phenanthrene	µg/kg	38	38	100	3.7	500	C739	35.5	17.5	79	60	3.7	500	C739	35.5	17.5	79	60
Total cPAHs	µg/kg	38	38	100	1.18 T	533 T	C739	39.8	18.5	85.9	112	1.18 T	533 T	C739	39.8	18.5	85.9	112
Phthalates																		
Butylbenzyl phthalate	µg/kg	39	12	31	2.6 J	54	WR-VC-04	9.03	5.3	14.3	29.8	2.1 U	54	WR-VC-04	6.17	3.1	8.76	17.2
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	39	2	5	0.23 J	0.62 J	RC483-2	0.425	0.425	0.276	0.601	0.0253 U	19 U	SD150	3.09	0.38	4.74	14.3
Phenols																		
Pentachlorophenol	µg/kg	39	9	23	0.36 J	67	WR-VC-03	9.96	3.2	21.5	42.7	0.33 U	96 U	SD150	9.06	1	18.6	22.9
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	22	22	100	28 J	210 J	C739	85.4	69.5	50.8	179	28 J	210 J	C739	85.4	69.5	50.8	179
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	4	4	100	120 J	190 J	C739	143	130	32	181	120 J	190 J	C739	143	130	32	181
Total Petroleum Hydrocarbons (Residual)	mg/kg	22	22	100	100 J	780 J	RC483-2	475	455	186	768	100 J	780 J	RC483-2	475	455	186	768
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	4	4	100	270 J	460 J	C739	343	320	82.2	441	270 J	460 J	C739	343	320	82.2	441
Total Petroleum Hydrocarbons	mg/kg	22	22	100	128 JT	910 JT	WR-VC-45	561	526	210	860	128 JT	910 JT	WR-VC-45	561	526	210	860
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	4	4	100	390 JA	650 JA	C739	485	450	114	622	390 JA	650 JA	C739	485	450	114	622
RM 10-11																		
Metals																		
Cadmium	mg/kg	68	67	99	0.03	43.7	C752	0.912	0.23	5.31	0.567	0.029 UT	43.7	C752	0.899	0.23	5.27	0.562
Lead	mg/kg	68	68	100	1.88	348	WR-VC-110	36	18.1	53.8	154	1.88	348	WR-VC-110	36	18.1	53.8	154
Mercury	mg/kg	68	68	100	0.017 J	1.17	C752	0.124	0.0745	0.176	0.437	0.017 J	1.17	C752	0.124	0.0745	0.176	0.437
Nickel	mg/kg	68	68	100	12.5	38.8	C752	23.9	22.9	5.35	33.3	12.5	38.8	C752	23.9	22.9	5.35	33.3
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	6	6	100	0.000644 JT	0.0149 T	C752	0.00608	0.00379	0.00582	0.0141	0.000644 JT	0.0149 T	C752	0.00608	0.00379	0.00582	0.0141
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	68	2	3	0.17 JT	0.31 NJ	C746	0.24	0.24	0.099	0.303	0.062 U	2 UJ	WR-GC-32; WR-GC-33; WR-GC-34; WR-GC-35	0.475	0.31	0.483	1.9
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	68	67	99	0.4 J	550	WR-VC-59	45.7	18	96.6	149	0.14 U	550	WR-VC-59	45	17.5	96	145
Total HPAHs	µg/kg	68	68	100	0.37 JT	5630 JT	WR-VC-110	477	200	980	1370	0.37 JT	5630 JT	WR-VC-110	477	200	980	1370
Total LPAHs	µg/kg	68	66	97	1.6 JT	2360 JT	WR-VC-110	141	50	319	518	0.91 UT	2360 JT	WR-VC-110	137	48	315	496
Naphthalene	µg/kg	68	39	57	3.5	130 J	WR-VC-110	23.1	15	25.1	59.4	0.58 U	130 J	WR-VC-110	14.8	8.3	21.4	46.7
Phenanthrene	µg/kg	68	66	97	1 J	1500 J	WR-VC-110	78.2	22.5	204	278	0.75 U	1500 J	WR-VC-110	76	22	201	268
Total cPAHs	µg/kg	68	67	99	0.641 JT	795 T	WR-VC-59	65.4	26	139	201	0.28 UT	795 T	WR-VC-59	64.4	25.4	138	197

Table D1.3-15. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Navigation Channel.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Phthalates																		
Butylbenzyl phthalate	µg/kg	64	19	30	4.3 J	210	RC02-2	24.9	9.1	46.3	57.9	2.2 U	210	RC02-2	12.7	4.9	27.5	39.6
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	64	7	11	0.12 J	0.65 J	C752	0.284	0.18	0.201	0.593	0.068 U	6 U	C7482; C757	0.587	0.265	1.21	3.41
Phenols																		
Pentachlorophenol	µg/kg	64	35	55	0.42 J	64	WR-VC-51	6.02	2.3	11.6	18.9	0.19 UT	64	WR-VC-51	4.25	1.45	8.95	13
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	64	63	98	3.4 J	600 J	C752	129	96	122	326	1.6 U	600 J	C752	128	94.3	122	324
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	32	31	97	2.6 J	570 J	C752	126	80	137	400	1.6 U	570 J	C752	122	74.5	137	386
Total Petroleum Hydrocarbons (Residual)	mg/kg	64	62	97	18.2 JT	1300 J	C752	533	500	304	1000	14 U	1300 J	C752	517	495	312	1000
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	32	28	88	11.6 JT	1100 J	C752	358	303	272	932	7 U	1100 J	C752	317	265	277	836
Total Petroleum Hydrocarbons	mg/kg	64	63	98	3.4 JA	1900 JA	C752	655	600	417	1320	3.4 JA	1900 JA	C752	645	590	421	1320
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	32	31	97	2.6 JA	1670 JA	C752	449	374	414	1260	2.6 JA	1670 JA	C752	436	351	415	1220
RM 11-11.8																		
Metals																		
Cadmium	mg/kg	35	35	100	0.016 J	2.12	WR-CD-43	0.217	0.11	0.358	0.465	0.016 J	2.12	WR-CD-43	0.217	0.11	0.358	0.465
Lead	mg/kg	35	35	100	1.54	489	WR-CD-43	30.6	14.9	81.8	65	1.54	489	WR-CD-43	30.6	14.9	81.8	65
Mercury	mg/kg	35	34	97	0.007 J	0.87 J	WR-CD-42	0.0884	0.045	0.155	0.251	0.005 UJ	0.87 J	WR-CD-42	0.086	0.041	0.153	0.244
Nickel	mg/kg	35	35	100	9.64	53.7 JT	UC03	18.2	16.7	8.53	32.6	9.64	53.7 JT	UC03	18.2	16.7	8.53	32.6
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	8	3	38	0.000000257 JT	0.000185 JT	C779	0.0000619	0.000000404	0.000107	0.000167	0.000000257 JT	0.000191 UT	C779	0.000127	0.000158	0.0000799	0.000189
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	39	5	13	0.2 J	3.4 J	UC03	1.19	0.88	1.28	2.91	0.051 U	3.4 J	UC03	0.966	0.42	0.919	2
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	39	31	79	0.26 J	168 J	WR-CD-43	39.6	25	41.8	125	0.14 U	168 J	WR-CD-43	31.5	19	40.5	121
Total HPAHs	µg/kg	39	31	79	3.8 JT	1650 T	WR-CD-43	442	289	463	1550	0.64 UT	1650 T	WR-CD-43	351	202	449	1510
Total LPAHs	µg/kg	39	32	82	0.35 JT	890 T	UC03	169	101	222	680	0.35 JT	890 T	UC03	139	60.1	211	673
Naphthalene	µg/kg	39	26	67	0.4 J	212 J	WR-CD-43	33	19	45.5	95	0.4 J	212 J	WR-CD-43	22.3	9	39.9	89.8
Phenanthrene	µg/kg	39	30	77	0.9 J	420	UC03	80.5	42.5	101	289	0.75 U	420	UC03	62.1	29	94.6	237
Total cPAHs	µg/kg	39	31	79	0.339 JT	218 JT	WR-CD-43	53.5	33.9	56.1	174	0.28 UT	218 JT	WR-CD-43	42.6	25.5	54.4	170
Phthalates																		
Butylbenzyl phthalate	µg/kg	26	6	23	3.5 J	6.6 J	WR-VC-126	4.9	5.05	1.19	6.35	1.8 U	28 U	UC03	6.2	3.2	6.08	18
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	26	1	4	0.87 J	0.87 J	WR-VC-122	0.87	0.87	--	0.87	0.068 U	12 U	WR-VC-06	1.9	0.13	3.88	10.8
Phenols																		
Pentachlorophenol	µg/kg	26	6	23	0.41 J	2.5 J	UC03	1.36	1.3	0.745	2.33	0.18 U	12 U	WR-VC-06	2.25	0.735	3.75	10.8
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	20	15	75	1.5 J	220 J	WR-VC-132	75.6	75	72.4	206	1.4 U	220 J	WR-VC-132	57	24.7	70.4	201
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	10	3	30	1.8 J	3.8 J	C779	3	3.4	1.06	3.76	1.4 U	3.8 J	C779	2.12	1.55	0.967	3.62
Total Petroleum Hydrocarbons (Residual)	mg/kg	20	15	75	5.45 JT	750 J	UC03	285	280	251	680	3.3 U	750 J	UC03	215	103	249	655
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	10	3	30	4.1 J	8.6 J	C779	6.2	5.9	2.26	8.33	3.3 U	8.6 J	C779	4.64	3.65	1.81	7.75
Total Petroleum Hydrocarbons	mg/kg	20	16	80	2.2 JT	980 JT	UC03	343	316	331	898	2.2 JT	980 JT	UC03	275	133	326	876
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	10	3	30	5.9 JA	12.4 JA	C779	9.2	9.3	3.25	12.1	3.3 UA	12.4 JA	C779	5.54	3.65	3.12	11

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

-- data not available.
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-16. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Western Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Study Area																		
Metals																		
Cadmium	mg/kg	574	506	88	0.0156 J	9.3	HA-43	0.407	0.259	0.745	0.899	0.00177 U	9.3	HA-43	0.425	0.264	0.723	1.18
Lead	mg/kg	580	579	100	2.75	1290 J	G355	45.2	17.1	111	162	2.75	1290 J	G355	45.2	17.2	111	161
Mercury	mg/kg	554	496	90	0.008 J	2.01	G453	0.102	0.07	0.135	0.282	0.00189 U	2.01	G453	0.099	0.07	0.129	0.262
Nickel	mg/kg	547	543	99	6.22 J	341	HA-43	27.6	24.1	22.4	46	6.22 J	341	HA-43	27.5	24.1	22.3	45.8
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	77	77	100	0.00000255 JT	0.239 T	G453	0.00643	0.00116	0.0279	0.0199	0.00000255 JT	0.239 T	G453	0.00643	0.00116	0.0279	0.0199
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	457	80	18	0.0089 J	430	07R006	7.97	1.57	47.9	8.94	0.00833 U	430	07R006	4.27	0.55	22.8	11.2
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	612	582	95	0.86 J	160000	GS04APG2	2830	150	13500	11900	0.33 U	160000	GS04APG2	2700	149	13200	9740
Total HPAHs	µg/kg	612	602	98	2.16 JT	1680000 T	GS04APG2	28100	1600	137000	99600	2.16 JT	1680000 T	GS04APG2	27700	1520	136000	95300
Total LPAHs	µg/kg	612	585	96	0.65 JT	772000 JA	AN-1-3	12000	310	69500	30300	0.65 JT	772000 JA	AN-1-3	11500	308	68000	27600
Naphthalene	µg/kg	616	434	70	0.89 J	73000 J	AN-1-3; G294-1	938	36	6110	1700	0.43 U	73000 J	AN-1-3; G294-1	674	23.5	5150	1030
Phenanthrene	µg/kg	612	584	95	0.53 J	400000	G301	6450	160	35300	19900	0.53 J	400000	G301	6160	150	34500	17900
Total cPAHs	µg/kg	612	591	97	0.05 JT	212000 T	GS04APG2	3750	211	17800	15000	0.05 JT	212000 T	GS04APG2	3630	201	17500	13200
Phthalates																		
Butylbenzyl phthalate	µg/kg	539	100	19	2.2 J	840 J	G355	54.6	13.5	129	202	1.7 U	6600 U	A2GS12; HA-43	104	14	492	345
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	542	190	35	0.062 J	340	OSS004	8.07	1.1	38.4	15.8	0.0151 UT	6600 U	A2GS12	63.3	2.2	397	178
Phenols																		
Pentachlorophenol	µg/kg	532	106	20	0.57 J	680	OSS004	27.2	5.95	81.2	133	0.167 U	20000 U	A2GS12	212	4.5	1390	386
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	299	281	94	8.3 J	20000 J	G294-1	496	120	1850	1300	4.3 U	20000 J	G294-1	468	110	1800	1170
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	54	33	61	23.8	370 J	G619	100	68	85.1	280	15.3 U	370 J	G619	71.3	38	75.5	243
Total Petroleum Hydrocarbons (Residual)	mg/kg	238	231	97	8.4 J	18000 J	G453	983	480	2240	2450	8.4 J	18000 J	G453	961	465	2210	2420
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	54	40	74	38.3	520 J	G619	172	152	113	378	30.5 U	520 J	G619	139	94	113	368
Total Petroleum Hydrocarbons	mg/kg	299	293	98	8.4 JT	33100 JT	G294-1	1280	500	3740	3190	8.4 JT	33100 JT	G294-1	1260	490	3710	3120
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	54	46	85	23.8 A	890 JA	G619	222	172	195	642	23.8 A	890 JA	G619	196	120	191	641
RM 01.9-03																		
Metals																		
Cadmium	mg/kg	16	16	100	0.088	1.15	G029	0.357	0.289	0.274	0.855	0.088	1.15	G029	0.357	0.289	0.274	0.855
Lead	mg/kg	16	16	100	4.98	20.5	G029	11.6	12.4	4.49	18.6	4.98	20.5	G029	11.6	12.4	4.49	18.6
Mercury	mg/kg	16	16	100	0.019	0.14	G029	0.0613	0.0535	0.037	0.133	0.019	0.14	G029	0.0613	0.0535	0.037	0.133
Nickel	mg/kg	16	15	94	15.7 J	26.6	G003; G012	22.8	23.3	2.72	26.6	15.7 J	26.6	G003; G012	23	23.4	2.69	26.6
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	2	2	100	0.000141 JT	0.000341 JT	D1-1	0.000241	0.000241	0.000141	0.000331	0.000141 JT	0.000341 JT	D1-1	0.000241	0.000241	0.000141	0.000331
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	16	4	25	0.17 NJ	3.11 NJ	G012	1.56	1.48	1.45	3.01	0.0733 U	3.11 NJ	G012	0.494	0.135	0.912	2.63
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	16	16	100	12	970 J	WR-PG-04	202	55.8	286	798	12	970 J	WR-PG-04	202	55.8	286	798
Total HPAHs	µg/kg	16	16	100	76.1 JT	6480 JT	WR-PG-04	1520	444	2090	6040	76.1 JT	6480 JT	WR-PG-04	1520	444	2090	6040
Total LPAHs	µg/kg	16	16	100	6.16 JT	1650 T	G041	267	56.9	514	1520	6.16 JT	1650 T	G041	267	56.9	514	1520
Naphthalene	µg/kg	16	11	69	5.2	160	G029	38.4	12	56	150	1.9 U	160	G029	27.7	9	48.6	145
Phenanthrene	µg/kg	16	16	100	1.7 J	1000	G041	138	22	296	828	1.7 J	1000	G041	138	22	296	828
Total cPAHs	µg/kg	16	16	100	15.6 JT	1310 JT	WR-PG-04	270	76.2	384	1070	15.6 JT	1310 JT	WR-PG-04	270	76.2	384	1070
Phthalates																		
Butylbenzyl phthalate	µg/kg	16	2	12	3.5 JT	7.1 J	G012	5.3	5.3	2.55	6.92	1.9 U	15 U	WR-PG-04	4.47	3.05	4.11	14.3
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	16	6	38	0.108 J	1.01 J	D2	0.598	0.725	0.343	0.949	0.0298 U	20 U	G041	3.05	1.81	4.81	8.68
Phenols																		
Pentachlorophenol	µg/kg	16	1	6	1.2 NJ	1.2 NJ	WR-PG-04	1.2	1.2	--	1.2	0.29 UT	4.5 U	D1-2; G003	2.66	3.2	1.73	4.5
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	1	1	100	69 J	69 J	WR-PG-04	69	69	--	69	69 J	69 J	WR-PG-04	69	69	--	69
Total Petroleum Hydrocarbons (Residual)	mg/kg	1	1	100	310 J	310 J	WR-PG-04	310	310	--	310	310 J	310 J	WR-PG-04	310	310	--	310
Total Petroleum Hydrocarbons	mg/kg	1	1	100	379 JT	379 JT	WR-PG-04	379	379	--	379	379 JT	379 JT	WR-PG-04	379	379	--	379

Table D1.3-16. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Western Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
RM 03-04																		
Metals																		
Cadmium	mg/kg	31	30	97	0.06	0.4	SD005; SD011	0.241	0.252	0.0826	0.373	0.06	0.4	SD005; SD011	0.238	0.25	0.0832	0.37
Lead	mg/kg	31	31	100	5.85 T	26	G105	13.9	13.9	3.37	18.7	5.85 T	26	G105	13.9	13.9	3.37	18.7
Mercury	mg/kg	30	25	83	0.024 T	0.219	G100	0.0831	0.064	0.0491	0.19	0.024 T	0.219	G100	0.0789	0.0635	0.0466	0.187
Nickel	mg/kg	31	30	97	17.9 JT	27.8	SD015	24.2	24.7	2.64	27.4	15.9 UJ	27.8	SD015	23.9	24.6	2.99	27.4
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	4	4	100	0.000248 JT	0.000775 JT	G105	0.000457	0.000402	0.000226	0.000724	0.000248 JT	0.000775 JT	G105	0.000457	0.000402	0.000226	0.000724
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	28	5	18	0.17 J	4.05 NJ	G072	1.6	0.559	1.77	3.82	0.076 U	4.05 NJ	G072	0.622	0.19	0.96	2.6
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	31	31	100	5.2 T	3600	G619	421	230	674	1150	5.2 T	3600	G619	421	230	674	1150
Total HPAHs	µg/kg	31	31	100	44.6 T	38000 T	G619	3800	1640	6940	10400	44.6 T	38000 T	G619	3800	1640	6940	10400
Total LPAHs	µg/kg	31	30	97	26 T	12000 T	G619	970	239	2200	2360	19 UT	12000 T	G619	939	225	2170	2360
Naphthalene	µg/kg	31	28	90	8.2	980	G619	127	46	199	367	8.2	980	G619	116	31	192	365
Phenanthrene	µg/kg	31	30	97	24	8400	G619	562	110	1530	1260	19 U	8400	G619	545	110	1510	1250
Total cPAHs	µg/kg	31	31	100	6.94 T	4800 T	G619	566	305	898	1540	6.94 T	4800 T	G619	566	305	898	1540
Phthalates																		
Butylbenzyl phthalate	µg/kg	31	2	6	9.8 J	36	03R032	22.9	22.9	18.5	34.7	2.1 U	58 U	03R002	11.9	4.8	12.8	34
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	31	6	19	0.16 J	1 J	G077	0.563	0.479	0.313	0.967	0.0178 U	20 U	SD001; SD011	4.95	2	6.81	19.5
Phenols																		
Pentachlorophenol	µg/kg	31	3	10	1.9 J	110 J	SD003	42.2	14.7	59.1	100	0.35 U	110 J	SD003	21.6	4.5	35.8	98.5
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	7	7	100	35 J	570 J	G619	174	77	197	489	35 J	570 J	G619	174	77	197	489
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	1	1	100	370 J	370 J	G619	370	370	--	370	370 J	370 J	G619	370	370	--	370
Total Petroleum Hydrocarbons (Residual)	mg/kg	7	5	71	380 J	940 J	G619	588	480	240	898	110 U	940 J	G619	454	410	301	877
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	1	1	100	520 J	520 J	G619	520	520	--	520	520 J	520 J	G619	520	520	--	520
Total Petroleum Hydrocarbons	mg/kg	7	7	100	35 JT	1510 JA	G619	594	487	529	1370	35 JT	1510 JA	G619	594	487	529	1370
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	1	1	100	890 JA	890 JA	G619	890	890	--	890	890 JA	890 JA	G619	890	890	--	890
RM 04-05																		
Metals																		
Cadmium	mg/kg	95	69	73	0.043 J	0.848	G155	0.232	0.244	0.123	0.4	0.043 J	1.31 U	SS-48	0.417	0.267	0.359	1.22
Lead	mg/kg	98	97	99	2.75	330	R2AR02PG	21.6	15.9	33.6	41.1	2.75	330	R2AR02PG	21.6	16	33.4	40.6
Mercury	mg/kg	94	70	74	0.008 J	0.74	G153	0.0863	0.0635	0.101	0.191	0.00189 U	0.74	G153	0.0893	0.07	0.0912	0.192
Nickel	mg/kg	91	91	100	6.22 J	41 J	SS-37	23.5	23	7.42	36.7	6.22 J	41 J	SS-37	23.5	23	7.42	36.7
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	7	7	100	0.000283 JT	0.0033 T	G147	0.00113	0.00065	0.00104	0.00276	0.000283 JT	0.0033 T	G147	0.00113	0.00065	0.00104	0.00276
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	55	10	18	0.204 J	2.5 J	G150	0.884	0.588	0.787	2.34	0.0129 U	41 U	S3	1.95	0.46	6.54	6.7
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	100	94	94	0.86 J	7500	ARC03B	615	194	1140	2910	0.86 J	7500	ARC03B	639	198	1150	3110
Total HPAHs	µg/kg	100	98	98	9.75 T	81900 T	ARC03B	6020	2150	12000	27600	9.75 T	81900 T	ARC03B	5910	2070	11900	27400
Total LPAHs	µg/kg	100	94	94	4.08 JT	32300 T	ARC03B	2010	368	5120	10900	4.08 JT	32300 T	ARC03B	1930	354	4980	10800
Naphthalene	µg/kg	100	76	76	6.8	1400	ARC03B	132	42.5	261	603	0.43 U	3370 U	S3	164	31.5	431	1000
Phenanthrene	µg/kg	100	94	94	1.9 J	22000	ARC03B	1240	187	3300	7080	1.9 J	22000	ARC03B	1210	187	3210	6670
Total cPAHs	µg/kg	100	94	94	1.62 JT	9840 T	ARC03B	832	274	1520	3920	1.62 JT	9840 T	ARC03B	843	284	1510	3800
Phthalates																		
Butylbenzyl phthalate	µg/kg	77	4	5	6.6 J	80 J	G139	31.9	20.5	32.7	71.2	1.8 U	3370 U	S3	126	13	518	396
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	80	25	31	0.15 J	2	WR-PG-24	0.609	0.415	0.508	1.66	0.0162 UT	3370 U	S3	113	1.37	510	346
Phenols																		
Pentachlorophenol	µg/kg	77	10	13	1.4 NJ	29 J	G124	7.58	3.85	9.31	24.7	0.48 U	10200 U	S3	361	4.2	1570	1200
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	57	54	95	8.3 J	945 JT	ARC06B-1	163	100	192	589	4.3 U	945 JT	ARC06B-1	155	98	190	568
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	37	16	43	23.8	300 T	SS-41	102	78.3	81.6	275	15.3 U	300 T	SS-41	59.1	30.9	65.2	192
Total Petroleum Hydrocarbons (Residual)	mg/kg	52	52	100	8.4 J	2400 J	G139	510	380	480	1550	8.4 J	2400 J	G139	510	380	480	1550
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	37	23	62	38.3	376 J	SS-29	128	93.5	91.8	354	30.5 U	376 J	SS-29	95.6	68.7	83.8	282
Total Petroleum Hydrocarbons	mg/kg	57	57	100	8.4 JT	2760 JT	G139	623	456	631	1850	8.4 JT	2760 JT	G139	623	456	631	1850
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	37	29	78	23.8 A	664 A	SS-41	158	82	166	559	23.8 A	664 A	SS-41	134	73.7	154	476

Table D1.3-16. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Western Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	Units	Sample Count	Detected Sample Count	Percent Detected	Minimum[a]	Maximum[a]	Maximum Location(s)	Mean	Median[b]	Standard Deviation	95th Percentile[b]	Minimum (full DL)[a]	Maximum (full DL)[a]	Maximum Location(s)	Mean (full DL)	Median (full DL)[b]	Standard Deviation (full DL)	95th Percentile[b] (full DL)
RM 05-06																		
Metals																		
Cadmium	mg/kg	67	65	97	0.084	0.9	G245	0.234	0.242	0.11	0.317	0.084	0.9	G245	0.236	0.242	0.11	0.376
Lead	mg/kg	67	67	100	5.74 J	232	SD05	19.5	14.1	27.3	32.5	5.74 J	232	SD05	19.5	14.1	27.3	32.5
Mercury	mg/kg	67	66	99	0.013 J	0.172 J	BT014	0.0633	0.0585	0.0311	0.125	0.013 J	0.172 J	BT014	0.0635	0.059	0.0309	0.125
Nickel	mg/kg	66	66	100	10.8	30.6	SDBH11SS	23.7	24.9	4.82	29.8	10.8	30.6	SDBH11SS	23.7	24.9	4.82	29.8
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	6	6	100	0.000244 JT	0.00208 JT	C187	0.000761	0.000417	0.000713	0.00183	0.000244 JT	0.00208 JT	C187	0.000761	0.000417	0.000713	0.00183
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	50	13	26	0.0103 J	6.66 J	G189	2.61	2.5	2.23	6.07	0.0103 J	6.66 J	G189	0.974	0.355	1.52	4.7
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	82	82	100	8	23000	G210	1230	308	3160	6710	8	23000	G210	1230	308	3160	6710
Total HPAHs	µg/kg	82	82	100	64 JT	260000 T	G210	13100	2630	35800	77000	64 JT	260000 T	G210	13100	2630	35800	77000
Total LPAHs	µg/kg	82	82	100	12.8 JT	85500 T	G210	4220	527	13900	19000	12.8 JT	85500 T	G210	4220	527	13900	19000
Naphthalene	µg/kg	82	74	90	4.2	2500	LPSG-S-021-R-1	133	49	326	405	0.48 U	2500	LPSG-S-021-R-1	120	42	312	374
Phenanthrene	µg/kg	82	82	100	5.3	66000	G210	2850	270	9760	14600	5.3	66000	G210	2850	270	9760	14600
Total cPAHs	µg/kg	82	82	100	11.5 JT	30000 T	G210	1640	419	4140	8930	11.5 JT	30000 T	G210	1640	419	4140	8930
Phthalates																		
Butylbenzyl phthalate	µg/kg	67	12	18	3 J	55	05R020	18.1	7.3	18.7	52.8	2 U	1200 U	SD05	34.3	11	147	53.8
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	68	30	44	0.062 J	12 J	SDBH14SS	1.34	0.626	2.26	3.75	0.062 J	580 U	SD05	14	1.12	70.1	20
Phenols																		
Pentachlorophenol	µg/kg	67	15	22	1.7 J	140 T	05R020; WR-PG-36	22.8	4.7	47.7	140	0.53 U	17000 U	SD05	303	4.5	2070	440
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	45	42	93	30 J	2400 J	G179	231	110	420	717	14 U	2400 J	G179	220	110	408	708
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	3	3	100	34 J	230 J	G654	145	170	100	224	34 J	230 J	G654	145	170	100	224
Total Petroleum Hydrocarbons (Residual)	mg/kg	44	41	93	24 J	2900 J	G179	505	360	522	1200	24 J	2900 J	G179	499	385	504	1190
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	3	3	100	140 J	410 J	G654	250	200	142	389	140 J	410 J	G654	250	200	142	389
Total Petroleum Hydrocarbons	mg/kg	45	43	96	24 JT	5340 JT	G179	711	500	925	1760	24 JT	5340 JT	G179	699	450	906	1740
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	3	3	100	174 JA	640 JA	G654	395	370	234	613	174 JA	640 JA	G654	395	370	234	613
RM 06-07																		
Metals																		
Cadmium	mg/kg	106	98	92	0.05	0.78	22B04	0.281	0.254	0.13	0.5	0.00189 U	1.1 U	22C04	0.276	0.253	0.16	0.5
Lead	mg/kg	109	109	100	3.32 J	684	G270-1	44.2	24.6	81	154	3.32 J	684	G270-1	44.2	24.6	81	154
Mercury	mg/kg	105	99	94	0.012 J	0.722	G327	0.11	0.075	0.116	0.354	0.012 J	0.722	G327	0.107	0.074	0.113	0.331
Nickel	mg/kg	108	108	100	7.03	200 JT	G263	32.7	26	25.6	79.7	7.03	200 JT	G263	32.7	26	25.6	79.7
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	9	9	100	0.000284 JT	0.00355 T	G327	0.00166	0.00116	0.0013	0.00347	0.000284 JT	0.00355 T	G327	0.00166	0.00116	0.0013	0.00347
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	92	19	21	0.146 J	22	06R004	4.6	2.35	5.49	12.1	0.0728 U	50 U	SD081	3.74	0.732	9.37	20.4
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	109	109	100	13	160000	GS04APG2	13000	1400	29000	73800	13	160000	GS04APG2	13000	1400	29000	73800
Total HPAHs	µg/kg	109	109	100	127 T	1680000 T	GS04APG2	133000	15000	299000	701000	127 T	1680000 T	GS04APG2	133000	15000	299000	701000
Total LPAHs	µg/kg	109	109	100	8.95 JT	772000 JA	AN-1-3	58500	2970	152000	377000	8.95 JT	772000 JA	AN-1-3	58500	2970	152000	377000
Naphthalene	µg/kg	109	103	94	0.89 J	73000 J	AN-1-3; G294-1	3660	140	12200	14800	0.47 U	73000 J	AN-1-3; G294-1	3460	130	11900	14200
Phenanthrene	µg/kg	109	109	100	4.1	400000	G301	30600	1800	77000	210000	4.1	400000	G301	30600	1800	77000	210000
Total cPAHs	µg/kg	109	109	100	18.2 T	212000 T	GS04APG2	17400	1970	38400	96000	18.2 T	212000 T	GS04APG2	17400	1970	38400	96000
Phthalates																		
Butylbenzyl phthalate	µg/kg	105	11	10	4.5 J	58	06R001	17.7	7.2	17.4	50	2 U	830 U	G264	71.5	19	122	308
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	105	49	47	0.18 J	140 J	SDUD27SS	5.84	1.79	19.9	14.2	0.0307 UJ	1200 U	G264	32.3	2.03	132	174
Phenols																		
Pentachlorophenol	µg/kg	105	32	30	1 J	290	G263	20.7	8.03	51	52.2	0.167 U	1000 U	SD067	48	6.59	149	99.8
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	68	68	100	11.2	20000 J	G294-1	1340	185	3460	9650	11.2	20000 J	G294-1	1340	185	3460	9650
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	1	1	100	61 J	61 J	G656	61	61	--	61	61 J	61 J	G656	61	61	--	61
Total Petroleum Hydrocarbons (Residual)	mg/kg	59	58	98	61 JT	17000 J	G283	1950	535	3610	11300	47 UT	17000 J	G283	1910	530	3580	11200
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	1	1	100	200 J	200 J	G656	200	200	--	200	200 J	200 J	G656	200	200	--	200
Total Petroleum Hydrocarbons	mg/kg	68	68	100	11.2 A	33100 JT	G294-1	3010	608	6760	19100	11.2 A	33100 JT	G294-1	3010	608	6760	19100
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	1	1	100	261 JA	261 JA	G656	261	261	--	261	261 JA	261 JA	G656	261	261	--	261

Table D1.3-16. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Western Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
RM 07-08																		
Metals																		
Cadmium	mg/kg	108	100	93	0.0156 J	5.79	TOS-SD5	0.606	0.293	1.14	3.91	0.00177 U	5.79	TOS-SD5	0.563	0.282	1.11	3.07
Lead	mg/kg	108	108	100	5.84	1290 J	G355	38.3	16.4	127	89.4	5.84	1290 J	G355	38.3	16.4	127	89.4
Mercury	mg/kg	107	92	86	0.016 J	0.46	G394	0.0799	0.07	0.0584	0.143	0.016 J	0.46	G394	0.0766	0.07	0.0552	0.127
Nickel	mg/kg	97	96	99	12.6 J	102	G355	25.1	22.9	10.4	34.8	12.6 J	102	G355	25	22.8	10.4	34.6
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	17	17	100	0.00000255 JT	0.0332 T	G355	0.00352	0.000826	0.0079	0.0133	0.00000255 JT	0.0332 T	G355	0.00352	0.000826	0.0079	0.0133
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	104	7	7	0.0089 J	430	07R006	62.8	1.22	162	303	0.0089 J	430	07R006	12.6	1.56	45.9	49.9
Total DDD	µg/kg	108	93	86	0.233 NJT	11000 A	OSS004	405	49	1270	1900	0.233 NJT	11000 A	OSS004	350	19.9	1190	1520
Total DDE	µg/kg	108	87	81	0.356 NJT	1480 A	OSS004	124	11	292	812	0.0406 UT	1480 A	OSS004	108	8.96	266	567
Total DDT	µg/kg	108	88	81	0.099 JT	81000 A	OSS002	2480	158	9270	10000	0.099 JT	81000 A	OSS002	2020	47.7	8420	9330
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	133	119	89	2 J	12000	G355	283	67	1240	651	0.33 U	12000	G355	256	54	1170	598
Total HPAHs	µg/kg	133	127	95	2.16 JT	143000 T	G355	3160	733	14200	8300	2.16 JT	143000 T	G355	3020	714	13900	8010
Total LPAHs	µg/kg	133	119	89	0.65 JT	6340 JT	G355	355	156	734	1410	0.65 JT	6340 JT	G355	341	154	700	1240
Naphthalene	µg/kg	137	72	53	1.4 J	154	2203	25.9	18	26.7	83.4	0.5 U	168 UJ	TOS-SD3	18.9	13.4	25.3	64.4
Phenanthrene	µg/kg	133	118	89	0.53 J	4900	G355	218	90.5	520	1020	0.53 J	4900	G355	194	73	494	830
Total cPAHs	µg/kg	133	125	94	0.05 JT	21900 T	G355	445	77.6	2170	959	0.05 JT	21900 T	G355	419	70.4	2110	906
Phthalates																		
Butylbenzyl phthalate	µg/kg	115	19	17	4.7 J	840 J	G355	64.7	15	190	192	1.8 U	1200 UJ	TOS-SD3	77.1	16	183	500
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	115	40	35	0.127 J	340	OSS004	24	3.16	74.2	84.3	0.0161 UT	1200 UJ	TOS-SD3	60.6	10	169	500
Phenols																		
Pentachlorophenol	µg/kg	109	18	17	0.57 J	680	OSS004	75.2	9.2	173	374	0.26 U	2400 UJ	TOS-SD3	146	12	344	1000
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	37	36	97	20 J	501	2201	171	131	115	437	4.9 U	501	2201	167	130	117	434
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	4	4	100	44 J	170 JT	G694	103	99.5	52.3	161	44 J	170 JT	G694	103	99.5	52.3	161
Total Petroleum Hydrocarbons (Residual)	mg/kg	30	29	97	16 J	1100 J	BT020	487	470	229	880	16 J	1100 J	BT020	473	460	238	865
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	4	4	100	88 J	320 JT	G694	228	253	99.8	313	88 J	320 JT	G694	228	253	99.8	313
Total Petroleum Hydrocarbons	mg/kg	37	37	100	16 JT	1520 JT	BT020	549	540	313	1010	16 JT	1520 JT	BT020	549	540	313	1010
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	4	4	100	132 JA	490 JA	G694	332	352	150	474	132 JA	490 JA	G694	332	352	150	474
RM 08-09																		
Metals																		
Cadmium	mg/kg	67	60	90	0.0608 J	5.41	G453	0.673	0.457	0.883	1.65	0.00228 U	5.41	G453	0.687	0.45	0.872	2.03
Lead	mg/kg	67	67	100	3.07 J	956	G453	99.9	40.6	154	361	3.07 J	956	G453	99.9	40.6	154	361
Mercury	mg/kg	67	62	93	0.015 J	2.01	G453	0.187	0.101	0.27	0.455	0.01 U	2.01	G453	0.177	0.1	0.262	0.454
Nickel	mg/kg	67	67	100	10.1 J	153 J	19A01	27.6	23.2	18.7	50	10.1 J	153 J	19A01	27.6	23.2	18.7	50
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	14	14	100	0.000499 T	0.239 T	G453	0.02	0.00192	0.0632	0.0946	0.000499 T	0.239 T	G453	0.02	0.00192	0.0632	0.0946
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	49	10	20	0.00981 JT	6.86 J	G441	1.64	1.27	1.99	4.83	0.00833 U	6.86 J	G441	0.822	0.484	1.12	2.08
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	66	60	91	4.3	1670	A2GS12	175	50	315	834	4.3	1670	A2GS12	161	46.5	303	806
Total HPAHs	µg/kg	66	66	100	69.4 JT	19600 T	A2GS12	1740	533	3230	7650	69.4 JT	19600 T	A2GS12	1740	533	3230	7650
Total LPAHs	µg/kg	66	64	97	12.9 JT	6790 T	A2GS12	552	160	1150	2390	12.9 JT	6790 T	A2GS12	611	167	1190	3110
Naphthalene	µg/kg	66	37	56	5.7	269 J	19A01	54.5	24	62.9	164	0.69 U	269 J	19A01	39.5	19	55.4	149
Phenanthrene	µg/kg	66	64	97	6	4820	A2GS12	294	65.5	703	1040	6	4820	A2GS12	286	65.5	694	1020
Total cPAHs	µg/kg	66	62	94	6.09 T	2120 T	A2GS12	241	66.8	431	1150	6.09 T	2120 T	A2GS12	227	64.5	420	1150
Phthalates																		
Butylbenzyl phthalate	µg/kg	64	18	28	2.2 J	760	08R001	111	23	192	441	1.7 U	6600 U	A2GS12	267	19	947	1520
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	67	21	31	0.102 JT	5.44 J	PP011806	1.51	1.2	1.45	4.6	0.0151 UT	6600 U	A2GS12	201	2.56	931	1160
Phenols																		
Pentachlorophenol	µg/kg	63	13	21	0.84 J	18 J	G445	6.55	3.7	5.17	16.3	0.168 UT	20000 U	A2GS12	664	4.1	2900	4520
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	36	31	86	16.2 J	8400 J	G453	568	150	1600	2230	16.2 J	8400 J	G453	494	115	1490	1450
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	1	1	100	41.5 JT	41.5 JT	G717	41.5	41.5	--	41.5	41.5 JT	41.5 JT	G717	41.5	41.5	--	41.5
Total Petroleum Hydrocarbons (Residual)	mg/kg	14	14	100	290 J	18000 J	G453	2000	750	4640	7790	290 J	18000 J	G453	2000	750	4640	7790
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	1	1	100	155 JT	155 JT	G717	155	155	--	155	155 JT	155 JT	G717	155	155	--	155

Table D1.3-16. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Western Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	Units	Sample Count	Detected Sample Count	Percent Detected	Minimum[a]	Maximum[a]	Maximum Location(s)	Mean	Median[b]	Standard Deviation	95th Percentile[b]	Minimum (full DL)[a]	Maximum (full DL)[a]	Maximum Location(s)	Mean (full DL)	Median (full DL)[b]	Standard Deviation (full DL)	95th Percentile[b] (full DL)
Total Petroleum Hydrocarbons	mg/kg	36	35	97	16.2 JA	26500 JT	G453	1370	354	4450	3220	16.2 JA	26500 JT	G453	1330	348	4390	3180
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	1	1	100	197 JA	197 JA	G717	197	197	--	197	197 JA	197 JA	G717	197	197	--	197
RM 09-10																		
Metals																		
Cadmium	mg/kg	36	35	97	0.133 T	9.3	HA-43	0.693	0.242	1.55	1.45	0.133 T	9.3	HA-43	0.686	0.245	1.53	1.41
Lead	mg/kg	36	36	100	8.3	1030	HA-43	95.6	20.5	207	473	8.3	1030	HA-43	95.6	20.5	207	473
Mercury	mg/kg	36	35	97	0.0285 JT	0.99	HA-43	0.149	0.07	0.2	0.493	0.0285 JT	0.99	HA-43	0.147	0.07	0.198	0.479
Nickel	mg/kg	36	35	97	11.7	341	HA-43	41.6	23.1	65.3	138	11.7	341	HA-43	41	23.1	64.4	131
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	13	13	100	0.00102 JT	0.0484 T	G477	0.00912	0.00308	0.0144	0.0384	0.00102 JT	0.0484 T	G477	0.00912	0.00308	0.0144	0.0384
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	31	7	23	0.0115 J	7.15 J	G492-2	3.41	3.6	2.59	6.69	0.0115 J	9.7 UT	SD151	1.32	0.24	2.35	6.38
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	36	36	100	4.2	840	G738	144	56	210	556	4.2	840	G738	144	56	210	556
Total HPAHs	µg/kg	36	36	100	40.2 JT	17000 JT	G467	1920	688	3350	6590	40.2 JT	17000 JT	G467	1920	688	3350	6590
Total LPAHs	µg/kg	36	36	100	8.39 JT	8070 JT	G467	576	115	1500	2470	8.39 JT	8070 JT	G467	576	115	1500	2470
Naphthalene	µg/kg	36	18	50	5.5	350	G738	39.1	17.5	79	109	0.65 UJ	350	G738	32.5	14.5	60.5	100
Phenanthrene	µg/kg	36	36	100	2.65 JT	5600	G467	393	69	1050	1410	2.65 JT	5600	G467	393	69	1050	1410
Total cPAHs	µg/kg	36	36	100	5.35 JT	1210 T	G738	213	84.5	309	818	5.35 JT	1210 T	G738	213	84.5	309	818
Phthalates																		
Butylbenzyl phthalate	µg/kg	36	17	47	3.95 JT	480	G477	86.7	40	119	256	2.3 U	6600 U	HA-43	272	15	1100	608
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	32	9	28	0.14 J	2.01 JT	G492-1	1.02	1.13	0.689	1.89	0.0161 UT	20 U	SD149	2.13	0.555	4.67	10.9
Phenols																		
Pentachlorophenol	µg/kg	32	5	16	0.94 J	98 JT	09R002	29.9	4.2	42.4	87.4	0.33 U	99 U	SD149	14.2	3.25	28.8	96.4
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	19	19	100	37 J	460 J	G497	126	120	91.2	226	37 J	460 J	G497	126	120	91.2	226
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	5	5	100	27 J	71 J	G738	49.2	43	19.4	70.4	27 J	71 J	G738	49.2	43	19.4	70.4
Total Petroleum Hydrocarbons (Residual)	mg/kg	15	15	100	350 J	2500 J	G497	759	650	520	1450	350 J	2500 J	G497	759	650	520	1450
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	5	5	100	120 J	270 J	G740	178	160	55.9	252	120 J	270 J	G740	178	160	55.9	252
Total Petroleum Hydrocarbons	mg/kg	19	19	100	301 A	2960 JT	G497	805	710	580	1380	301 A	2960 JT	G497	805	710	580	1380
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	5	5	100	147 JA	338 JA	G740	227	223	70.1	317	147 JA	338 JA	G740	227	223	70.1	317
RM 10-11																		
Metals																		
Cadmium	mg/kg	39	24	62	0.149 T	1.23	SED-2	0.289	0.213	0.229	0.645	0.124 U	1.23	SED-2	0.325	0.203	0.294	0.992
Lead	mg/kg	39	39	100	10.3 JT	961	SED-3	75.7	37.1	157	239	10.3 JT	961	SED-3	75.7	37.1	157	239
Mercury	mg/kg	23	23	100	0.041	0.139	WR-PG-106	0.075	0.068	0.0256	0.125	0.041	0.139	WR-PG-106	0.075	0.068	0.0256	0.125
Nickel	mg/kg	26	26	100	17.6	51.5	SED-12	28.5	25.1	9.84	50.3	17.6	51.5	SED-12	28.5	25.1	9.84	50.3
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	5	5	100	0.000676 T	0.00292 T	G503	0.00151	0.0011	0.000964	0.00275	0.000676 T	0.00292 T	G503	0.00151	0.0011	0.000964	0.00275
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	23	5	22	0.51 NJ	8.83 J	G503	2.75	1.5	3.43	7.42	0.133 U	8.83 J	G503	1.26	0.79	1.95	4.67
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	30	27	90	5.1	810	G508	75.8	32	156	217	5.1	810	G508	70.2	30.1	149	215
Total HPAHs	µg/kg	30	28	93	59.9 JT	5900 T	G508	873	393	1340	3570	20 UT	5900 T	G508	816	351	1310	3390
Total LPAHs	µg/kg	30	27	90	10.3 JT	2370 T	G518	270	93.2	478	817	10.3 JT	2370 T	G518	245	82.2	459	781
Naphthalene	µg/kg	30	13	43	4	274	SED-8	57.8	9.7	95.4	266	3.1 U	274	SED-8	30	7.25	66.4	178
Phenanthrene	µg/kg	30	27	90	5.4	960	G518	114	49.8	209	513	5.4	960	G518	104	41.5	200	479
Total cPAHs	µg/kg	30	28	93	2.2 T	1280 T	G508	110	41.6	242	310	2.2 T	1280 T	G508	104	39.2	235	303
Phthalates																		
Butylbenzyl phthalate	µg/kg	20	10	50	4.9 J	21	GCA10W	9.84	7.15	6.05	20.6	1.9 UJ	21	GCA10W	6.61	4.9	5.37	20.1
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	20	3	15	0.17 J	5.2 J	WR-PG-108	1.85	0.17	2.9	4.7	0.17 J	5.2 J	G510; WR-PG-108	2.29	1.15	2.08	5.2
Phenols																		
Pentachlorophenol	µg/kg	23	8	35	1.5 J	38	WR-PG-118	11	5.5	12.8	32.8	1.5 J	100 U	T1S-02; T1S-04; T1S-06	20	5	32.7	100

Table D1.3-16. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Surface Sediment, Study Area (RM 1.9-11.8) Western Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	21	15	71	52 J	300	SED-2	118	100	62.2	214	12.5 U	300	SED-2	88.9	85	70.1	177
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	1	1	100	36 J	36 J	G763	36	36	--	36	36 J	36 J	G763	36	36	--	36
Total Petroleum Hydrocarbons (Residual)	mg/kg	8	8	100	330 J	960 J	WR-PG-120	659	650	234	939	330 J	960 J	WR-PG-120	659	650	234	939
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	1	1	100	160 J	160 J	G763	160	160	--	160	160 J	160 J	G763	160	160	--	160
Total Petroleum Hydrocarbons	mg/kg	21	18	86	26.7 A	1520 A	SED-2	560	397	421	1160	25 UA	1520 A	SED-2	484	386	432	1100
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	1	1	100	196 JA	196 JA	G763	196	196	--	196	196 JA	196 JA	G763	196	196	--	196
RM 11-11.8																		
Metals																		
Cadmium	mg/kg	9	9	100	0.171	0.249	WR-PG-122	0.203	0.206	0.0247	0.238	0.171	0.249	WR-PG-122	0.203	0.206	0.0247	0.238
Lead	mg/kg	9	9	100	10.5	19 J	G772	13.7	12.8	2.78	18	10.5	19 J	G772	13.7	12.8	2.78	18
Mercury	mg/kg	9	8	89	0.04	0.087	WR-PG-122	0.0568	0.055	0.0157	0.0807	0.038 U	0.087	WR-PG-122	0.0547	0.054	0.0159	0.0798
Nickel	mg/kg	9	9	100	19.5 J	26.7	T1S-08	23.5	24	2.09	26.1	19.5 J	26.7	T1S-08	23.5	24	2.09	26.1
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	9	0	0	--	--	--	--	--	--	--	0.31 U	1.6 U	T1S-08	0.666	0.58	0.381	1.27
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	9	8	89	8	330	WR-PG-130	60.4	20	110	231	8	330	WR-PG-130	55.9	20	104	217
Total HPAHs	µg/kg	9	9	100	53 T	3260 T	WR-PG-130	565	183	1030	2200	53 T	3260 T	WR-PG-130	565	183	1030	2200
Total LPAHs	µg/kg	9	8	89	21.6 JT	2990 T	WR-PG-130	422	29.8	1040	2000	20 UT	2990 T	WR-PG-130	378	25.3	981	1860
Naphthalene	µg/kg	9	2	22	40	320	WR-PG-130	180	180	198	306	4 U	320	WR-PG-130	46.6	6.8	103	208
Phenanthrene	µg/kg	9	8	89	10	1500	WR-PG-130	214	18	520	1000	10	1500	WR-PG-130	193	20	491	931
Total cPAHs	µg/kg	9	8	89	11.6 JT	435 T	WR-PG-130	82	28.2	144	307	11.6 JT	435 T	WR-PG-130	75.1	25.8	136	289
Phthalates																		
Butylbenzyl phthalate	µg/kg	8	5	62	4.5 J	29 J	G772	13.6	5.8	11.9	28	3.1 U	29 J	G772	9.85	4.65	10.4	27.3
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	8	1	12	180	180	G772	180	180	--	180	0.39 U	180	G772	22.9	0.46	63.5	117
Phenols																		
Pentachlorophenol	µg/kg	9	1	11	3.1 NJ	3.1 NJ	G772	3.1	3.1	--	3.1	0.9 U	100 U	T1S-08	13.4	1.2	32.6	64.4
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	8	8	100	46 J	150 J	WR-PG-130	91.3	77.5	37.3	143	46 J	150 J	WR-PG-130	91.3	77.5	37.3	143
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	1	1	100	63 J	63 J	G772	63	63	--	63	63 J	63 J	G772	63	63	--	63
Total Petroleum Hydrocarbons (Residual)	mg/kg	8	8	100	320 J	900 J	G772; WR-PG-130	606	540	223	900	320 J	900 J	G772; WR-PG-130	606	540	223	900
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	1	1	100	360 J	360 J	G772	360	360	--	360	360 J	360 J	G772	360	360	--	360
Total Petroleum Hydrocarbons	mg/kg	8	8	100	366 JT	1050 JT	WR-PG-130	698	618	259	1040	366 JT	1050 JT	WR-PG-130	698	618	259	1040
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	1	1	100	423 JA	423 JA	G772	423	423	--	423	423 JA	423 JA	G772	423	423	--	423

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

-- data not available.
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-17. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Western Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Study Area																		
Metals																		
Cadmium	mg/kg	529	494	93	0.011 J	26.7	HA-42	0.457	0.305	1.53	0.757	0.008 UJ	26.7	HA-42	0.47	0.309	1.48	0.898
Lead	mg/kg	537	537	100	2.67	2950	HA-43	44.7	22.8	182	103	2.67	2950	HA-43	44.7	22.8	182	103
Mercury	mg/kg	483	461	95	0.007 J	10.6	HA-43	0.208	0.121	0.568	0.483	0.007 J	10.6	HA-43	0.202	0.118	0.556	0.466
Nickel	mg/kg	521	521	100	5.99 J	716	C356	29.4	24.7	44.5	39.1	5.99 J	716	C356	29.4	24.7	44.5	39.1
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	47	47	100	0.000000291 JT	0.24 T	C455	0.01	0.00225	0.035	0.0216	0.000000291 JT	0.24 T	C455	0.01	0.00225	0.035	0.0216
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	510	44	9	0.18 J	172 NJ	C356	8.86	1.47	26.8	35.7	0.062 U	9900 U	WB-36	63.2	0.607	520	98.6
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	621	574	92	0.26 J	1010000	GP26	14600	150	77300	55400	0.14 U	1010000	GP26	13600	130	74400	44000
Total HPAHs	µg/kg	621	599	96	0.31 JT	13400000 T	C302	181000	1600	987000	515000	0.31 JT	13400000 T	C302	175000	1510	970000	500000
Total LPAHs	µg/kg	621	602	97	0.23 JT	39900000 T	C302	399000	630	2820000	644000	0.23 JT	39900000 T	C302	387000	568	2770000	631000
Naphthalene	µg/kg	648	503	78	0.61 J	20000000	C302	232000	95	1660000	317000	0.43 U	20000000	C302	180000	50	1470000	94900
Phenanthrene	µg/kg	621	587	95	0.46 J	8500000	C302	103000	310	617000	244000	0.44 U	8500000	C302	96900	280	601000	220000
Total cPAHs	µg/kg	621	587	95	0.031 JT	1310000 T	GP26	18800	199	99900	70000	0.031 JT	1310000 T	GP26	17800	191	97200	57200
Phthalates																		
Butylbenzyl phthalate	µg/kg	557	53	10	2.3 J	11800	HA-42	246	10	1620	114	1.9 U	11800	HA-42	151	14	675	492
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	573	136	24	0.066 J	14000	OSS004	124	1.64	1210	64.8	0.0186 U	14000	OSS004	126	3	721	340
Phenols																		
Pentachlorophenol	µg/kg	553	157	28	0.78 NJ	5600	C301	75.8	4.3	479	106	0.2 U	36000 U	LWMTCLP11C	414	3.8	2070	2000
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	363	319	88	1.75 JT	190000 J	C301	2920	390	15600	4620	1.75 JT	190000 J	C301	2570	320	14700	4440
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	81	70	86	5.5 J	88000 J	C662	1900	245	10500	3420	1.6 UT	88000 J	C662	1650	205	9780	3200
Total Petroleum Hydrocarbons (Residual)	mg/kg	324	291	90	6.6 J	110000 J	C301	2210	780	8500	4500	4.6 U	110000 J	C301	1990	715	8080	3900
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	81	71	88	5.4 J	15000 J	C662	868	520	1830	2650	3.7 UT	15000 J	C662	764	460	1740	2600
Total Petroleum Hydrocarbons	mg/kg	363	333	92	3 JT	321000 JT	C301	4990	1130	24400	8690	3 JT	321000 JT	C301	4580	1020	23400	8570
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	81	72	89	5.4 JA	103000 JA	C662	2710	733	12100	6340	3.7 UA	103000 JA	C662	2410	690	11400	6200
RM 03-04																		
Metals																		
Cadmium	mg/kg	12	12	100	0.139	0.7	SD001	0.286	0.209	0.182	0.601	0.139	0.7	SD001	0.286	0.209	0.182	0.601
Lead	mg/kg	12	12	100	4.99	27	SD001	14.3	11.6	8.89	25.6	4.99	27	SD001	14.3	11.6	8.89	25.6
Mercury	mg/kg	12	12	100	0.025	0.333	C060	0.148	0.146	0.117	0.312	0.025	0.333	C060	0.148	0.146	0.117	0.312
Nickel	mg/kg	12	12	100	19.3	32.6	SD001	24.5	24.3	3.6	30.1	19.3	32.6	SD001	24.5	24.3	3.6	30.1
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	13	0	0 --	--		--	--	--	--	--	0.0895 UJ	0.96 UJ	SD001	0.315	0.15	0.273	0.703
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	12	11	92	1.4 J	5700	SD001	1330	360	2000	5150	0.34 U	5700	SD001	1220	229	1950	5100
Total HPAHs	µg/kg	12	12	100	2.61 JT	63900 T	SD001	13100	2540	21900	57500	2.61 JT	63900 T	SD001	13100	2540	21900	57500
Total LPAHs	µg/kg	12	12	100	0.67 JT	32400 T	SD001	5830	690	10700	27600	0.67 JT	32400 T	SD001	5830	690	10700	27600
Naphthalene	µg/kg	13	8	62	1.9 J	2900	SD001	691	310	971	2310	0.54 U	2900	SD001	428	86	818	1880
Phenanthrene	µg/kg	12	11	92	0.62 J	18000	SD001	3530	510	6320	16000	0.48 U	18000	SD001	3230	345	6110	15800
Total cPAHs	µg/kg	12	12	100	0.05 JT	7720 T	SD001	1620	313	2590	6760	0.05 JT	7720 T	SD001	1620	313	2590	6760
Phthalates																		
Butylbenzyl phthalate	µg/kg	12	0	0 --	--		--	--	--	--	--	2.2 U	73 U	SD001	14.2	3.7	20.6	47.2
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	13	2	15	0.24	1.37 J	C077	0.805	0.805	0.799	1.31	0.125 UJ	73 U	SD001	11.5	3.2	20.9	50.8
Phenols																		
Pentachlorophenol	µg/kg	12	3	25	5.6 J	15 NJ	C615	8.8	5.8	5.37	14.1	0.57 U	370 UJ	SD001	33.4	0.605	106	175
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	7	5	71	69 J	890 J	C060	366	290	311	782	14 U	890 J	C060	265	230	307	728
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	1	1	100	209 JT	209 JT	C615	209	209	--	209	209 JT	209 JT	C615	209	209	--	209
Total Petroleum Hydrocarbons (Residual)	mg/kg	7	7	100	59 J	1400 J	C060	506	590	472	1170	59 J	1400 J	C060	506	590	472	1170
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	1	1	100	457 JT	457 JT	C615	457	457	--	457	457 JT	457 JT	C615	457	457	--	457
Total Petroleum Hydrocarbons	mg/kg	7	7	100	59 JT	2290 JT	C060	767	855	779	1890	59 JT	2290 JT	C060	767	855	779	1890
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	1	1	100	666 JA	666 JA	C615	666	666	--	666	666 JA	666 JA	C615	666	666	--	666

Table D1.3-17. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Western Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	Units	Sample Count	Detected Sample Count	Percent Detected	Minimum[a]	Maximum[a]	Maximum Location(s)	Mean	Median[b]	Standard Deviation	95th Percentile[b]	Minimum (full DL)[a]	Maximum (full DL)[a]	Maximum Location(s)	Mean (full DL)	Median (full DL)[b]	Standard Deviation (full DL)	95th Percentile[b] (full DL)
RM 04-05																		
Metals																		
Cadmium	mg/kg	82	69	84	0.05 JT	0.639	C130	0.318	0.309	0.128	0.526	0.05 JT	1.08 U	S2	0.353	0.315	0.178	0.696
Lead	mg/kg	82	82	100	2.7	61.9 T	SGP-16	22.1	21.2	10.8	36.4	2.7	61.9 T	SGP-16	22.1	21.2	10.8	36.4
Mercury	mg/kg	63	59	94	0.009 JT	0.91	C142	0.178	0.149	0.162	0.378	0.009 JT	0.91	C142	0.174	0.14	0.158	0.365
Nickel	mg/kg	77	77	100	11.9	32	C133	24.1	25.1	4.54	30	11.9	32	C133	24.1	25.1	4.54	30
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	1	1	100	0.00000754 JT	0.00000754 JT	LWMC6	0.00000754	0.00000754	--	0.00000754	0.00000754 JT	0.00000754 JT	LWMC6	0.00000754	0.00000754	--	0.00000754
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	61	2	3	0.86 NJ	1.2 NJ	C135	1.03	1.03	0.24	1.18	0.0705 UJT	43.3 U	S2	2.23	0.533	6.5	6.7
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	75	69	92	0.45 J	16000	C147	1610	500	3140	7340	0.29 U	16000	C147	1590	560	3030	6920
High Molecular Weight PAH	µg/kg	75	73	97	1.48 JT	181000 T	C147	17400	4710	35600	79700	1.48 JT	181000 T	C147	17000	4330	35200	77000
Low Molecular Weight PAH	µg/kg	75	73	97	0.73 JT	77000 T	C142	7370	1470	15400	34800	0.73 JT	77000 T	C142	7230	1470	15200	33000
Naphthalene	µg/kg	77	61	79	1.4 J	1900	SD035	353	120	487	1500	0.45 U	3550 U	S2	383	110	619	1650
Phenanthrene	µg/kg	75	73	97	0.73 J	52000	C142	4830	800	10300	22400	0.73 J	52000	C142	4750	800	10100	21300
Total cPAHs	µg/kg	75	69	92	0.559 JT	20900 T	C147	2150	694	4160	9750	0.34 UT	20900 T	C147	2080	694	4010	9180
Phthalates																		
Butylbenzyl phthalate	µg/kg	67	12	18	2.7 J	120	NA-1B	24.3	5.9	42.5	115	1.9 U	3550 U	S2	139	5.9	515	561
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	72	15	21	0.21 NJ	5.29 J	C133	1.09	0.81	1.19	2.45	0.0196 U	3550 U	S2	115	1.37	499	479
Phenols																		
Pentachlorophenol	µg/kg	66	24	36	1.1 J	9.1 J	C136	3.83	3.4	2.03	7.71	0.47 UT	10800 U	S2	367	2.4	1580	1750
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	56	49	88	13 J	1600 J	C142	525	470	345	1160	4.5 U	1600 J	C142	460	420	365	1130
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	22	15	68	20.7 T	760 J	C626; SGP-14	263	165	247	760	13.1 U	760 J	C626; SGP-14	184	82.2	233	747
Total Petroleum Hydrocarbons (Residual)	mg/kg	55	48	87	6.9 J	2000 J	C139; C142	942	905	483	1870	6.6 U	2000 J	C139; C142	823	830	548	1830
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	22	15	68	35.1	960 J	C626	358	250	301	859	26.2 U	960 J	C626	255	109	291	808
Total Petroleum Hydrocarbons	mg/kg	56	50	89	6.9 JT	3640 JT	C142	1430	1320	840	2990	6.6 UT	3640 JT	C142	1280	1250	907	2960
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	22	15	68	57.3 A	1720 JA	C626	621	385	544	1620	26.2 UA	1720 JA	C626	434	183	525	1560
RM 05-06																		
Metals																		
Cadmium	mg/kg	54	52	96	0.07	3.47	C227	0.335	0.272	0.464	0.559	0.07	3.47	C227	0.33	0.257	0.455	0.551
Lead	mg/kg	54	54	100	4.08 J	117	C245	21.3	18.8	17.2	45.7	4.08 J	117	C245	21.3	18.8	17.2	45.7
Mercury	mg/kg	53	51	96	0.01 JT	0.522 J	C182	0.122	0.101	0.0958	0.25	0.009 U	0.522 J	C182	0.118	0.099	0.0964	0.25
Nickel	mg/kg	53	53	100	11.3 J	33 J	SD055C	22.9	22.8	4.42	28.6	11.3 J	33 J	SD055C	22.9	22.8	4.42	28.6
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	2	2	100	0.00125 JT	0.00324 T	C184	0.00225	0.00225	0.00141	0.00314	0.00125 JT	0.00324 T	C184	0.00225	0.00225	0.00141	0.00314
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	50	4	8	0.26 J	1.63 J	C245	1.02	1.09	0.59	1.58	0.0767 U	8.7 U	SD055C	0.898	0.51	1.33	2.5
Total DDD	µg/kg	50	40	80	0.079 JT	680 T	C531	64.5	14.6	122	234	0.0484 UT	680 T	C531	51.7	7.8	112	230
Total DDE	µg/kg	50	33	66	0.08 JT	58 NJT	C182	11.3	4.44	15.4	46.4	0.0454 UT	58 NJT	C182	8.5	2.61	13.6	41.2
Total DDT	µg/kg	50	33	66	0.211 JT	100 JT	C531	17.4	9.25	21.1	52.2	0.0527 UJT	100 JT	C531	11.6	3.54	18.9	46.8
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	59	56	95	0.59 J	30000	SD05	2830	738	4870	9730	0.3 U	30000	SD05	2690	640	4780	9470
Total HPAHs	µg/kg	59	58	98	0.77 JT	403000 T	SD05	31800	7920	61200	114000	0.66 UT	403000 T	SD05	31300	7260	60800	113000
Total LPAHs	µg/kg	59	59	100	0.47 JT	182000 JT	SD05	14100	2120	29800	55900	0.47 JT	182000 JT	SD05	14100	2120	29800	55900
Naphthalene	µg/kg	62	54	87	4.8	2000	SD055C	424	175	550	1800	0.44 U	2000	SD055C	370	130	532	1790
Phenanthrene	µg/kg	59	58	98	0.47 J	120000	SD05	9050	1100	19300	37500	0.44 U	120000	SD05	8900	1000	19200	37000
Total cPAHs	µg/kg	59	58	98	0.038 JT	39400 T	SD05	3600	888	6310	12500	0.038 JT	39400 T	SD05	3540	869	6270	12300
Phthalates																		
Butylbenzyl phthalate	µg/kg	57	5	9	2.3 J	100 J	SD05	26.1	8.8	41.6	83	1.9 U	190 U	SD055C	24.3	13	34	80
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	59	11	19	0.066 J	3.1 J	C245	0.976	0.57	0.985	2.63	0.0187 U	590 U	SD05	27.4	2.9	83.5	116
Phenols																		
Pentachlorophenol	µg/kg	57	13	23	1.5 J	10 J	C179	4.91	3.8	3.26	9.4	0.22 U	18000 U	SD05	354	0.92	2380	440
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	49	44	90	9.3 J	2800	SD05	544	375	584	1740	4.4 U	2800	SD05	492	340	575	1640
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	4	4	100	13 J	780 JT	C531	311	225	334	708	13 J	780 JT	C531	311	225	334	708
Total Petroleum Hydrocarbons (Residual)	mg/kg	48	39	81	70 J	2300 J	C240; SD05	808	710	530	1850	7.4 U	2300 J	C240; SD05	674	625	557	1730
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	4	3	75	300 J	640 JT	C531	430	350	184	611	19 U	640 JT	C531	327	325	254	597

Table D1.3-17. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Western Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	Units	Sample Count	Detected Sample Count	Percent Detected	Minimum[a]	Maximum[a]	Maximum Location(s)	Mean	Median[b]	Standard Deviation	95th Percentile[b]	Minimum (full DL)[a]	Maximum (full DL)[a]	Maximum Location(s)	Mean (full DL)	Median (full DL)[b]	Standard Deviation (full DL)	95th Percentile[b] (full DL)
Total Petroleum Hydrocarbons	mg/kg	49	44	90	21 JA	5140 JT	SD05	1280	1060	1140	3590	9.1 UT	5140 JT	SD05	1160	880	1140	3430
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	4	4	100	13 JA	1400 JT	C531	628	550	575	1280	13 JA	1400 JT	C531	628	550	575	1280
RM 06-07																		
Metals																		
Cadmium	mg/kg	147	145	99	0.011 J	7.03	C324	0.33	0.275	0.59	0.584	0.011 J	7.03	C324	0.328	0.275	0.586	0.576
Lead	mg/kg	155	155	100	2.67	363	SDDC24SB	31.2	22.3	45.6	79.6	2.67	363	SDDC24SB	31.2	22.3	45.6	79.6
Mercury	mg/kg	148	140	95	0.008 J	2.34	SDUD1SB	0.175	0.125	0.237	0.441	0.007 U	2.34	SDUD1SB	0.169	0.119	0.232	0.437
Nickel	mg/kg	150	150	100	5.99 J	168	C324	28.2	24.4	15.9	57.2	5.99 J	168	C324	28.2	24.4	15.9	57.2
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	5	5	100	0.0000307 JT	0.00714 JT	C263	0.00282	0.000353	0.00364	0.00701	0.0000307 JT	0.00714 JT	C263	0.00282	0.000353	0.00364	0.00701
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	127	16	13	0.2 J	12 J	SDDB22SB	3.28	2.13	3.25	7.97	0.0682 UJ	160 U	LWMTCLP11B; LWMTCLP11C	8.64	0.98	24.3	46.6
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	216	196	91	0.26 J	1010000	GP26	41200	2050	128000	188000	0.26 J	1010000	GP26	37400	1350	123000	159000
Total HPAHs	µg/kg	216	206	95	0.56 JT	13400000 T	C302	507000	20000	1640000	2340000	0.56 JT	13400000 T	C302	483000	15300	1600000	2240000
Total LPAHs	µg/kg	216	212	98	0.23 JT	39900000 T	C302	1120000	8210	4660000	5190000	0.23 JT	39900000 T	C302	1100000	6080	4620000	5110000
Naphthalene	µg/kg	225	189	84	0.61 J	20000000	C302	616000	484	2670000	2420000	0.43 U	20000000	C302	517000	280	2460000	1860000
Phenanthrene	µg/kg	216	203	94	0.46 J	8500000	C302	291000	4800	1030000	1290000	0.46 J	8500000	C302	274000	3190	996000	1250000
Total cPAHs	µg/kg	216	198	92	0.054 JT	1310000 T	GP26	53500	2780	167000	240000	0.054 JT	1310000 T	GP26	49000	1810	160000	212000
Phthalates																		
Butylbenzyl phthalate	µg/kg	161	6	4	3.3 J	11 J	C528; SDOF28SB	7.03	6.25	3.48	11	2 U	3800 U	C301	218	49	539	1500
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	166	32	19	0.073 J	71	C302	7.4	1.54	16.6	48.4	0.061 U	7100 U	LWMTCLP11C	148	2.9	640	685
Phenols																		
Pentachlorophenol	µg/kg	163	36	22	1 J	5600	C301	297	13	977	1400	0.5 U	36000 U	LWMTCLP11C	714	6.9	3220	2000
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	105	92	88	2.1 J	190000 J	C301	8610	885	28300	45300	2.1 J	190000 J	C301	7540	670	26700	30000
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	7	6	86	710 J	88000 J	C662	17200	3500	34800	67700	3.7 U	88000 J	C662	14800	1400	32400	63600
Total Petroleum Hydrocarbons (Residual)	mg/kg	102	92	90	6.6 J	110000 J	C301	4770	955	14600	19000	6.1 U	110000 J	C301	4320	790	13900	14000
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	7	6	86	770 JT	15000 J	C662	3630	1190	5620	12000	6.1 U	15000 J	C662	3110	970	5310	11300
Total Petroleum Hydrocarbons	mg/kg	105	98	93	3 JT	321000 JT	C301	13300	1800	43800	55300	3 JT	321000 JT	C301	12400	1600	42500	49100
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	7	6	86	1500 JT	103000 JA	C662	20800	4700	40400	79600	6.1 UT	103000 JA	C662	17900	2400	37700	74900
RM 07-08																		
Metals																		
Cadmium	mg/kg	125	112	90	0.056 J	2.07	C401	0.335	0.289	0.249	0.668	0.056 J	2.07	C401	0.391	0.31	0.29	0.92
Lead	mg/kg	125	125	100	2.74	127 J	LWMTCLP14A	25.8	22.1	16	49.5	2.74	127 J	LWMTCLP14A	25.8	22.1	16	49.5
Mercury	mg/kg	104	97	93	0.0135 JT	1.05 J	DMMU-3(A+B+D+E)	0.156	0.102	0.164	0.41	0.009 U	1.05 J	DMMU-3(A+B+D+E)	0.153	0.104	0.16	0.401
Nickel	mg/kg	123	123	100	10.2	716	C356	32.2	24.3	65.1	37.6	10.2	716	C356	32.2	24.3	65.1	37.6
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	17	17	100	0.000434 JT	0.0132 T	LWMC14	0.00442	0.0036	0.004	0.0125	0.000434 JT	0.0132 T	LWMC14	0.00442	0.0036	0.004	0.0125
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	169	14	8	0.21 JT	172 NJ	C356	22.7	6.19	45.4	90	0.067 U	9900 U	WB-36	182	2.34	893	466
Total DDD	µg/kg	474	401	85	0.085 JT	1230000 JT	WB-37	13400	41	86600	22500	0.0503 UT	1230000 JT	WB-37	11300	16.5	79800	17900
Total DDE	µg/kg	474	338	71	0.069 JT	24000 A	WB-9	417	13	1940	1540	0.0454 UT	24000 A	WB-9	360	6.16	1720	1520
Total DDT	µg/kg	473	382	81	0.125 JT	3500000 A	WB-24	26300	62.5	234000	29200	0.0581 UJT	3500000 A	WB-24	21200	20.1	211000	25900
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	154	142	92	0.89 J	9600	OSS004	197	84.4	813	504	0.3 U	9600	OSS004	182	76.5	782	438
Total HPAHs	µg/kg	154	148	96	1.17 JT	118000 T	OSS004	2640	1120	10200	6980	1.17 JT	118000 T	OSS004	2530	1070	10000	6770
Total LPAHs	µg/kg	154	143	93	0.53 JT	17000 T	OSS004	982	360	2250	4460	0.53 JT	17000 T	OSS004	912	325	2180	4150
Naphthalene	µg/kg	162	109	67	0.74 J	5100	WB-42	148	35	524	607	0.45 U	5100	WB-42	107	23.4	434	320
Phenanthrene	µg/kg	154	142	92	0.745 JT	15000	OSS004	562	185	1730	1690	0.745 JT	15000	OSS004	518	169	1670	1570
Total cPAHs	µg/kg	154	148	96	0.031 JT	14500 JT	OSS004	293	116	1210	754	0.031 JT	14500 JT	OSS004	281	112	1190	715
Phthalates																		
Butylbenzyl phthalate	µg/kg	152	7	5	8.6 J	42	OSS006	15.9	12	11.7	34.2	1.9 U	1230 U	DMMU-2-A	102	17	212	320
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	157	55	35	0.097 J	14000	OSS004	301	6.9	1890	124	0.066 UJ	14000	OSS004	230	10	1150	1140
Phenols																		
Pentachlorophenol	µg/kg	149	36	24	1.1 J	100	WB-36	23.3	9.1	31.1	97.8	0.51 U	6140 U	DMMU-3-B	416	9.7	1030	3320

Table D1.3-17. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Western Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	80	70	88	20 T	4500 J	C377	781	310	1060	3400	4.6 UT	4500 J	C377	686	240	1020	2950
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	18	18	100	43 J	3600 JT	C532	1080	565	1200	3260	43 J	3600 JT	C532	1080	565	1200	3260
Total Petroleum Hydrocarbons (Residual)	mg/kg	55	52	95	11 J	3900 J	C690	1060	730	931	3190	4.9 UT	3900 J	C690	999	720	936	3160
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	18	18	100	140 J	3600 J	C695	1140	795	1010	2840	140 J	3600 J	C695	1140	795	1010	2840
Total Petroleum Hydrocarbons	mg/kg	80	73	91	11 JT	7720 JT	C377	1600	880	1830	5860	4.9 UT	7720 JT	C377	1460	692	1800	5370
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	18	18	100	183 JA	6500 JA	C695	2220	1360	2180	6250	183 JA	6500 JA	C695	2220	1360	2180	6250
RM 08-09																		
Metals																		
Cadmium	mg/kg	77	74	96	0.034	5.3	SD143	0.515	0.366	0.785	1.14	0.034	5.3	SD143	0.503	0.364	0.772	1.11
Lead	mg/kg	77	77	100	2.86	1080	SD143	55.9	29.4	127	160	2.86	1080	SD143	55.9	29.4	127	160
Mercury	mg/kg	72	71	99	0.007 J	1.3	C455	0.209	0.156	0.247	0.634	0.007 J	1.3	C455	0.206	0.15	0.247	0.613
Nickel	mg/kg	76	76	100	11.6	150	HA-37	26.3	25.8	15	30.8	11.6	150	HA-37	26.3	25.8	15	30.8
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	14	14	100	0.000000291 JT	0.24 T	C455	0.0213	0.00117	0.0636	0.106	0.000000291 JT	0.24 T	C455	0.0213	0.00117	0.0636	0.106
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	64	7	11	0.18 J	8.72 NJ	C453	1.82	0.25	3.17	6.9	0.062 U	10.9 U	C455	0.677	0.245	1.71	1.52
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	76	72	95	0.3 J	840	C457	80.8	50.5	123	199	0.14 U	910 U	SD143	88.5	48	154	213
Total HPAHs	µg/kg	76	74	97	0.31 JT	9350 T	C457	944	584	1410	2470	0.31 JT	9350 T	C457	931	584	1390	2440
Total LPAHs	µg/kg	76	76	100	0.66 JT	13600 T	C455	580	170	1650	2260	0.66 JT	13600 T	C455	580	170	1650	2260
Naphthalene	µg/kg	80	58	72	0.85 J	440	C455	61.3	40	69.8	139	0.47 U	910 U	SD143	58.2	26.5	116	133
Phenanthrene	µg/kg	76	73	96	0.52 J	3800	C455	252	78	542	926	0.52 J	3800	C455	242	72	534	883
Total cPAHs	µg/kg	76	74	97	0.031 JT	1230 T	C457	113	68.7	178	285	0.031 JT	1230 T	C457	122	68.7	198	307
Phthalates																		
Butylbenzyl phthalate	µg/kg	77	9	12	4 J	34	C444	15.2	10	9.83	29.6	2 U	910 U	SD143	30.3	5.2	110	71.2
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	78	16	21	0.069 JT	36.1 J	C455	3.03	0.416	8.86	10.9	0.0186 U	910 U	SD143	18.9	1.3	103	41.9
Phenols																		
Pentachlorophenol	µg/kg	78	30	38	0.89 J	51	C455	5.1	2.55	9	8.58	0.2 U	4500 U	SD143	65.8	1.25	510	15.9
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	42	37	88	1.75 JT	12000 J	C455	738	280	1990	2140	1.75 JT	12000 J	C455	652	250	1880	2000
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	17	14	82	61 J	410 J	C701	221	220	113	378	1.6 UT	410 J	C701	182	170	134	370
Total Petroleum Hydrocarbons (Residual)	mg/kg	41	38	93	8.6 JT	25000 J	C455	1550	695	4040	3730	4.6 U	25000 J	C455	1440	630	3910	3500
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	17	16	94	5.4 J	840 J	C701	436	450	257	795	3.7 UT	840 J	C701	410	440	270	792
Total Petroleum Hydrocarbons	mg/kg	42	39	93	10.4 JA	37100 JT	C455	2230	960	5950	5760	4.9 UA	37100 JT	C455	2070	840	5760	5520
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	17	16	94	5.4 JA	1250 JA	C701	629	630	385	1170	3.7 UA	1250 JA	C701	592	610	403	1160
RM 09-10																		
Metals																		
Cadmium	mg/kg	26	24	92	0.051	26.7	HA-42	2.41	0.4	6.37	16.2	0.008 UJ	26.7	HA-42	2.33	0.4	6.13	14.8
Lead	mg/kg	26	26	100	3.05	2950	HA-43	310	32.1	750	2130	3.05	2950	HA-43	310	32.1	750	2130
Mercury	mg/kg	25	25	100	0.0185 JT	10.6	HA-43	0.898	0.178	2.22	3.97	0.0185 JT	10.6	HA-43	0.898	0.178	2.22	3.97
Nickel	mg/kg	24	24	100	15.4	627	HA-42	68.3	26.1	134	282	15.4	627	HA-42	68.3	26.1	134	282
PCB TEQ																		
Total PCB TEQ (ND=0)	µg/kg	8	8	100	0.00000191 JT	0.0228 T	LWMC19	0.00974	0.00708	0.00896	0.0214	0.00000191 JT	0.0228 T	LWMC19	0.00974	0.00708	0.00896	0.0214
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	20	1	5	0.54 J	0.54 J	C738	0.54	0.54	--	0.54	0.062 U	47 U	LWMTCLP19	5.88	0.27	13.6	42.3
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	23	22	96	3.4	12400	HA-43	756	79.5	2620	984	0.55 U	12400	HA-43	723	72	2560	980
Total HPAHs	µg/kg	23	22	96	40 JT	190000 T	HA-43	10900	879	40100	10700	1.3 UT	190000 T	HA-43	10500	671	39300	10600
Total LPAHs	µg/kg	23	21	91	24 JT	168000 T	HA-43	8630	350	36500	2710	1.5 UT	168000 T	HA-43	7890	330	34900	2650
Naphthalene	µg/kg	23	18	78	5.3	10900	HA-43	674	42	2550	1940	1.5 U	10900	HA-43	533	34	2260	347
Phenanthrene	µg/kg	23	21	91	10	75900	HA-43	4020	210	16500	2230	0.95 U	75900	HA-43	3670	160	15800	2150
Total cPAHs	µg/kg	23	22	96	4.75 JT	16800 T	HA-43	1020	112	3540	1220	0.55 UT	16800 T	HA-43	978	108	3470	1220
Phthalates																		
Butylbenzyl phthalate	µg/kg	25	12	48	3 J	11800	HA-42	1020	16.5	3390	5460	1.9 U	11800	HA-42	799	16	2640	5350
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	22	3	14	0.64	2.18 J	C461	1.18	0.724	0.866	2.03	0.068 U	66 U	LWMTCLP19	10.9	3.7	18.4	59.9

Table D1.3-17. Summary Statistics by River Mile for Other Contaminants and Physical Parameters in Subsurface Sediment, Study Area (RM 1.9-11.8) Western Nearshore.

					Detected Concentrations							Detected and Not Detected Concentrations						
Chemical	**Units**	**Sample Count**	**Detected Sample Count**	**Percent Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**Standard Deviation**	**95th Percentile[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (full DL)**	**Median (full DL)[b]**	**Standard Deviation (full DL)**	**95th Percentile[b] (full DL)**
Phenols																		
Pentachlorophenol	µg/kg	22	9	41	0.78 NJ	9.1	C738	3.31	2.6	2.64	7.54	0.2 U	330 U	LWMTCLP19	36.8	2.7	93.9	299
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	18	16	89	47.5	1810	HA-43	282	158	425	768	7 U	1810	HA-43	254	140	407	628
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	6	6	100	5.5 J	390 J	C738	174	167	142	355	5.5 J	390 J	C738	174	167	142	355
Total Petroleum Hydrocarbons (Residual)	mg/kg	10	9	90	300 J	930 J	C738	537	540	192	814	33 U	930 J	C738	486	540	241	800
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	6	6	100	15 J	750 J	C738	359	350	256	680	15 J	750 J	C738	359	350	256	680
Total Petroleum Hydrocarbons	mg/kg	18	16	89	196 JA	4370 A	HA-43	886	713	984	2110	33 UA	4370 A	HA-43	795	609	961	1800
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	6	6	100	20.5 JA	1140 JA	C738	534	522	397	1030	20.5 JA	1140 JA	C738	534	522	397	1030
RM 11-11.8																		
Metals																		
Cadmium	mg/kg	6	6	100	0.172 T	0.449 T	C7732	0.306	0.311	0.0916	0.421	0.172 T	0.449 T	C7732	0.306	0.311	0.0916	0.421
Lead	mg/kg	6	6	100	17.7 T	132 T	C7732	75.1	70.8	47.6	130	17.7 T	132 T	C7732	75.1	70.8	47.6	130
Mercury	mg/kg	6	6	100	0.056 T	0.128	C7731	0.0856	0.0834	0.0239	0.118	0.056 T	0.128	C7731	0.0856	0.0834	0.0239	0.118
Nickel	mg/kg	6	6	100	24.3	27.5	C7731	26.2	26.6	1.36	27.5	24.3	27.5	C7731	26.2	26.6	1.36	27.5
Pesticides																		
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	6	0	0 --	--	--	--	--	--	--	0.062 UT	0.79 U	C7731	0.377	0.36	0.316	0.75	
Polycyclic Aromatic Hydrocarbons																		
Benzo(a)pyrene	µg/kg	6	6	100	24	160	C7731	60.8	46.5	49.5	133	24	160	C7731	60.8	46.5	49.5	133
Total HPAHs	µg/kg	6	6	100	290 T	3100 T	C7731	922	585	1080	2480	290 T	3100 T	C7731	922	585	1080	2480
Total LPAHs	µg/kg	6	6	100	57 JT	1000 T	C7731	321	235	347	828	57 JT	1000 T	C7731	321	235	347	828
Naphthalene	µg/kg	6	6	100	5.3 T	53	C7731	28.9	30	17.5	50	5.3 T	53	C7731	28.9	30	17.5	50
Phenanthrene	µg/kg	6	6	100	33 T	580	C7731	180	125	203	478	33 T	580	C7731	180	125	203	478
Total cPAHs	µg/kg	6	6	100	35.1 T	241 T	C7731	89.8	67.8	75.4	199	35.1 T	241 T	C7731	89.8	67.8	75.4	199
Phthalates																		
Butylbenzyl phthalate	µg/kg	6	2	33	9.1 JT	29 JT	C7732	19.1	19.1	14.1	28	6.4 U	29 JT	C7732	15.4	16	7.83	25.8
Semivolatile Organic Compounds																		
Hexachlorobenzene	µg/kg	6	2	33	0.083 JT	0.3 T	C7732	0.192	0.192	0.153	0.289	0.083 JT	0.34 U	C7731	0.239	0.245	0.101	0.338
Phenols																		
Pentachlorophenol	µg/kg	6	6	100	1.5 JT	4.6 JT	C7732	3.03	2.95	1.24	4.53	1.5 JT	4.6 JT	C7732	3.03	2.95	1.24	4.53
Petroleum																		
Total Petroleum Hydrocarbons (Diesel)	mg/kg	6	6	100	51 JT	245 JT	C7732	190	208	71.8	244	51 JT	245 JT	C7732	190	208	71.8	244
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	6	6	100	40.5 JT	220 JT	C7732	169	190	65.6	216	40.5 JT	220 JT	C7732	169	190	65.6	216
Total Petroleum Hydrocarbons (Residual)	mg/kg	6	6	100	305 JT	885 JT	C7732	711	748	213	884	305 JT	885 JT	C7732	711	748	213	884
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	6	6	100	185 JT	640 JT	C7732	511	543	168	639	185 JT	640 JT	C7732	511	543	168	639
Total Petroleum Hydrocarbons	mg/kg	6	6	100	356 JA	1130 JA	C7732	903	955	286	1130	356 JA	1130 JA	C7732	903	955	286	1130
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	6	6	100	226 JA	855 JA	C7732	680	733	232	853	226 JA	855 JA	C7732	680	733	232	853

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

-- data not available.
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-18. Summary Statistics for Other Contaminants and Physical Parameters in Surface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Grainsize																
Fines	percent	80	80	100	0.28	98.4 T	U6TOC-2	30.5	28.3	67.4	0.28	98.4 T	U6TOC-2	30.5	28.3	67.4
Conventionals																
Total organic carbon	percent	77	77	100	0.12	2.57	U6TOC-2	1.13	1.18	2.29	0.12	2.57	U6TOC-2	1.13	1.18	2.29
Metals																
Cadmium	mg/kg	72	63	87.5	0.04 J	0.281 T	G027	0.1256	0.12	0.2099	0.04 J	0.3 UJ	HC-SS29; HC-SS31; HC-SS32	0.1201	0.118	0.2095
Lead	mg/kg	72	72	100	3.96 JT	31.6 J	BH04SD	8.55	7.68 J	14	3.96 JT	31.6 J	BH04SD	8.55	7.68 J	14
Mercury	mg/kg	68	60	88.2	0.009 J	0.061	G786	0.03314	0.034	0.05115	0.009 J	0.19 U	HC-SS29; HC-SS31; HC-SS32	0.03535	0.034	0.07985
Nickel	mg/kg	72	72	100	12.3 J	35.7	HC08	21.3	21.3	26.5 J	12.3 J	35.7	HC08	21.3	21.3	26.5 J
PCB TEQ																
Total PCB TEQ (ND=0)	pg/g	26	25	96.2	0.000455 T	0.723 JT	U2C-2	0.0996443	0.00608 JT	0.5618 J	0.000455 T	2.65 UT	WR06SD	0.146773	0.006205 J	0.70575 J
Pesticides																
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	77	1	1.3	0.32 NJ	0.32 NJ	UG12C	0.32	0.32 NJ	0.32 NJ	0.043 U	2.1 U	HC08	0.2134	0.086 U	0.95 U
Polycyclic Aromatic Hydrocarbons																
Benzo(a)pyrene	µg/kg	78	51	65.4	0.53 J	124 JT	G027	11	6.9 T	27.5	0.33 U	124 JT	G027	9.06	5.55	25.3
Total HPAHs	µg/kg	78	62	79.5	1.7 JT	1320 T	G027	96	61.3 J	265 J	1 UT	1320 T	G027	77.9	49.8 J	188 J
Total LPAHs	µg/kg	78	54	69.2	0.44 JT	192 T	G027	15.4	10.8 J	29.1 J	0.44 JT	192 T	G027	12.5	7.3 J	26.4 J
Naphthalene	µg/kg	78	28	35.9	1.5 J	9.9	UG03B	5.06	4.7	8.1	0.55 U	50 U	HC-SS29; HC-SS31; HC-SS32	4.37	2.98	12.2
Phenanthrene	µg/kg	77	40	51.9	0.91 J	128 JT	G027	11.2	6.2	21.6	0.59 U	128 JT	G027	8.02	4.3 J	25 U
Total cPAHs	µg/kg	78	62	79.5	0.49 JT	700 JT	G027	53.1	34.2 J	140 J	0.49 JT	700 JT	G027	43.8	25 J	140 J
Phthalates																
Butylbenzyl phthalate	µg/kg	72	17	23.6	2.7 J	33 J	UG11C	10	8 J	21 J	2.2 U	100 U	HC-SS29; HC-SS31; HC-SS32	8	2.8 J	41 J
Semivolatile Organic Compounds																
Hexachlorobenzene	µg/kg	72	26	36.1	0.075 J	1.04 J	U2C-3	0.347	0.208 J	0.975 J	0.068 U	24 U	WR03SD; WR05SD	2.1	0.255 J	10.7 U
Phenols																
Pentachlorophenol	µg/kg	78	6	7.7	1.5 J	12	U1C-1	4.6	2.6 J	11 J	0.25 U	250 U	HC-SS29; HC-SS31; HC-SS32	14	1.6 U	110 U
Petroleum																
Total Petroleum Hydrocarbons (Diesel)	mg/kg	43	34	79.1	2.6 T	69 J	UG02F	36.1	35.5 J	59.1 J	2.6 T	69 J	UG02F	30.1	30.3 JT	57.8 J
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	32	32	100	1.7 T	49.5 JT	G027	22.1	20.4 J	38.9 J	1.7 T	49.5 JT	G027	22.1	20.4 J	38.9 J
Total Petroleum Hydrocarbons (Residual)	mg/kg	39	36	92.3	9.2 T	420 J	UG02F	226	219 J	390 J	9.2 T	420 J	UG02F	210	214 JT	390 J
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	32	32	100	6.9 T	315 JT	G027	96.8	86 J	182 J	6.9 T	315 JT	G027	96.8	86 J	182 J
Total Petroleum Hydrocarbons	mg/kg	43	39	90.7	11.8 A	489 JA	UG02F	254	250 JA	447 J	11.8 A	489 JA	UG02F	232	240	445 J
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	32	32	100	8.6 A	365 T	G027	119	108 J	217 J	8.6 A	365 T	G027	119	108 J	217 J

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

-- data not available.
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-19. Summary Statistics for Other Contaminants and Physical Parameters in Subsurface Sediment, Upriver Reach (RM 15.3-28.4).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Grainsize																
Fines	percent	3	3	100	22.2 T	43.6 T	C016	30.6	25.9 T	41.8	22.2 T	43.6 T	C016	30.6	25.9 T	41.8
Conventionals																
Total organic carbon	percent	3	3	100	1.15	1.8 T	C016	1.47	1.47	1.77	1.15	1.8 T	C016	1.47	1.47	1.77
Metals																
Cadmium	mg/kg	3	3	100	0.132	0.217	C016	0.179	0.187	0.214	0.132	0.217	C016	0.179	0.187	0.214
Lead	mg/kg	3	3	100	9.34 J	19.4 J	C016	14.4	14.6 J	18.9 J	9.34 J	19.4 J	C016	14.4	14.6 J	18.9 J
Mercury	mg/kg	3	3	100	0.031	0.172 T	C016	0.0943	0.08	0.163	0.031	0.172 T	C016	0.0943	0.08	0.163
Nickel	mg/kg	3	3	100	19	21.1	C017	20.2	20.6	21.1	19	21.1	C017	20.2	20.6	21.1
Pesticides																
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	3	0	0	--	--	--	--	--	--	0.043 U	0.2 U	C016; C032	0.0738	0.1 U	0.1 U
Polycyclic Aromatic Hydrocarbons																
Benzo(a)pyrene	µg/kg	3	3	100	20	34	C016	29	32	34	20	34	C016	29	32	34
Total HPAHs	µg/kg	3	3	100	230 T	404 T	C016	317	317 T	395	230 T	404 T	C016	317	317 T	395
Total LPAHs	µg/kg	3	3	100	23.2 T	129 T	C016	67.1	49.1 T	121	23.2 T	129 T	C016	67.1	49.1 T	121
Naphthalene	µg/kg	3	3	100	4.2	36	C016	16	8.9	33	4.2	36	C016	16	8.9	33
Phenanthrene	µg/kg	3	3	100	12	55	C016	29	21	52	12	55	C016	29	21	52
Total cPAHs	µg/kg	3	3	100	130 T	200 T	C016	170	190 T	200	130 T	200 T	C016	170	190 T	200
Phthalates																
Butylbenzyl phthalate	µg/kg	3	1	33.3	16	16	C016	16	16	16	3.2 U	16	C016	6.4	1.6 U	15
Semivolatile Organic Compounds																
Hexachlorobenzene	µg/kg	3	1	33.3	0.28	0.28	C016	0.28	0.28	0.28	0.12 U	0.28	C016	0.13	0.06 U	0.26
Phenols																
Pentachlorophenol	µg/kg	3	0	0	--	--	--	--	--	--	5.4 U	5.8 U	C016; C032	2.8	2.9 U	2.9 U
Petroleum																
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	3	3	100	21 J	58 J	C016	42	46 J	57 J	21 J	58 J	C016	42	46 J	57 J
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	3	3	100	130 J	290 J	C016	190	160 J	280 J	130 J	290 J	C016	190	160 J	280 J
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	3	3	100	176 T	348 T	C016	235	181 T	331	176 T	348 T	C016	235	181 T	331

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

-- data not available.
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-20. Summary Statistics for Other Contaminants and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Grain Size																
Fines	percent	135	135	100	0.3 T	89.4 T	WRS38	21.9	14.4 T	67.2	0.3 T	89.4 T	WRS38	21.9	14.4 T	67.2
Conventionals																
Total organic carbon	percent	208	208	100	0.033	13.1	G045	1.066	0.8475	2.327	0.033	13.1	G045	1.066	0.8475	2.327
Metals																
Cadmium	mg/kg	269	218	81	0.03 J	132 J	R12	1.476	0.217	5.745	0.03 J	132 J	R12	1.242	0.213	4.22 J
Lead	mg/kg	269	256	95.2	1.57 J	20800 J	R12	214.1	23.6	625 J	0.576 U	20800 J	R12	203.9	22.9 J	592.6 J
Mercury	mg/kg	263	227	86.3	0.005 J	29.2 J	C029	0.43785	0.055	1.1379 J	0.00172 U	29.2 J	C029	0.38312	0.052 T	0.9245 J
Nickel	mg/kg	243	242	99.6	3.89 J	11500 J	R50	77.73	19 J	81.65	0.0508 U	11500 J	R50	77.41	19 J	81.3
PCB TEQ																
Total PCB TEQ (ND=0)	pg/g	8	8	100	0.000879 JT	4.51 T	GCA12E	1.27123	0.354 J	4.034	0.000879 JT	4.51 T	GCA12E	1.27123	0.354 J	4.034
Pesticides																
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	145	20	13.8	0.059 J	2.3	C090	0.496	0.315 J	1.45 J	0.011 UJ	2.3	C090	0.156	0.055 UJ	0.63 J
Polycyclic Aromatic Hydrocarbons																
Benzo(a)pyrene	µg/kg	269	223	82.9	0.0097	3800	PGC-10	181.73	33.2	736.6	0.0097	3800	PGC-10	151.23	20	659
Total HPAHs	µg/kg	269	242	90	0.0734 T	38700 T	PGC-10	1740	295.5	6885	0.0734 T	38700 T	PGC-10	1566	215 T	6120
Total LPAHs	µg/kg	269	227	84.4	0.11 T	23800 T	PGC-10	522	69 A	2285	0.0088 UT	23800 T	PGC-10	441.2	41.2 JT	2048
Naphthalene	µg/kg	269	195	72.5	0.57 J	5300	G003	95.27	12	165	0.0088 U	5300	G003	70.02	6.4	136
Phenanthrene	µg/kg	269	214	79.6	0.11	11000	PGC-10	251	36.5	1214	0.0088 U	11000	PGC-10	200.3	23	856.4
Total cPAHs	µg/kg	269	232	86.2	0.058 T	18400 T	C087	922	164	3840	0.058 T	18400 T	C087	796	110 T	3560
Phthalates																
Butylbenzyl phthalate	µg/kg	96	29	30.2	3.6 J	580	G007	54	14	350 J	2.6 U	580	G007	21	1.8 U	50 U
Semivolatile Organic Compounds																
Hexachlorobenzene	µg/kg	149	60	40.3	0.094 J	3.4	G100	0.456	0.28 J	1.42	0.068 U	20 U	HC-SS02; HC-SS03; HC-SS04; HC-SS30	0.603	0.11 J	2.56
Phenols																
Pentachlorophenol	µg/kg	107	12	11.2	3.2 NJ	890	G057	130	38 J	510	0.17 U	2100 U	PGC-10	38	2.8 U	150 U
Petroleum																
Total Petroleum Hydrocarbons (Diesel)	mg/kg	61	22	36.1	6.4 J	530	PGC-10	142	79.5 J	501 J	0.064 U	530	PGC-10	59.9	14 U	280
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	128	116	90.6	1.9 JT	760 J	C090	70.1	33.5 J	223 J	1.3 U	760 J	C090	63.9	30.5 J	210 J
Total Petroleum Hydrocarbons (Residual)	mg/kg	21	20	95.2	10 J	1800 J	UG07	405	300	822 J	10 J	1800 J	UG07	389	280	770
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	128	121	94.5	4.9 JT	1500 J	C090	264	160 J	910	3.1 U	1500 J	C090	250	150 J	875 J
Total Petroleum Hydrocarbons	mg/kg	61	41	67.2	0.17 A	2400 JT	UG07	382	244 A	1130 T	0.17 A	2400 JT	UG07	270	125 U	941 T
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	128	124	96.9	2.2 JA	2260 JA	C090	324	187 J	1020 J	2.2 JA	2260 JA	C090	314	181 J	1010 J
Excluding All Zidell Data																
Grain Size																
Fines	percent	115	115	100	0.3 T	73.5 T	G015	19.8	14.3 T	60.9	0.3 T	73.5 T	G015	19.8	14.3 T	60.9
Conventionals																
Total organic carbon	percent	165	165	100	0.033	13.1	G045	1.069	0.81	2.292	0.033	13.1	G045	1.069	0.81	2.292
Metals																
Cadmium	mg/kg	159	154	96.9	0.03 J	1.7	G059	0.2316	0.1635	0.6719	0.03 J	1.7	G059	0.2282	0.156	0.6684
Lead	mg/kg	159	159	100	1.57 J	457	G094	45.9	19.2	189 J	1.57 J	457	G094	45.9	19.2	189 J
Mercury	mg/kg	159	155	97.5	0.005 J	29.2 J	C029	0.3073	0.041	0.4394	0.005 J	29.2 J	C029	0.302	0.042	0.4338
Nickel	mg/kg	134	134	100	8.07	39.6	G093	17.1	16.8 J	27.7	8.07	39.6	G093	17.1	16.8 J	27.7
PCB TEQ																
Total PCB TEQ (ND=0)	pg/g	8	8	100	0.000879 JT	4.51 T	GCA12E	1.27123	0.354 J	4.034	0.000879 JT	4.51 T	GCA12E	1.27123	0.354 J	4.034
Pesticides																
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	145	20	13.8	0.059 J	2.3	C090	0.496	0.315 J	1.45 J	0.011 UJ	2.3	C090	0.156	0.055 UJ	0.63 J
Polycyclic Aromatic Hydrocarbons																
Benzo(a)pyrene	µg/kg	157	140	89.2	0.17 J	3800	PGC-10	149	19	292	0.14 U	3800	PGC-10	133	18	266
Total HPAHs	µg/kg	157	144	91.7	2.02 JT	38700 T	PGC-10	1480	216	3710	0.64 UT	38700 T	PGC-10	1360	200 JT	3190
Total LPAHs	µg/kg	157	149	94.9	0.57 JT	23800 T	PGC-10	520	47 T	1460 J	0.57 JT	23800 T	PGC-10	494	41 JT	1290 J
Naphthalene	µg/kg	157	139	88.5	0.57 J	5300	G003	111	7.9	146	0.57 J	5300	G003	98.8	6.4	140
Phenanthrene	µg/kg	157	136	86.6	0.95 J	11000	PGC-10	243	24	595	0.75 U	11000	PGC-10	211	20	502
Total cPAHs	µg/kg	157	142	90.4	0.8 JT	18400 T	C087	718	111	1810	0.48 UT	18400 T	C087	650	99.6 JT	1530

Table D1.3-20. Summary Statistics for Other Contaminants and Physical Parameters in Surface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Phthalates																
Butylbenzyl phthalate	µg/kg	96	29	30.2	3.6 J	580	G007	54	14	350 J	2.6 U	580	G007	21	1.8 U	50 U
Semivolatile Organic Compounds																
Hexachlorobenzene	µg/kg	149	60	40.3	0.094 J	3.4	G100	0.456	0.28 J	1.42	0.068 U	20 U	HC-SS02; HC-SS03; HC-SS04; HC-SS30	0.603	0.11 J	2.56
Phenols																
Pentachlorophenol	µg/kg	107	12	11.2	3.2 NJ	890	G057	130	38 J	510	0.17 U	2100 U	PGC-10	38	2.8 U	150 U
Petroleum																
Total Petroleum Hydrocarbons (Diesel)	mg/kg	25	19	76	6.4 J	530	PGC-10	156	97	512 J	1.3 U	530	PGC-10	119	61	474 J
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	128	116	90.6	1.9 JT	760 J	C090	70.1	33.5 J	223 J	1.3 U	760 J	C090	63.9	30.5 J	210 J
Total Petroleum Hydrocarbons (Residual)	mg/kg	21	20	95.2	10 J	1800 J	UG07	405	300	822 J	10 J	1800 J	UG07	389	280	770
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	128	121	94.5	4.9 JT	1500 J	C090	264	160 J	910	3.1 U	1500 J	C090	250	150 J	875 J
Total Petroleum Hydrocarbons	mg/kg	25	23	92	10 JA	2400 JT	UG07	504	314 T	1290	10 JA	2400 JT	UG07	467	280 JT	1270
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	128	124	96.9	2.2 JA	2260 JA	C090	324	187 J	1020 J	2.2 JA	2260 JA	C090	314	181 J	1010 J
Zidell Data Only																
Grain Size																
Fines	percent	20	20	100	0.5	89.4 T	WRS38	34.3	26.8	80.5	0.5	89.4 T	WRS38	34.3	26.8	80.5
Conventionals																
Total organic carbon	percent	43	43	100	0.229	2.59	WRS-96	1.053	0.932	2.504	0.229	2.59	WRS-96	1.053	0.932	2.504
Metals																
Cadmium	mg/kg	110	64	58.2	0.127	132 J	R12	4.47	1.35 J	8.037 J	0.0369 U	132 J	R12	2.707	0.5 U	6.428 J
Lead	mg/kg	110	97	88.2	2.1	20800 J	R12	489.8	41	1438 J	0.576 U	20800 J	R12	432.3	31.23 J	1378 J
Mercury	mg/kg	104	72	69.2	0.0223 T	20.2 J	R50	0.71889	0.171	2.298 J	0.00172 U	20.2 J	R50	0.50716	0.1 U	1.468 J
Nickel	mg/kg	109	108	99.1	3.89 J	11500 J	R50	153	21.6 J	153.9 J	0.0508 U	11500 J	R50	151.6	21.3 J	153.6 J
Polycyclic Aromatic Hydrocarbons																
Benzo(a)pyrene	µg/kg	112	83	74.1	0.0097	3320	R20	237.76	75.3	899.1	0.0097	3320	R20	176.66	36.65	730.3
Total HPAHs	µg/kg	112	98	87.5	0.0734 T	28000 T	R20	2124	500	7515	0.0734 T	28000 T	R20	1858	357	6900
Total LPAHs	µg/kg	112	78	69.6	0.11 T	4330 T	WRS16	526.3	133	2626	0.0088 UT	4330 T	WRS16	367.2	47.9	2350
Naphthalene	µg/kg	112	56	50	5	495	R22	56.88	29.3	165	0.0088 U	495	R22	29.7	6.5 U	115.4
Phenanthrene	µg/kg	112	78	69.6	0.11	2020	R47	265.8	63.85	1264	0.0088 U	2020	R47	185.6	30.3	1112
Total cPAHs	µg/kg	112	90	80.4	0.058 T	16000 T	R20	1240	326	4830	0.058 T	16000 T	R20	1000	184	3840
Petroleum																
Total Petroleum Hydrocarbons (Diesel)	mg/kg	36	3	8.3	44	74	WRS22	57	53 T	71.9	0.064 U	110 U	WRS28	18.6	13.5 U	53.5
Total Petroleum Hydrocarbons	mg/kg	36	18	50	0.17 A	642	WRS07	226	172	635	0.17 A	642	WRS07	132	34 U	532

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

-- data not available.
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-21. Summary Statistics for Other Contaminants and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Grain Size																
Fines	percent	129	129	100	0.31 T	89 T	WRS37	33.08	32.8 T	71.36	0.31 T	89 T	WRS37	33.08	32.8 T	71.36
Conventionals																
Total organic carbon	percent	159	156	98.1	0.034 J	22.4 J	C024	1.81	0.939	7.53	0.02 UJ	22.4 J	C024	1.78	0.92 J	7.44
Metals																
Cadmium	mg/kg	178	159	89.3	0.03	3.6	WRS46	0.467	0.211 J	1.91	0.026 U	3.6	WRS46	0.464	0.239	1.82 J
Lead	mg/kg	178	168	94.4	1.35 J	1380	PGC-07	65	30.9	173 J	1.35 J	1380	PGC-07	61.8	25	171 J
Mercury	mg/kg	178	163	91.6	0.005 J	3.46 JT	C783	0.3509	0.116	1.556	0.005 J	3.46 JT	C783	0.3283	0.1 U	1.376
Nickel	mg/kg	114	114	100	6.77	151	WRS06	22.2	19.6	34 J	6.77	151	WRS06	22.2	19.6	34 J
Pesticides																
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	94	31	33	0.12 J	1.9 JT	IPC-C014	0.528	0.4 J	1.35 J	0.043 U	2.9 U	C783	0.27	0.113 U	1.02 J
Polycyclic Aromatic Hydrocarbons																
Benzo(a)pyrene	µg/kg	161	132	82	0.23 J	170000	PGC-06	8990	51	91300	0.14 U	170000	PGC-06	7370	27	68000
Total HPAHs	µg/kg	161	145	90.1	0.28 T	1950000 T	PGC-06	91900	513 T	850000	0.28 T	1950000 T	PGC-06	82800	377 T	748000 T
Total LPAHs	µg/kg	161	150	93.2	0.25 JT	3030000 T	PGC-05	141000	353	1360000	0.25 JT	3030000 T	PGC-05	132000	222 T	1300000 T
Naphthalene	µg/kg	162	125	77.2	0.45 J	1600000	PGC-05	63100	84	628000	0.44 U	1600000	PGC-05	48700	37.5	487000
Phenanthrene	µg/kg	161	135	83.9	1.9 J	750000	PGC-06	38400	150	342000	0.4 U	750000	PGC-06	32200	81	300000
Total cPAHs	µg/kg	161	140	87	0.28 JT	788000 T	PGC-06	37700	244	351000	0.28 JT	788000 T	PGC-06	32800	150 T	292000 T
Phthalates																
Butylbenzyl phthalate	µg/kg	64	6	9.4	3.3 J	33 T	C031	14	11 J	30	1.7 U	160 U	C783	7.4	1.6 U	31
Semivolatile Organic Compounds																
Hexachlorobenzene	µg/kg	94	13	13.8	0.14 J	2.8	O33-C005	0.454	0.24 J	1.5 J	0.068 U	2.8	O33-C005	0.137	0.06 U	0.308 J
Phenols																
Pentachlorophenol	µg/kg	109	3	2.8	0.24 J	26 T	UC05-2	9.7	3 J	24 J	0.16 U	83000 UJ	PGC-06	1500	30 U	3000 UJ
Petroleum																
Total Petroleum Hydrocarbons (Diesel)	mg/kg	107	65	60.7	1.9 J	19000	PGC-06	2360	420	14600	1.3 UT	19000	PGC-06	1430	38	11700
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	57	47	82.5	4.65 JT	1200 J	C783	237	140 J	852 J	1.3 UT	1200 J	C783	196	110	773 J
Total Petroleum Hydrocarbons (Residual)	mg/kg	83	64	77.1	3.6 JT	13000	PGC-06	1940	505	9040	3.2 U	13000	PGC-06	1500	210	8690
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	57	50	87.7	5.25 JT	2300 J	C783	472	335	1380 J	3.1 UT	2300 J	C783	417	290 J	1330 J
Total Petroleum Hydrocarbons	mg/kg	107	95	88.8	0.92 JT	36800 T	PGC-06	3330	490 JT	23800	0.92 JT	36800 T	PGC-06	2960	381	22900
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	57	50	87.7	6.7 JA	3500 JA	C783	694	495	2120	3.1 UA	3500 JA	C783	611	410 T	2060
Excluding All Zidell Data																
Grain Size																
Fines	percent	119	119	100	0.31 T	75.6 T	PGC-04	32.72	33.6 T	71.03	0.31 T	75.6 T	PGC-04	32.72	33.6 T	71.03
Conventionals																
Total organic carbon	percent	159	156	98.1	0.034 J	22.4 J	C024	1.81	0.939	7.53	0.02 UJ	22.4 J	C024	1.78	0.92 J	7.44
Metals																
Cadmium	mg/kg	148	145	98	0.03	3.02 J	PGC-03	0.304	0.206	0.831	0.026 U	3.02 J	PGC-03	0.299	0.203	0.816
Lead	mg/kg	148	147	99.3	1.35 J	1380	PGC-07	62.6	31.9	173 J	1.35 J	1380	PGC-07	62.3	31.6	173 J
Mercury	mg/kg	148	148	100	0.005 J	3.46 JT	C783	0.3649	0.124	1.671	0.005 J	3.46 JT	C783	0.3649	0.124	1.671
Nickel	mg/kg	84	84	100	6.77	36.9 J	UC08	19	18.7	31.1 J	6.77	36.9 J	UC08	19	18.7	31.1 J
PCB Aroclors																
Aroclors	µg/kg	98	57	58.2	1.4 JT	610 T	C022	89.6	41 T	522 J	0.73 UT	610 T	C022	52.5	7.2	242
Pesticides																
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	94	31	33	0.12 J	1.9 JT	IPC-C014	0.528	0.4 J	1.35 J	0.043 U	2.9 U	C783	0.27	0.113 U	1.02 J
Polycyclic Aromatic Hydrocarbons																
Benzo(a)pyrene	µg/kg	149	124	83.2	0.23 J	170000	PGC-06	9570	79	96900	0.14 U	170000	PGC-06	7970	39	78200
Total HPAHs	µg/kg	149	135	90.6	0.28 T	1950000 T	PGC-06	98700	578 T	928000	0.28 T	1950000 T	PGC-06	89400	506 T	825000
Total LPAHs	µg/kg	149	145	97.3	0.25 JT	3030000 T	PGC-05	146000	375 T	1380000	0.25 JT	3030000 T	PGC-05	142000	360 T	1360000
Naphthalene	µg/kg	150	122	81.3	0.45 J	1600000	PGC-05	64700	87	652000	0.44 U	1600000	PGC-05	52600	46.3	496000
Phenanthrene	µg/kg	149	131	87.9	1.9 J	750000	PGC-06	39600	170	350000	0.4 U	750000	PGC-06	34800	110	318000
Total cPAHs	µg/kg	149	131	87.9	0.28 JT	788000 T	PGC-06	40300	286 T	395000	0.28 JT	788000 T	PGC-06	35400	210 T	324000

Table D1.3-21. Summary Statistics for Other Contaminants and Physical Parameters in Subsurface Sediment, Downtown Reach (RM 11.8-15.3).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Phthalates																
Butylbenzyl phthalate	µg/kg	64	6	9.4	3.3 J	33 T	C031	14	11 J	30	1.7 U	160 U	C783	7.4	1.6 U	31
Semivolatile Organic Compounds																
Hexachlorobenzene	µg/kg	94	13	13.8	0.14 J	2.8	O33-C005	0.454	0.24 J	1.5 J	0.068 U	2.8	O33-C005	0.137	0.06 U	0.308 J
Phenols																
Pentachlorophenol	µg/kg	109	3	2.8	0.24 J	26 T	UC05-2	9.7	3 J	24 J	0.16 U	83000 UJ	PGC-06	1500	30 U	3000 UJ
Petroleum																
Total Petroleum Hydrocarbons (Diesel)	mg/kg	83	63	75.9	1.9 J	19000	PGC-06	2430	430	14800	1.3 UT	19000	PGC-06	1840	130	12900
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)	mg/kg	57	47	82.5	4.65 JT	1200 J	C783	237	140 J	852 J	1.3 UT	1200 J	C783	196	110	773 J
Total Petroleum Hydrocarbons (Residual)	mg/kg	83	64	77.1	3.6 JT	13000	PGC-06	1940	505	9040	3.2 U	13000	PGC-06	1500	210	8690
Total Petroleum Hydrocarbons (Residual) (silica gel treated)	mg/kg	57	50	87.7	5.25 JT	2300 J	C783	472	335	1380 J	3.1 UT	2300 J	C783	417	290 J	1330 J
Total Petroleum Hydrocarbons	mg/kg	83	71	85.5	0.92 JT	36800 T	PGC-06	4280	589 T	25200	0.92 JT	36800 T	PGC-06	3670	390 T	24300
Total Petroleum Hydrocarbons (silica gel treated)	mg/kg	57	50	87.7	6.7 JA	3500 JA	C783	694	495	2120	3.1 UA	3500 JA	C783	611	410 T	2060
Zidell Data Only																
Grain Size																
Fines	percent	10	10	100	3.1	89 T	WRS37	37.4	25.1	87.7	3.1	89 T	WRS37	37.4	25.1	87.7
Metals																
Cadmium	mg/kg	30	14	46.7	1	3.6	WRS46	2.15	1.95	3.54	1	3.6	WRS46	1.28	0.7 U	3.41
Lead	mg/kg	30	21	70	2.9 T	972	WRS07	81.4	25	115	2.1 U	972	WRS07	59.4	15.5	113
Mercury	mg/kg	30	15	50	0.0255 T	1.3	WRS07	0.2135	0.093	0.67	0.016 U	1.3	WRS07	0.1479	0.1 U	0.373
Nickel	mg/kg	30	30	100	16	151	WRS06	31.2	26	54.6	16	151	WRS06	31.2	26	54.6
PCB Aroclors																
Aroclors	µg/kg	12	2	16.7	140 T	190 T	WRS28	170	170	190	110 UT	190 T	WRS28	81	65 U	160
Total PCBs[c]																
Total PCBs	µg/kg	12	2	16.7	140 T	190 T	WRS28	170	170	190	110 UT	190 T	WRS28	81	65 U	160
Polycyclic Aromatic Hydrocarbons																
Benzo(a)pyrene	µg/kg	12	8	66.7	4.8	24	WRS46	12	10	20	3.5 U	24	WRS46	8.4	8.7	18
Total HPAHs	µg/kg	12	10	83.3	4.8 T	309 T	WRS46	91.3	80.2	245	3.9 UT	309 T	WRS46	76.4	51.5	231
Total LPAHs	µg/kg	12	5	41.7	5.9 T	208 T	WRS25	90.1	58.8 T	195	3.5 UT	208 T	WRS25	38.8	2.75 U	172
Naphthalene	µg/kg	12	3	25	15	70	WRS25	37	25	66	3.5 U	70	WRS25	11	2.5 U	45
Phenanthrene	µg/kg	12	4	33.3	19	60	WRS46	40	41	60	3.5 U	60	WRS46	15	2.5 U	58
Total cPAHs	µg/kg	12	9	75	4.8 T	140 T	WRS46	50	41 T	120	3.5 UT	140 T	WRS46	38	26	110
Petroleum																
Total Petroleum Hydrocarbons (Diesel)	mg/kg	24	2	8.3	98	160	WRS37	130	130	160	10 U	210 U	WRS31	22	5 U	100
Total Petroleum Hydrocarbons	mg/kg	24	24	100	42 A	1630	WRS06	493	314	1390	42 A	1630	WRS06	493	314	1390

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

-- data not available.
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
A - Total value based on limited number of analytes.
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2

Table D1.3-22. Summary Statistics for Other Contaminants and Physical Parameters in Surface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Grain Size																
Fines	percent	21	21	100	2.13 T	95.4 T	DG03	53.3	59.9 T	94.5 T	2.13 T	95.4 T	DG03	53.3	59.9 T	94.5 T
Conventionals																
Total organic carbon	percent	25	25	100	0.13	2.63	DG07	1.16	1.15 T	2.44	0.13	2.63	DG07	1.16	1.15 T	2.44
Metals																
Cadmium	mg/kg	25	24	96	0.08	1.63	DG08	0.477	0.305	0.99	0.08	1.63	DG08	0.459	0.3 T	0.986
Lead	mg/kg	25	25	100	3.23	27.7	DG15	11.7	12.1	21.6	3.23	27.7	DG15	11.7	12.1	21.6
Mercury	mg/kg	25	25	100	0.011 J	7.11 J	DG15	0.3344	0.054 T	0.1216 J	0.011 J	7.11 J	DG15	0.3344	0.054 T	0.1216 J
Nickel	mg/kg	25	25	100	9	31.7	DG03	21.4	21.6	31	9	31.7	DG03	21.4	21.6	31
PCB TEQ																
Total PCB TEQ (ND=0)	pg/g	4	4	100	0.00266 JT	0.0153 JT	GCRSP01W	0.008125	0.00727 J	0.014156 J	0.00266 JT	0.0153 JT	GCRSP01W	0.008125	0.00727 J	0.014156 J
Pesticides																
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	25	1	4	2.4 NJT	2.4 NJT	GCRSP01W	2.4	2.4 NJT	2.4 NJT	0.062 U	2.6 U	DG05	0.435	0.15 U	1.24 U
Polycyclic Aromatic Hydrocarbons																
Benzo(a)pyrene	µg/kg	25	24	96	5	1400	DG05	98.7	27	220 J	0.33 U	1400	DG05	94.7	23	214 J
Total HPAHs	µg/kg	25	25	100	0.54 JT	13000 T	DG05	864	240 T	1680	0.54 JT	13000 T	DG05	864	240 T	1680
Total LPAHs	µg/kg	25	25	100	0.84 JT	4900 JT	DG05	248	36 JT	160 J	0.84 JT	4900 JT	DG05	248	36 JT	160 J
Naphthalene	µg/kg	25	20	80	0.84 J	370	DG05	27	8.1 J	48	0.63 U	370	DG05	22	6.5	29
Phenanthrene	µg/kg	25	24	96	3.7	2700	DG05	140	21	100	0.49 U	2700	DG05	130	20	100
Total cPAHs	µg/kg	25	24	96	29 JT	6300 T	DG05	460	150 J	1000 J	0.71 UT	6300 T	DG05	440	130 T	980 J
Phthalates																
Butylbenzyl phthalate	µg/kg	21	12	57.1	2.8 J	9.6	GCR01E-ALT	5.6	6 J	8.4 J	2.2 U	9.6	GCR01E-ALT	3.8	3.2 J	7.4 JT
Semivolatile Organic Compounds																
Hexachlorobenzene	µg/kg	21	1	4.8	0.19 JT	0.19 JT	GCRSP01W	0.19	0.19 JT	0.19 JT	0.068 U	5.7 U	DG07	0.472	0.075 U	2.55 U
Phenols																
Pentachlorophenol	µg/kg	21	13	61.9	0.47 NJ	4.1 J	DG07	1.2	0.77 J	3.1 J	0.2 U	4.1 J	DG07	0.85	0.71 NJ	2.5 J
Petroleum																
Total Petroleum Hydrocarbons (Diesel)	mg/kg	17	16	94.1	5 J	130 JT	DG05	36	34 J	94 J	1.9 U	130 JT	DG05	34	33 JT	92 J
Total Petroleum Hydrocarbons (Residual)	mg/kg	17	16	94.1	36 J	440 J	DG03	220	230 J	430 J	4.3 U	440 J	DG03	210	210 JT	420 J
Total Petroleum Hydrocarbons	mg/kg	17	17	100	1.3 JT	480 JT	DG03	240	240 JT	470 J	1.3 JT	480 JT	DG03	240	240 JT	470 J

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

-- data not available.

cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-23. Summary Statistics for Other Contaminants and Physical Parameters in Subsurface Sediment, Downstream Reach (RM 0-1.9).

					Detected Concentrations						Detected and Not Detected Concentrations					
Analyte	**Units**	**# Analyzed**	**# Detected**	**% Detected**	**Minimum[a]**	**Maximum[a]**	**Maximum Location(s)**	**Mean**	**Median[b]**	**95th[b]**	**Minimum (full DL)[a]**	**Maximum (full DL)[a]**	**Maximum Location(s)**	**Mean (half DL)**	**Median (half DL)[b]**	**95th (half DL)[b]**
Grain Size																
Fines	percent	17	17	100	2.47 T	96.4 T	DC03	69.6	79.9 T	91.8	2.47 T	96.4 T	DC03	69.6	79.9 T	91.8
Conventionals																
Total organic carbon	percent	26	26	100	0.05	2.78	DC03	1	0.97	2.13	0.05	2.78	DC03	1	0.97	2.13
Metals																
Cadmium	mg/kg	26	26	100	0.03	1.95	DC02	0.838	0.77	1.83	0.03	1.95	DC02	0.838	0.77	1.83
Lead	mg/kg	26	26	100	1.2	37.7	DC02	15.8	14.9	33.2	1.2	37.7	DC02	15.8	14.9	33.2
Mercury	mg/kg	26	26	100	0.006 J	0.282 J	DC03	0.0924	0.0785 J	0.252 J	0.006 J	0.282 J	DC03	0.0924	0.0785 J	0.252 J
Nickel	mg/kg	26	26	100	4.4	20.4 J	DC07	15.9	16.8 J	19.7 J	4.4	20.4 J	DC07	15.9	16.8 J	19.7 J
Pesticides																
gamma-Hexachlorocyclohexane (Lindane)	µg/kg	26	0	0	--	--	--	--	--	--	0.19 U	2 UJ	WR-BC-03; WR-GC-02; WR-GC-04; WR-GC-05; WR-GC-06	0.46	0.14 U	1 U
Polycyclic Aromatic Hydrocarbons																
Benzo(a)pyrene	µg/kg	26	23	88.5	0.9 J	770	DC03	73.2	39	123 J	0.32 U	770	DC03	64.8	23.5	122 J
Total HPAHs	µg/kg	26	24	92.3	0.64 JT	11000 T	DC03	824	350	1350	0.64 JT	11000 T	DC03	761	240 J	1320
Total LPAHs	µg/kg	26	26	100	0.49 JT	12000 T	DC03	576	43 J	853	0.49 JT	12000 T	DC03	576	43 J	853
Naphthalene	µg/kg	27	20	74.1	0.6 J	330	DC03	43	12	270	0.49 U	330	DC03	32	4 J	200
Phenanthrene	µg/kg	26	26	100	0.49 J	7200	DC03	330	20 J	360	0.49 J	7200	DC03	330	20 J	360
Total cPAHs	µg/kg	26	23	88.5	4.9 JT	4200 T	DC03	370	190 T	610 J	0.7 UT	4200 T	DC03	330	120 J	610 J
Phthalates																
Butylbenzyl phthalate	µg/kg	17	0	0	--	--	--	--	--	--	1.9 U	6.2 U	DC04	1.4	1.2 U	2.5 U
Semivolatile Organic Compounds																
Hexachlorobenzene	µg/kg	17	1	5.9	0.42 J	0.42 J	DC06	0.42	0.42 J	0.42 J	0.096 U	3.3 U	DC05	0.207	0.065 U	0.73 U
Phenols																
Pentachlorophenol	µg/kg	17	8	47.1	0.5 J	6 J	DC02	1.4	0.54 J	4.6 J	0.17 U	6 J	DC02	0.73	0.12 U	2.8 J
Petroleum																
Total Petroleum Hydrocarbons (Diesel)	mg/kg	17	17	100	2 JT	370 J	DC03	62	35 J	270 J	2 JT	370 J	DC03	62	35 J	270 J
Total Petroleum Hydrocarbons (Residual)	mg/kg	17	14	82.4	7.4 JT	680 J	DC03	220	150 J	670 J	7.4 JT	680 J	DC03	180	130 J	660 J
Total Petroleum Hydrocarbons	mg/kg	17	17	100	2.4 JT	1100 JT	DC03	250	170 JT	970 J	2.4 JT	1100 JT	DC03	250	170 JT	970 J

Notes:

[a] Whenever several result values match maximum or minimum value, qualifier and descriptor preference has been given in the following order: U over J over A over N over T over no qualification.

[b] Median is the exact result value ranking as the 0.50 percentile in an ascending list of all results, and 95th percentile is the exact result value of the 0.95 ranking result. When the ascending list of all results doesn't produce an exact match to the corresponding percentile rank, average of two adjacent results ranking closest to 0.50 percentile is the median, and an interpolated value is the 95th percentile. Such median or 95th percentile value is not qualified. It is qualified with "U" if both results ranking immediately above and below the corresponding percentile are "U" qualified, and with "J" if at least one of the results is "J" qualified.

-- data not available.
cPAH - carcinogenic polycyclic aromatic hydrocarbon
DL - detection limit
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
PCDD/F - dioxin/furan
RM - river mile
TEQ - toxic equivalent concentration

Reason codes for qualifiers:
J - The associated numerical value is an estimated quantity.
N - Presumptive evidence of presence of material; identification of the compound is not definitive.
U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

Reason codes for descriptors:
T - The associated numerical value was mathematically derived (e.g., from summing multiple analyte results such as Aroclors, or calculating the average of multiple results for a single analyte). Also indicates all results that are selected for reporting in preference to other available results (e.g., for parameters reported by multiple methods) for the Round 2 data.

Table D1.3-24. Number of Surface and Subsurface Samples (Detected only) for Other Contaminants by Concentration Range, Study Area (RM 1.9-11.8)

	Surface Sediment Concentration Ranges							Subsurface Sediment Concentration Ranges							
Chemical	**<1**	**1-10**	**10-100**	**100-1000**	**1000-10000**	**>10000**	**Surface Total**	**<1**	**1-10**	**10-100**	**100-1000**	**1000-10000**	**>10000**	**Subsurface Total**	**Grand Total**
Metals															
Cadmium	1312	90	1				1403	1381	51	3				1435	2838
Lead		215	1242	97	5	1	1560		453	1024	107	5		1589	3149
Mercury	1394	3	1				1398	1345	26	2				1373	2771
Nickel		7	1474	13			1494		4	1508	9			1521	3015
PCB TEQ															
Total PCB TEQ (ND = 0)	152	91	17	4			264	54	80	16	5			155	419
Pesticides															
gamma-Hexachlorocyclohexane (Lindane)	95	106	4	1			206	55	58	7	1			121	327
Total DDD	165	658	171	56	9	1	1060	182	541	342	150	60	30	1305	2365
Total DDE	151	762	87	20	5		1025	183	635	231	73	25	4	1151	2176
Total DDT	254	462	145	55	16	4	936	212	481	241	121	65	40	1160	2096
Polycyclic Aromatic Hydrocarbons															
Total cPAH	14	69	642	619	201	68	1613	98	126	467	564	184	133	1572	3185
Benzo(a)pyrene	1	102	718	549	158	53	1581	63	134	554	486	156	115	1508	3089
Total HPAHs		7	117	704	604	208	1640	35	94	151	511	528	296	1615	3255
Total LPAHs	1	48	568	655	226	84	1582	52	103	343	577	305	214	1594	3176
Naphthalene	6	229	665	184	31	10	1125	36	162	600	351	70	66	1285	2410
Phenanthrene	3	120	698	545	150	60	1576	34	146	454	525	219	160	1538	3114
Phthalates															
Butylbenzyl phthalate		159	257	50	4		470		125	118	20		1	264	734
Semivolatile Organic Compounds															
Hexachlorobenzene	256	158	14	4			432	120	91	21	2	1	1	236	668
Phenols															
Pentachlorophenol	17	159	73	16	1		266	18	294	67	8	3		390	656
Petroleum															
Total Petroleum Hydrocarbons (Diesel)	3	25	444	268	25	2	767	7	52	237	499	98	11	904	1671
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)		3	153	25	5		186		13	56	122	13	1	205	391
Total Petroleum Hydrocarbons (Residual)	3	7	46	519	58	5	638	7	33	105	545	153	11	854	1492
Total Petroleum Hydrocarbons (Residual) (silica gel treated)		3	42	156	4		205		12	26	147	18	2	205	410
Total Petroleum Hydrocarbons	3	20	113	550	96	7	789	7	44	122	461	312	23	969	1758
Total Petroleum Hydrocarbons (silica gel treated)		3	35	166	5	2	211		14	23	127	48	2	214	425

Notes:

cPAH - carcinogenic polycyclic aromatic hydrocarbon
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
TEQ - toxic equivalent concentration

Table D1.3-25. Number of Surface and Subsurface Samples (Detected and Not Detected) for Other Contaminants by Concentration Range, Study Area (RM 1.9-11.8).

	Surface Sediment Concentration Ranges							Subsurface Sediment Concentration Ranges							
Chemical	**<1**	**1-10**	**10-100**	**100-1000**	**1000-10000**	**>10000**	**Surface Total**	**<1**	**1-10**	**10-100**	**100-1000**	**1000-10000**	**>10000**	**Subsurface Total**	**Grand Total**
Metals															
Cadmium	1430	120	1				1551	1470	57	3				1530	3081
Lead		218	1254	97	5	1	1575		455	1030	107	5		1597	3172
Mercury	1523	3	1				1527	1426	26	2				1454	2981
Nickel		7	1491	13			1511		4	1508	9			1521	3032
PCB TEQ															
Total PCB TEQ (ND = 0)	152	91	17	4			264	60	80	16	5			161	425
Pesticides															
gamma-Hexachlorocyclohexane (Lindane)	875	285	34	1			1195	867	267	61	18	7		1220	2415
Total DDD	209	793	180	57	9	1	1249	502	585	349	153	60	30	1679	2928
Total DDE	205	899	113	24	5		1246	571	727	262	83	32	4	1679	2925
Total DDT	380	629	162	57	16	4	1248	600	578	270	125	65	40	1678	2926
Polycyclic Aromatic Hydrocarbons															
Total cPAH	14	85	669	622	203	68	1661	147	207	471	570	187	133	1715	3376
Benzo(a)pyrene	4	138	751	555	160	53	1661	137	252	560	492	159	115	1715	3376
Total HPAHs		15	128	706	604	208	1661	70	151	153	516	529	296	1715	3376
Total LPAHs	1	75	609	663	229	84	1661	75	188	350	581	307	214	1715	3376
Naphthalene	69	488	871	194	34	10	1666	177	417	657	363	78	66	1758	3424
Phenanthrene	3	157	743	547	151	60	1661	80	270	457	527	221	160	1715	3376
Phthalates															
Butylbenzyl phthalate		649	696	142	17		1504		799	619	144	26	1	1589	3093
Semivolatile Organic Compounds															
Hexachlorobenzene	582	528	238	29	10		1387	596	453	206	85	26	1	1367	2754
Phenols															
Pentachlorophenol	274	643	428	92	13	4	1454	507	497	211	115	39	10	1379	2833
Petroleum															
Total Petroleum Hydrocarbons (Diesel)	3	36	490	269	25	2	825	10	101	390	499	98	11	1109	1934
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)		13	178	25	5		221		49	65	122	13	1	250	471
Total Petroleum Hydrocarbons (Residual)	3	8	59	528	58	5	661	9	78	214	555	153	11	1020	1681
Total Petroleum Hydrocarbons (Residual) (silica gel treated)		3	58	156	4		221		40	43	147	18	2	250	471
Total Petroleum Hydrocarbons	3	21	146	552	96	7	825	9	66	231	468	312	23	1109	1934
Total Petroleum Hydrocarbons (silica gel treated)		3	45	166	5	2	221		42	31	127	48	2	250	471

Notes:

cPAH - carcinogenic polycyclic aromatic hydrocarbon
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
TEQ - toxic equivalent concentration

Table D1.3-26. Number of Surface and Subsurface Samples (Detected Only) for Other Contaminants by Concentration Range, Upriver Reach (RM 15.3-28.4).

	Surface Sediment Concentration Ranges							Subsurface Sediment Concentration Ranges						
Chemical	**<1**	**1-10**	**10-100**	**100-1000**	**1000-10000**	**>10000**	**Surface Total**	**<1**	**1-10**	**10-100**	**100-1000**	**1000-10000**	**Subsurface Total**	**Grand Total**
Metals														
Cadmium	63						63	3					3	66
Lead		62	10				72		1	2			3	75
Mercury	60						60	3					3	63
Nickel			72				72			3			3	75
PCB TEQ														
Total PCB TEQ (ND = 0)	25						25							25
Pesticides														
gamma-Hexachlorocyclohexane (Lindane)	1						1							1
Total DDD	41	6					47	1	2				3	50
Total DDE	31	24					55	1	2				3	58
Total DDT	16	6	1				23		2				2	25
Polycyclic Aromatic Hydrocarbons														
Total cPAH	10	26	25	1			62			3			3	65
Benzo(a)pyrene	2	37	11	1			51			3			3	54
Total HPAHs		5	45	11	1		62				3		3	65
Total LPAHs	5	21	27	1			54			2	1		3	57
Naphthalene		28					28		2	1			3	31
Phenanthrene	1	31	7	1			40			3			3	43
Phthalates														
Butylbenzyl phthalate		12	5				17			1			1	18
Semivolatile Organic Compounds														
Hexachlorobenzene	24	2					26	1					1	27
Phenols														
Pentachlorophenol		5	1				6							6
Petroleum														
Total Petroleum Hydrocarbons (Diesel)		2	32				34							34
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)		4	28				32			3			3	35
Total Petroleum Hydrocarbons (Residual)		1	3	32			36							36
Total Petroleum Hydrocarbons (Residual) (silica gel treated)		1	22	9			32				3		3	35
Total Petroleum Hydrocarbons			4	35			39							39
Total Petroleum Hydrocarbons (silica gel treated)		1	13	18			32				3		3	35

Notes:

cPAH - carcinogenic polycyclic aromatic hydrocarbon
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
TEQ - toxic equivalent concentration

Table D1.3-27. Number of Surface and Subsurface Samples (Detected and Not Detected) for Other Contaminants by Concentration Range, Upriver Reach (RM 15.3-28.4).

	Surface Sediment Concentration Ranges							Subsurface Sediment Concentration Ranges						
Chemical	**<1**	**1-10**	**10-100**	**100-1000**	**1000-10000**	**>10000**	**Surface Total**	**<1**	**1-10**	**10-100**	**100-1000**	**1000-10000**	**Subsurface Total**	**Grand Total**
Metals														
Cadmium	72						72	3					3	75
Lead		62	10				72		1	2			3	75
Mercury	68						68	3					3	71
Nickel			72				72			3			3	75
PCB TEQ														
Total PCB TEQ (ND = 0)	25	1					26							26
Pesticides														
gamma-Hexachlorocyclohexane (Lindane)	65	12					77	3					3	80
Total DDD	61	20					81	1	2				3	84
Total DDE	43	38					81	1	2				3	84
Total DDT	61	19	1				81	1	2				3	84
Polycyclic Aromatic Hydrocarbons	38	302	243	38	2		623		2	12	10		24	647
Total cPAH	13	34	30	1			78			3			3	81
Benzo(a)pyrene	6	54	17	1			78			3			3	81
Total HPAHs		16	50	11	1		78				3		3	81
Total LPAHs	5	40	32	1			78			2	1		3	81
Naphthalene	3	68	7				78		2	1			3	81
Phenanthrene	5	58	13	1			77			3			3	80
Phthalates														
Butylbenzyl phthalate		50	22				72		2	1			3	75
Semivolatile Organic Compounds														
Hexachlorobenzene	45	16	11				72	3					3	75
Phenols														
Pentachlorophenol	34	28	9	7			78		3				3	81
Petroleum														
Total Petroleum Hydrocarbons (Diesel)		6	37				43							43
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)		4	28				32			3			3	35
Total Petroleum Hydrocarbons (Residual)		1	6	32			39							39
Total Petroleum Hydrocarbons (Residual) (silica gel treated)		1	22	9			32				3		3	35
Total Petroleum Hydrocarbons			8	35			43							43
Total Petroleum Hydrocarbons (silica gel treated)		1	13	18			32				3		3	35

Notes:

cPAH - carcinogenic polycyclic aromatic hydrocarbon
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
TEQ - toxic equivalent concentration

Table D1.3-28. Number of Surface and Subsurface Samples (Detected Only) for Other Contaminants by Concentration Range, Downtown Reach (RM 11.8-15.3).

	Surface Sediment Concentration Ranges							Subsurface Sediment Concentration Ranges							
Chemical	**<1**	**1-10**	**10-100**	**100-1000**	**1000-10000**	**>10000**	**Surface Total**	**<1**	**1-10**	**10-100**	**100-1000**	**1000-10000**	**>10000**	**Subsurface Total**	**Grand Total**
Metals															
Cadmium	180	35	2	1			218	140	19					159	377
Lead		68	131	48	8	1	256		44	96	27	1		168	424
Mercury	215	10	2				227	149	14					163	390
Nickel		17	216	8		1	242		2	111	1			114	356
PCB TEQ															
Total PCB TEQ (ND = 0)	5	3					8								8
Pesticides															
gamma-Hexachlorocyclohexane (Lindane)	17	3					20	26	4					30	50
Total DDD	61	46	6				113	17	28	9				54	167
Total DDE	75	39	1				115	16	29	1				46	161
Total DDT	37	59	8				104	18	30	5				53	157
Polycyclic Aromatic Hydrocarbons															
Total cPAH	14	27	121	56	14		232	9	18	50	34	17	12	140	372
Benzo(a)pyrene	12	41	111	49	10		223	3	22	52	31	12	12	132	355
Total HPAHs	1	16	45	119	50	11	242	3	12	17	54	34	25	145	387
Total LPAHs	9	29	95	73	19	2	227	7	9	36	50	25	23	150	377
Naphthalene	10	83	83	15	4		195	1	20	48	35	10	11	125	320
Phenanthrene	3	42	109	47	12	1	214		18	42	39	19	17	135	349
Phthalates															
Butylbenzyl phthalate		13	14	2			29		3	3				6	35
Semivolatile Organic Compounds															
Hexachlorobenzene	54	6					60	12	1					13	73
Phenols															
Pentachlorophenol		2	6	4			12	1	1	1				3	15
Petroleum															
Total Petroleum Hydrocarbons (Diesel)		2	11	9			22		9	12	27	10	7	65	87
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)		20	73	23			116		2	14	30	1		47	163
Total Petroleum Hydrocarbons (Residual)		1	3	15	1		20		4	11	25	21	3	64	84
Total Petroleum Hydrocarbons (Residual) (silica gel treated)		5	36	77	3		121		2	8	35	5		50	171
Total Petroleum Hydrocarbons	1	4	4	29	3		41	1	9	15	35	25	10	95	136
Total Petroleum Hydrocarbons (silica gel treated)		8	29	80	7		124		2	8	29	12		51	175

Notes:

cPAH - carcinogenic polycyclic aromatic hydrocarbon
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
TEQ - toxic equivalent concentration

Table D1.3-29. Number of Surface and Subsurface Samples (Detected and Not Detected) for Other Contaminants by Concentration Range, Downtown Reach (RM 11.8-15.3).

	Surface Sediment Concentration Ranges							Subsurface Sediment Concentration Ranges							
Chemical	**<1**	**1-10**	**10-100**	**100-1000**	**1000-10000**	**>10000**	**Surface Total**	**<1**	**1-10**	**10-100**	**100-1000**	**1000-10000**	**>10000**	**Subsurface Total**	**Grand Total**
Metals															
Cadmium	215	51	2	1			269	143	35					178	447
Lead	2	76	134	48	8	1	269		46	104	27	1		178	447
Mercury	251	10	2				263	164	14					178	441
Nickel	1	17	216	8		1	243		2	111	1			114	357
PCB TEQ															
Total PCB TEQ (ND = 0)	5	3					8								8
Pesticides															
gamma-Hexachlorocyclohexane (Lindane)	137	8					145	85	8					93	238
Total DDD	93	50	6				149	54	30	9				93	242
Total DDE	100	48	1				149	59	33	1				93	242
Total DDT	68	71	10				149	54	34	5				93	242
Polycyclic Aromatic Hydrocarbons															
Total cPAH	25	47	127	56	14		269	24	24	50	34	17	12	161	430
Benzo(a)pyrene	24	69	117	49	10		269	23	31	52	31	12	12	161	430
Total HPAHs	10	30	49	119	50	11	269	14	17	17	54	34	25	161	430
Total LPAHs	12	62	101	73	19	2	269	9	18	36	50	25	23	161	430
Naphthalene	19	137	94	15	4		269	19	36	50	36	10	11	162	431
Phenanthrene	22	72	115	47	12	1	269	9	35	42	39	19	17	161	430
Phthalates															
Butylbenzyl phthalate		69	24	3			96		49	12	3			64	160
Semivolatile Organic Compounds															
Hexachlorobenzene	134	11	4				149	91	2					93	242
Phenols															
Pentachlorophenol	10	70	15	11	1		107	23	28	32	8	13	5	109	216
Petroleum															
Total Petroleum Hydrocarbons (Diesel)	3	18	30	10			61		34	28	28	10	7	107	168
Total Petroleum Hydrocarbons (Diesel) (silica gel treated)		28	77	23			128		7	19	30	1		57	185
Total Petroleum Hydrocarbons (Residual)		1	3	16	1		21		10	17	32	21	3	83	104
Total Petroleum Hydrocarbons (Residual) (silica gel treated)		11	36	78	3		128		6	9	37	5		57	185
Total Petroleum Hydrocarbons	1	4	20	33	3		61	1	13	17	41	25	10	107	168
Total Petroleum Hydrocarbons (silica gel treated)		11	29	81	7		128		6	9	30	12		57	185

Notes:

cPAH - carcinogenic polycyclic aromatic hydrocarbon
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
TEQ - toxic equivalent concentration

Table D1.3-30. Number of Surface and Subsurface Samples (Detected Only) for Other Contaminants by Concentration Range, Downstream Reach (RM 0-1.9).

	Surface Sediment Concentration Ranges							Subsurface Sediment Concentration Ranges							
Chemical	**<1**	**1-10**	**10-100**	**100-1000**	**1000-10000**	**>10000**	**Surface Total**	**<1**	**1-10**	**10-100**	**100-1000**	**1000-10000**	**>10000**	**Subsurface Total**	**Grand Total**
Metals															
Cadmium	22	2					24	14	12					26	50
Lead		10	15				25		10	16				26	51
Mercury	24	1					25	26						26	51
Nickel		2	23				25		3	23				26	51
PCB TEQ															
Total PCB TEQ (ND = 0)	4						4								4
Pesticides															
gamma-Hexachlorocyclohexane (Lindane)		1					1								1
Total DDD	11	9					20	2	7	7				16	36
Total DDE	8	12					20	4	10	2				16	36
Total DDT	7	9	1				17	2	6	3				11	28
Polycyclic Aromatic Hydrocarbons															
Total cPAH		2	18	3	1		24		7	9	6	1		23	47
Benzo(a)pyrene		5	16	2	1		24	2	7	10	4			23	47
Total HPAHs	1		6	16	1	1	25	1	1	8	11	2	1	24	49
Total LPAHs	1	3	16	4	1		25	4	3	10	8		1	26	51
Naphthalene	1	13	5	1			20	1	9	8	2			20	40
Phenanthrene		6	16	1	1		24	4	7	11	3	1		26	50
Phthalates															
Butylbenzyl phthalate		12					12								12
Semivolatile Organic Compounds															
Hexachlorobenzene	1						1	1						1	2
Phenols															
Pentachlorophenol	8	5					13	6	2					8	21
Petroleum															
Total Petroleum Hydrocarbons (Diesel)		3	12	1			16		5	10	2			17	33
Total Petroleum Hydrocarbons (Residual)			4	12			16		1	3	10			14	30
Total Petroleum Hydrocarbons		1	3	13			17		4	3	9	1		17	34

Notes:

cPAH - carcinogenic polycyclic aromatic hydrocarbon
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
TEQ - toxic equivalent concentration

Table D1.3-31. Number of Surface and Subsurface Samples (Detected and Not Detected) for Other Contaminants by Concentration Range, Downstream Reach (RM 0-1.9).

	Surface Sediment Concentration Ranges							Subsurface Sediment Concentration Ranges							
Chemical	**<1**	**1-10**	**10-100**	**100-1000**	**1000-10000**	**>10000**	**Surface Total**	**<1**	**1-10**	**10-100**	**100-1000**	**1000-10000**	**>10000**	**Subsurface Total**	**Grand Total**
Metals															
Cadmium	23	2					25	14	12					26	51
Lead		10	15				25		10	16				26	51
Mercury	24	1					25	26						26	51
Nickel		2	23				25		3	23				26	51
PCB TEQ															
Total PCB TEQ (ND = 0)	4						4								4
Pesticides															
gamma-Hexachlorocyclohexane (Lindane)	17	8					25	15	11					26	51
Total DDD	14	11					25	7	12	7				26	51
Total DDE	9	16					25	9	15	2				26	51
Total DDT	9	15	1				25	7	16	3				26	51
Polycyclic Aromatic Hydrocarbons															
Total cPAH	1	2	18	3	1		25	3	7	9	6	1		26	51
Benzo(a)pyrene	1	5	16	2	1		25	5	7	10	4			26	51
Total HPAHs	1		6	16	1	1	25	3	1	8	11	2	1	26	51
Total LPAHs	1	3	16	4	1		25	4	3	10	8		1	26	51
Naphthalene	2	17	5	1			25	7	10	8	2			27	52
Phenanthrene	1	6	16	1	1		25	4	7	11	3	1		26	51
Phthalates															
Butylbenzyl phthalate		21					21		17					17	38
Semivolatile Organic Compounds															
Hexachlorobenzene	17	4					21	15	2					17	38
Phenols															
Pentachlorophenol	15	6					21	15	2					17	38
Petroleum															
Total Petroleum Hydrocarbons (Diesel)		4	12	1			17		5	10	2			17	34
Total Petroleum Hydrocarbons (Residual)		1	4	12			17		2	5	10			17	34
Total Petroleum Hydrocarbons		1	3	13			17		4	3	9	1		17	34

Notes:

cPAH - carcinogenic polycyclic aromatic hydrocarbon
HPAH - high molecular weight polycyclic aromatic hydrocarbon
LPAH - low molecular weight polycyclic aromatic hydrocarbon
ND - not detected
PCB - polychlorinated biphenyl
TEQ - toxic equivalent concentration

Table D1.3-32. Surface and Subsurface Sediment Samples Excluded from Summary Statistics Tables per Exclusion Criteria.

Excluded Sediment Samples	Excluded Sediment Samples	Excluded Sediment Samples	Excluded Sediment Samples	Excluded Sediment Samples	Excluded Sediment Samples
LW2-B016	LWG0104R002SDS015C00	MBCREOS1M3ASC81A	WLCARI08200811131	WLCCPF01SD0101SD141F	WLCGSG04RAA14SD1420
LW2-C086-B	LWG0106R031SDS015C00	MBCREOS1M3ASC81B	WLCARI08200811132	WLCCPF01SD0101SD1S1C	WLCGWF03GNCOMP2003
LW2-C086-C	LWG2-PG-R2AR4	MBCREOS1M4ASC47	WLCARI08200811133	WLCCPF01SD0102SD239F	WLCGWF03GNVC01A
LW2-C086-D	LWPTZSARCO6B-2	MBCREOS1M5ASC36	WLCARI0820081114PRS16	WLCCPF01SD0102SD241F	WLCGWF03GNVC03A1
LW2-C093-A	MBCREOS1BE1SCB1A	MBCREOS1M8ASC20	WLCARI0820081115PRS17	WLCCPF01SD0102SD2S1C	WLCITA96S01S01
LW2-C093-B	MBCREOS1BE1SCB1B	MBCREOS1Q4ASC49	WLCASF97S007W4153	WLCCPF01SD0103SD339F	WLCITC03SS010007
LW2-C093-C	MBCREOS1BE2SCB2	MBCREOS1R3ASC85	WLCASF97S017W4149	WLCCPF01SD0103SD341F	WLCITC03SS010708
LW2-C093-D	MBCREOS1BE3SCB3	MBCREOS2I12ASSJ12	WLCASF97S048W4165	WLCCPF01SD0103SD3S1C	WLCITC03SS010710C
LW2-C155-B	MBCREOS1BE4SCB4	MBCREOS2I2BSSJ2	WLCBPE06SGP011012	WLCCPF01SD0104SD439F	WLCITC03SS011011
LW2-C155-C	MBCREOS1I10ASC11	MBCREOS2J10AK09051	WLCBPE06SGP0124	WLCCPF01SD0104SD441F	WLCITC03SS020013
LW2-C155-D	MBCREOS1I11ASC6	MBCREOS2J10AK09200	WLCBPE06SGP0168	WLCCPF01SD0104SD4S1C	WLCITC03SS021314
LW2-C161-B	MBCREOS1I9ASCC16A	MBCREOS2J10AK09467	WLCBPE06SGP021012	WLCCPF01SD0105D5SC1C	WLCITC03SS021517C
LW2-C161-C	MBCREOS1J1BCC65AA	MBCREOS2J2DK01038	WLCBPE06SGP0224	WLCCPF01SD0105SD539F	WLCITC03SS021617
LW2-C161-D	MBCREOS1J1BCC65AB	MBCREOS2J2DK01215	WLCBPE06SGP0268	WLCCPF01SD0105SD541F	WLCITC03SS03R0102
LW2-C276-B	MBCREOS1J1BCC65AC	MBCREOS2J2DK01424	WLCBPE06SGP0301	WLCDRD05PG05050	WLCITC03SS03R0204C
LW2-C276-C	MBCREOS1J2ASC65	MBCREOS2J7CSSJ7	WLCBPE06SGP0346	WLCDRD05VC05050	WLCITC03SS03R0506
LW2-C276-D	MBCREOS1J2CSC66A	MBCREOS2K10ASSL10	WLCBPE06SGP03810	WLCGAB99GASD021299C	WLCITC03SS040008
LW2-C278-B	MBCREOS1J2CSC66B	MBCREOS2K5ASSL6	WLCBPE06SGP0401	WLCGAB99GASD021299G	WLCITC03SS050012
LW2-C278-C	MBCREOS1J6ASC29	MBCREOS2K5CL06090	WLCBPE06SGP041012	WLCGAF00GAC001GAC001	WLCITC03SS051213
LW2-C278-D	MBCREOS1J6BC30B01	MBCREOS2K5CL06275	WLCBPE06SGP0435	WLCGAF00GAC002GAC002	WLCITC03SS051416C
LW2-C284-B	MBCREOS1J6BC30B02	MBCREOS2K5CL06665	WLCBPE06SGP0701	WLCGAF00GAC003GAC003	WLCITC03SS051516
LW2-C284-C	MBCREOS1J6BC30B03	MBCREOS2L1CM01015	WLCBPE06SGP0724	WLCGAF00GAC004GAC004	WLCITC03SS060007
LW2-C284-D	MBCREOS1J6BSC30A	MBCREOS2L1CM01240	WLCBPE06SGP0768	WLCGAF00GAC005GAC005	WLCITC03SS060708
LW2-C284-E	MBCREOS1J7ASC26	MBCREOS2L1CM01765	WLCBPE06SGP081214	WLCGSA96SD07SD0701	WLCITC03SS060810C
LW2-C288-B	MBCREOS1J7BSC25	MBCREOS2L2CM02025	WLCBPE06SGP0824	WLCGSA96SD07SD0705	WLCITC03SS061011
LW2-C288-C	MBCREOS1J7CC25B01	MBCREOS2L2CM02147	WLCBPE06SGP0868	WLCGSA96SD08SD0801	WLCITH98SD01SD01
LW2-C288-D	MBCREOS1J7CC25B02	MBCREOS2L2CM02298	WLCBPE06SGP0968	WLCGSA96SD08SD0810	WLCMBA01ED0101ED0101
LW2-C294-B	MBCREOS1J7CSC25A	MBCREOS2L4FSSL4	WLCBPE06SGP09910	WLCGSD01AN0201_00-10	WLCMBA01ED0102ED0102
LW2-C294-C	MBCREOS1J9BSC16	MBCREOS2L5CM05075	WLCBPE06SGP1224	WLCGSD01AN0201_10-20	WLCMBA01ED0106ED0106
LW2-C294-D	MBCREOS1K2ASC77	MBCREOS2L5CM05350	WLCBPE06SGP1246	WLCGSD01AN0201_30-40	WLCMBA01ED0107ED0107
LW2-C494-A	MBCREOS1K3ASC80	MBCREOS2L5CM05475	WLCBPE06SGP12910	WLCGSD01AN0202_00-10	WLCMBA01ED0113ED0113
LW2-C494-B	MBCREOS1K3ASCC44A	MCAL1286MC123MC123	WLCBPE06SGP1701	WLCGSD01AN0202_10-20	WLCMBA01ED0113ED0141
LW2-C494-C	MBCREOS1K4ASC41A	MCAL1286MC456MC456	WLCBPE06SGP1724	WLCGSD01AN0202_30-40	WLCMBA01ED0117ED0117
LW2-C494-D	MBCREOS1K4BSC41	PPTLDT24B416U1B416C1	WLCBPE06SGP1801	WLCGSD01AN0203_00-10	WLCMBA01ED0120ED0120
LW2-C494-E	MBCREOS1K5ASC34	PPTLDT24T2U1B204C1	WLCBPE06SGP1824	WLCGSD01AN0203_10-20	WLCMBA01ED0126ED0126
LW2-G086	MBCREOS1K5ASCC34A	PPTLDT24T2U2B203C1	WLCBPE06SGP1901	WLCGSD01AN0203_30-40	WLCMBA01ED0127ED0127
LW2-G087	MBCREOS1K5ASCC34B	RM11E-C033-A	WLCBPE06SGP1924	WLCGSD01AN0204_00-10	WLCMBA01ED0128ED0128
LW2-G088	MBCREOS1K6ASC31	RM11E-C033-B	WLCBPE06SGP2001	WLCGSD01AN0204_10-20	WLCMBA01ED0129ED0129
LW2-G090	MBCREOS1K6CSCC31	RM11E-C033-C	WLCBPE06SGP2024	WLCGSD01AN0204_30-40	WLCMBI02PASH06PASH06
LW2-G091	MBCREOS1K9ASC17	RM11E-C033-D	WLCBPE06SGP2079	WLCGSG04RAA02SD1019	WLCMBI02SED01SED01
LW2-G104	MBCREOS1L1ASCC68A	RM11E-C041-B	WLCBPE06SGP2101	WLCGSG04RAA04SD0506	WLCMBI02SED03SED03
LW2-G108	MBCREOS1L1ASCC68B	RM11E-G043	WLCBPE06SGP2124	WLCGSG04RAA04SD0620	WLCMBI02SED04SED04
LW2-G157	MBCREOS1L1BSCC56	RM11E-G048	WLCBPE06SS05	WLCGSG04RAA05SD1020	WLCMBI02SED05SED05
LW2-G160	MBCREOS1L2ASC52	WLCACF05C13A	WLCBPE06SS20	WLCGSG04RAA06SD0407	WLCMBI02SED05SED51
LW2-G161	MBCREOS1L2ASC78	WLCARI0820080811PRS12	WLCBPE06SS21a	WLCGSG04RAA06SD0415	WLCMBI02SED06SED06
LW2-G276	MBCREOS1L2BSC53	WLCARI0820080930PRS01	WLCBPE06SS23	WLCGSG04RAA06SD1520	WLCMBI02SED07SED07
LW2-G278	MBCREOS1L4ASC45	WLCARI0820080930PRS02	WLCBPE06SS24	WLCGSG04RAA08SD0720	WLCMBI02SED09SED09
LW2-G284	MBCREOS1L4BSC42	WLCARI0820081029PRS05	WLCCIF01020304020304	WLCGSG04RAA09SD0516	WLCMBJ99D09903D09903
LW2-G288	MBCREOS1L5ASCC35	WLCARI0820081104PRS06	WLCCIF01T01T01	WLCGSG04RAA10SD1020	WLCMBJ99D09904D09904

Table D1.3-32. Surface and Subsurface Sediment Samples Excluded from Summary Statistics Tables per Exclusion Criteria.

Excluded Sediment Samples	Excluded Sediment Samples	Excluded Sediment Samples	Excluded Sediment Samples	Excluded Sediment Samples	Excluded Sediment Samples
LW2-G292	MBCREOS1L6BSC32	WLCARI0820081104PRS07	WLCCIF01T02T02	WLCGSG04RAA11SD1320	WLCMBJ99D09907D09907
LW2-G298	MBCREOS1L8ASC19	WLCARI0820081107PRS09	WLCCIF01T03T03	WLCGSG04RAA12SD1820	WLCMBJ99D09908D09908
LW2-G519-1	MBCREOS1M1ASC56	WLCARI0820081107PRS11	WLCCIF01T04T04	WLCGSG04RAA13SD1115	WLCMBJ99D09909D09909
LW2-G519-2	MBCREOS1M1ASC69	WLCARI08200811124.0	WLCCPF01SD0101SD139F	WLCGSG04RAA14SD1014	WLCMBJ99D09909D09953
WLCMBJ99D09911D09911	WLCRIL99HCSS15HCSS15	WLCRIV99G10G10S14	WLCT4C04VC24VC2435	WLCT4G06T4PI02E	WLCT4J98HCS30HCS30
WLCMBJ99D09912D09912	WLCRIL99HCSS16HCSS16	WLCRIV99G1112.514	WLCT4C04VC24VC2457	WLCT4G06T4PI02F	WLCT4J98HCS31HCS31
WLCMBJ99D09913D09913	WLCRIL99HCSS17HCSS17	WLCRIV99G1238.540	WLCT4C04VC24VC2479	WLCT4G06T4PI02G	WLCT4J98HCS35HCS35
WLCMBJ99D09914D09914	WLCRIL99HCSS18HCSS18	WLCRIV99G1248.550	WLCT4E97T401HCT401	WLCT4G06T4PI02H	WLCT4J98HCS37HCS37
WLCMBJ99D09915D09915	WLCRIL99HCSS19HCSS19	WLCRIV99G125354.5	WLCT4E97T401HCT401B	WLCT4G06T4PI032A	WLCT4J98HCS38HCS38
WLCMBJ99D09916D09916	WLCRIL99HCSS20HCSS20	WLCRIV99G126869.5	WLCT4E97T402HCT402	WLCT4G06T4PI032B	WLCT4L01T4COMPCOMP
WLCMBJ99D09916D09951	WLCRIL99HCSS22HCSS22	WLCRIV99G127374.5	WLCT4E97T402HCT402B	WLCT4G06T4PI032C	WLCT4L01T4VC01T4011A
WLCMBJ99D09917D09917	WLCRIL99HCSS25HCSS25	WLCRIV99G12G12S08	WLCT4E97T403HCT403	WLCT4G06T4PI03A	WLCT4L01T4VC01T4011B
WLCMBJ99D09918D09918	WLCRIL99HCSS26HCSS26	WLCRIV99G12G12S11	WLCT4E97T403HCT403B	WLCT4G06T4PI03B	WLCT4L01T4VC01T4011C
WLCMBJ99D09919D09919	WLCRIL99HCSS28HCSS28	WLCRIV99G13A13AS02	WLCT4G06T4B41101A	WLCT4G06T4PI03C	WLCT4L01T4VC02T4012A
WLCMBJ99D09920D09920	WLCRIL99HCSS34CSS101	WLCRIV99G13A13AS07	WLCT4G06T4B41101B	WLCT4G06T4PI03D	WLCT4L01T4VC02T4012B
WLCMBJ99D09921D09921	WLCRIL99HCSS34HCSS34	WLCRIV99G13A15.518	WLCT4G06T4B41102A	WLCT4G06T4PI03E	WLCT4L01T4VC02T4012C
WLCMBJ99D09923D09923	WLCRIV99G01G01S03	WLCRIV99G13ACG13AC	WLCT4G06T4B41102B	WLCT4G06T4PI03F	WLCT4L01T4VC03T4013A
WLCMBJ99D09924D09924	WLCRIV99G01G01S06	WLCRIV99G13B13BS07	WLCT4G06T4B41103A	WLCT4G06T4PI03G	WLCT4L93T408-1T40801
WLCMBJ99D09925D09925	WLCRIV99G04G04S03	WLCRIV99G13B13BS17	WLCT4G06T4B41103AA	WLCT4G06T4PI03H	WLCT4L93T408-2T40802
WLCMBJ99D09926D09926	WLCRIV99G04G04S07	WLCRIV99G13B13BS18	WLCT4G06T4B41103B	WLCT4G06T4PI042A	WLCT4L93T408-3T40803
WLCMBJ99D09926D09952	WLCRIV99G04G04S08	WLCRIV99G13B13BS19	WLCT4G06T4B41103BB	WLCT4G06T4PI042B	WLCT5K99B50101B50101
WLCMBJ99D09927D09927	WLCRIV99G05.566.5	WLCRIV99G1414S09A	WLCT4G06T4B41103C	WLCT4G06T4PI042C	WLCT5K99B50102B50102
WLCMBJ99D09928D09928	WLCRIV99G055/7879	WLCRIV99G14G14S04	WLCT4G06T4B41103CC	WLCT4G06T4PI042D	WLCT5K99B50103argeC1
WLCMBJ99D09929D09929	WLCRIV99G05G05S00	WLCRIV99G14G14S06	WLCT4G06T4B41103D	WLCT4G06T4PI042E	WLCT5K99B501C1B501C1
WLCMBJ99D09933D09933	WLCRIV99G05G05S04	WLCRIV99G16G16S06	WLCT4G06T4B41103E	WLCT4G06T4PI04A	WLCT5K99B503C1B503C1
WLCMBJ99D09933D09950	WLCRIV99G05G05S05	WLCRIV99G16G16S10	WLCT4G06T4B41104A	WLCT4G06T4PI04B	WLR048811.7C11.7C1
WLCMBJ99D09937D09937	WLCRIV99G05HCG05C	WLCRIV99G16G16S12	WLCT4G06T4B41104AA	WLCT4G06T4PI04C	WLR048811.7C11.7C2
WLCOFJ02480448040	WLCRIV99G05HCG101	WLCRIV99PA01PA01	WLCT4G06T4B41104B	WLCT4G06T4PI04D	WLR048811.7C11.7C3
WLCRFE95RF151115RF	WLCRIV99G06A06AS02	WLCRIV99PA02PA02	WLCT4G06T4B41104BB	WLCT4G06T4PI07A	WLR04888.1L8.1L
WLCRFE95RF161116RF	WLCRIV99G06A06AS04	WLCT0F01T20101T2011A	WLCT4G06T4B41104C	WLCT4G06T4PI07B	WLR04888.3L8.3L
WLCRFE95RF171117RF	WLCRIV99G06B.565.5	WLCT0F01T20101T2011B	WLCT4G06T4B41104D	WLCT4G06T4PI07C	WLR04888.7L8.7L
WLCRFE95RF181118RF	WLCRIV99G06B06BS02	WLCT0F01T20101T2011C	WLCT4G06T4B41104E	WLCT4G06T4PI08A	WLR048881L90L81L90L
WLCRFE95RF181119RF	WLCRIV99G06B06BS13	WLCT0F01T20102T2012A	WLCT4G06T4B41401A	WLCT4G06T4PI08B	WLR048883L87L83L87L
WLCRIJ9918COMP18COMP	WLCRIV99G06B3940.5	WLCT0F01T20102T2012B	WLCT4G06T4B41401B	WLCT4G06T4PI08C	WLR04889.0C9.0C
WLCRIJ99CZ01CZ01	WLCRIV99G06B51.553	WLCT0F01T50101T5011A	WLCT4G06T4B41401C	WLCT4G06T4PI08D	WLR04889.0L9.0L
WLCRIJ99CZ02CZ02	WLCRIV99G06B61.563	WLCT0F01T50102T5012A	WLCT4G06T4B41401D	WLCT4G06T4PI08E	WLR04889.2L9.2L
WLCRIJ99CZ03CZ03	WLCRIV99G06BCG06BC	WLCT0I98B501C1B501C1	WLCT4G06T4B41401E	WLCT4G06T4PI08F	WLR04889.8L9.8L
WLCRIJ99CZ03CZ031	WLCRIV99G07G07S03	WLCT0I98B501C2B501C2	WLCT4G06T4B41401F	WLCT4G06T4S304A	WLR0692WRGC01WRGC1
WLCRIJ99CZ04CZ04	WLCRIV99G07G07S05	WLCT0I98ISC1ISC1	WLCT4G06T4MD01A	WLCT4G06T4S304B	WLR0692WRGC02WRGC2B
WLCRIJ99CZ05CZ05	WLCRIV99G07G07S06	WLCT0I98ISC2ISC2	WLCT4G06T4MD01B	WLCT4G06T4S304C	WLR0692WRGC02WRGC2T
WLCRIJ99CZ06CZ06	WLCRIV99G07G07S19	WLCT0K96C0304HCT201	WLCT4G06T4MD01C	WLCT4G06T4S304D	WLR0692WRGC03WRGC3
WLCRIJ99CZ07CZ07	WLCRIV99G07G07S27	WLCT0K96C0506HCT202	WLCT4G06T4MD01D	WLCT4G06T4S304E	WLR0692WRGC04WRGC4
WLCRIJ99CZ08CZ08	WLCRIV99G07HCG07C	WLCT0K96C0506HCT2021	WLCT4G06T4MD02A	WLCT4G06T4S304F	WLR0692WRGC05WRGC5
WLCRIJ99VS18R1VS18R1	WLCRIV99G08.545.5	WLCT0K96C0708HCT203	WLCT4G06T4MD02B	WLCT4J97104105B41603	WLR0797WRGC30RGC30A
WLCRIJ99VS18R2VS18R2	WLCRIV99G0856.558	WLCT0K96HCGC01HCT101	WLCT4G06T4MD02C	WLCT4J97CVC102B41601	WLR0797WRGC31RGC31A
WLCRIL99HCSS05CSS100	WLCRIV99G0876.578	WLCT0K96HCGC02HCT102	WLCT4G06T4MD02D	WLCT4J97CVC102B41604	WLR0988LWR10LWR10
WLCRIL99HCSS05HCSS05	WLCRIV99G08G08S03	WLCT0K96HCGC10HCT501	WLCT4G06T4MD02E	WLCT4J97CVC103B41602	WLR0988LWR10LWR101
WLCRIL99HCSS06HCSS06	WLCRIV99G08HCG08C	WLCT0K96HCSS09HCT502	WLCT4G06T4PI01A	WLCT4J98HCS01HCS01	WLR1196WRVC01WRVC01

Table D1.3-32. Surface and Subsurface Sediment Samples Excluded from Summary Statistics Tables per Exclusion Criteria.

Excluded Sediment Samples	Excluded Sediment Samples	Excluded Sediment Samples	Excluded Sediment Samples	Excluded Sediment Samples	Excluded Sediment Samples
WLCRIL99HCSS07HCSS07	WLCRIV99G08HCG100	WLCT1L91TERM01112172	WLCT4G06T4PI01B	WLCT4J98HCS02HCS02	WLR1196WRVC02WRVC02
WLCRIL99HCSS08HCSS08	WLCRIV99G09.512.5	WLCT1L91TERM01112173	WLCT4G06T4PI01C	WLCT4J98HCS03HCS03	WLR1196WRVC03WRVC03
WLCRIL99HCSS09HCSS09	WLCRIV99G091617.5	WLCT4C04PS33331113	WLCT4G06T4PI01D	WLCT4J98HCS09HCS09	WLR1196WRVC04WRVC04
WLCRIL99HCSS10HCSS10	WLCRIV99G092122.5	WLCT4C04PS33C33911	WLCT4G06T4PI01E	WLCT4J98HCS10HCS10	WLR1196WRVC05WRVC05
WLCRIL99HCSS11HCSS11	WLCRIV99G10G10S04	WLCT4C04PS33VC3357	WLCT4G06T4PI01F	WLCT4J98HCS18HCS18	WLR1196WRVC06WRVC06
WLCRIL99HCSS12HCSS12	WLCRIV99G10G10S05	WLCT4C04VC24241113	WLCT4G06T4PI02A	WLCT4J98HCS18VC18S1	WLRPT294GC123B
WLCRIL99HCSS13HCSS13	WLCRIV99G10G10S08	WLCT4C04VC24C24911	WLCT4G06T4PI02B	WLCT4J98HCS18VC18S2	WLRPT294GC123T
WLCRIL99HCSS14HCSS14	WLCRIV99G10G10S10	WLCT4C04VC24VC2401	WLCT4G06T4PI02C	WLCT4J98HCS19HCS19	WLRPT294GC4
WLCRIL99HCSS15CSS102	WLCRIV99G10G10S12	WLCT4C04VC24VC2413	WLCT4G06T4PI02D	WLCT4J98HCS24HCS24	WR-WSI98SD0140
					WR-WSI98SD0290
					WR-WSI98SD0320
					WR-WSI98SD0640
					WR-WSI98SD0650
					WR-WSI98SD0760
					WR-WSI98SD0790
					WR-WSI98SD0820
					WR-WSI98SD1090
					WR-WSI98SD1120