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Table A-1-1. Concentrations of all analytes in Round 1 LDW surface sediment samples: Samples SS1-010 through SS18-010

ANALYTE	UNIT	LDW-SS1-010	LDW-SS4-010	LDW-SS5-010	LDW-SS10-010	LDW-SS12-010	LDW-SS13-010	LDW-SS14-010	LDW-SS15-010	LDW-SS17-010	LDW-SS18-010
Metals and trace elements											
Antimony	mg/kg dw	0.3 UJ	0.4 UJ	0.2 UJ	0.4 UJ	0.3 UJ	0.4 UJ	0.2 UJ	0.4 UJ	0.3 U	nr
Arsenic	mg/kg dw	6.2	21.2	6.5	12.4	13.0	13.3	12.1	11.5	14.9	nr
Cadmium	mg/kg dw	0.3 U	0.8	0.2 U	0.5	0.5	0.8	0.2 U	0.6	1.2	nr
Chromium	mg/kg dw	18.9	42	11.2	40	33.1	39.0	60.5	39	38.2	nr
Cobalt	mg/kg dw	4.9	10.8	4.6	11.1	8.5	11.2	8.6	10.4	10	nr
Copper	mg/kg dw	32.3	124	21.4	106	89.7	117	25.4	109	129	nr
Lead	mg/kg dw	27	86	26	65	59	82	22	67	148	nr
Mercury	mg/kg dw	0.09	0.38	0.05	0.39	0.24	0.35	0.06 U	0.6	0.41	nr
Molybdenum	mg/kg dw	1.1	3	0.8	2	1.8	2.2	1.0	2	3.5	nr
Nickel	mg/kg dw	10	26	8	28	24	26	30	26	26	nr
Selenium	mg/kg dw	7 U	10 UJ	6 U	10 U	8 U	9 U	6 UJ	10 U	9 U	nr
Silver	mg/kg dw	0.4 U	0.8	0.4 U	0.7	0.5 U	0.8	0.4 U	0.6	1.3	nr
Thallium	mg/kg dw	0.3 U	0.4 U	0.2 U	0.4 U	0.3 U	0.4 U	0.2 U	0.4 U	0.3 U	nr
Vanadium	mg/kg dw	42.3	81.7	37.1	78.9	59.3	71.0	43.1	74.2	69.6	nr
Zinc	mg/kg dw	60.3	198	78.1	162	154	176	96.8	156	185	nr
Organometals											
Monobutyltin as ion	µg/kg dw	na	R	na	na	na	na	R	R	na	na
Dibutyltin as ion	µg/kg dw	na	5.6 U	na	na	na	na	5.5 U	6.6	na	na
Tributyltin as ion	µg/kg dw	na	19	na	na	na	na	3.7 U	28	na	na
PAHs											
2-Chloronaphthalene	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
2-Methylnaphthalene	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
Acenaphthene	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
Acenaphthylene	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
Anthracene	µg/kg dw	21	21	20 U	29	36	26	20 U	49	68 J	nr
Benzo(a)anthracene	µg/kg dw	61	200	42	320	120	84	36	100	190	11

Table A-1-1. Samples SS1-010 through SS18-010, cont.

ANALYTE	UNIT	LDW-SS1-010	LDW-SS4-010	LDW-SS5-010	LDW-SS10-010	LDW-SS12-010	LDW-SS13-010	LDW-SS14-010	LDW-SS15-010	LDW-SS17-010	LDW-SS18-010
Benzo(a)pyrene	µg/kg dw	91	190	65	380	140	64	50	99	300	9.0
Benzo(b)fluoranthene	µg/kg dw	110	320	69	340	170	120	86	140	420	16
Benzo(g,h,i)perylene	µg/kg dw	50	32	37	39	47	97 U	32	28	100	nr
Benzo(k)fluoranthene	µg/kg dw	74	57	44	84	130	97 U	52	110	420	nr
Total benzofluoranthenes (calc'd)	µg/kg dw	180	380	113	420	300	120	138	250	840	nr
Chrysene	µg/kg dw	130	180	76	190	260	160	95	240	310	nr
Dibenzo(a,h)anthracene	µg/kg dw	19 U	20 U	20 U	20 U	22	97 U	20 U	20 U	98 U	nr
Dibenzofuran	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
Fluoranthene	µg/kg dw	120	320	140	190	390	190	140	220	380	nr
Fluorene	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
Indeno(1,2,3-cd)pyrene	µg/kg dw	50	120	39	220	53	47	42	31	100	6.4
Naphthalene	µg/kg dw	19 U	20 U	34	20 U	19 U	20 U	20 U	20 U	98 U	nr
Phenanthrene	µg/kg dw	50	77	66	70	180	56	51	98	190	nr
Pyrene	µg/kg dw	140	230	110	150	280	170	110	160	650	nr
Total HPAH (calc'd)	µg/kg dw	830	1,650	620	1,910	1,610	840	640	1,130	2,870	nr
Total LPAH (calc'd)	µg/kg dw	71	98	100	99	220	82	51	147	260 J	nr
Total PAH (calc'd)	µg/kg dw	900	1,750	720	2,010	1,830	920	690	1,280	3,130 J	nr
Phthalates											
Bis(2-ethylhexyl)phthalate	µg/kg dw	67 U	83 U	20 U	82 U	180	180	160	64 U	1,100	nr
Butyl benzyl phthalate	µg/kg dw	6.5 U	15 U	6.5 U	26	6.5 U	30	8.2 U	20 U	54 J	6.4 U
Diethyl phthalate	µg/kg dw	17 U	15 U	14 U	14 U	14 U	13 U	8.2 U	20 U	98 U	6.4 U
Dimethyl phthalate	µg/kg dw	6.5 U	15 U	6.5 U	14 U	6.5 U	6.6 U	120	20 U	98 U	6.4 U
Di-n-butyl phthalate	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
Di-n-octyl phthalate	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
Other SVOCs											
1,2,4-Trichlorobenzene	µg/kg dw	6.5 U	15 U	3.3 UJ	7 UJ	6.5 U	6.6 U	4.1 UJ	20 U	98 U	6.4 U
1,2-Dichlorobenzene	µg/kg dw	6.5 U	15 U	6.5 U	14 U	6.5 U	6.6 U	8.2 U	20 U	98 U	6.4 U
1,3-Dichlorobenzene	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
1,4-Dichlorobenzene	µg/kg dw	6.5 U	15 U	6.5 U	14 U	6.5 U	6.6 U	8.2 U	20 U	98 U	6.4 U
2,4,5-Trichlorophenol	µg/kg dw	97 U	98 U	98 U	98 U	96 U	97 U	98 U	98 U	490 U	nr
2,4,6-Trichlorophenol	µg/kg dw	97 U	98 U	98 U	98 U	96 U	97 U	98 U	98 U	490 U	nr

Table A-1-1. Samples SS1-010 through SS18-010, cont.

ANALYTE	UNIT	LDW-SS1-010	LDW-SS4-010	LDW-SS5-010	LDW-SS10-010	LDW-SS12-010	LDW-SS13-010	LDW-SS14-010	LDW-SS15-010	LDW-SS17-010	LDW-SS18-010
2,4-Dichlorophenol	µg/kg dw	97 U	98 U	98 U	98 U	96 U	97 U	98 U	98 U	490 U	nr
2,4-Dimethylphenol	µg/kg dw	6.5 U	15 U	6.5 U	14 U	6.5 U	6.6 U	8.2 U	20 U	98 U	6.4 U
2,4-Dinitrophenol	µg/kg dw	190 U	200 U	200 U	200 U	190 U	200 U	200 U	200 U	980 U	nr
2,4-Dinitrotoluene	µg/kg dw	97 U	98 U	98 U	98 U	96 U	97 U	98 U	98 U	490 U	nr
2,6-Dinitrotoluene	µg/kg dw	97 U	98 U	98 U	98 U	96 U	97 U	98 U	98 U	490 U	nr
2-Chlorophenol	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
2-Methylphenol	µg/kg dw	6.5 U	15 U	6.5 U	14 U	6.5 U	6.6 U	8.2 U	20 U	98 U	6.4 U
2-Nitroaniline	µg/kg dw	97 U	98 U	98 U	98 U	96 U	97 U	98 U	98 U	490 U	nr
2-Nitrophenol	µg/kg dw	97 U	98 U	98 U	98 U	96 U	97 U	98 U	98 U	490 U	nr
3,3'-Dichlorobenzidine	µg/kg dw	97 U	98 U	98 U	98 U	96 U	97 U	98 U	98 U	490 U	nr
3-Nitroaniline	µg/kg dw	97 U	98 U	98 U	98 U	96 U	97 U	98 U	98 U	490 U	nr
4,6-Dinitro-o-cresol	µg/kg dw	190 U	200 U	200 U	200 U	190 U	200 U	200 U	200 U	980 U	nr
4-Bromophenyl phenyl ether	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
4-Chloro-3-methylphenol	µg/kg dw	97 U	98 U	98 U	98 U	96 U	97 U	98 U	98 U	490 U	nr
4-Chloroaniline	µg/kg dw	97 U	98 U	98 U	98 U	96 U	97 U	98 U	98 U	490 U	nr
4-Chlorophenyl phenyl ether	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
4-Methylphenol	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
4-Nitroaniline	µg/kg dw	97 U	98 U	98 U	98 U	96 U	97 U	98 U	98 U	490 U	nr
4-Nitrophenol	µg/kg dw	97 U	98 U	98 U	98 U	96 U	97 U	98 U	98 U	490 U	nr
Aniline	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
Benzoic acid	µg/kg dw	54 J	150 UJ	65 U	140 UJ	65 U	66 U	82 UJ	200 U	980 U	64 U
Benzyl alcohol	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	32 U
bis(2-chloroethoxy)methane	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
bis(2-chloroethyl)ether	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
bis(2-chloroisopropyl)ether	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
Carbazole	µg/kg dw	19 U	20 U	20 U	20 U	23	20 U	20 U	20 U	98 U	nr
Hexachlorobenzene	µg/kg dw	3.2 UJ	7.4 UJ	0.98 U	4.0 UJ	6.5 U	1.6 U	0.99 U	20 U	98 U	6.4 U
Hexachlorobutadiene	µg/kg dw	6.5 U	15 U	0.98 U	14 U	6.5 U	1.6 UJ	8.2 U	20 U	98 U	6.4 U
Hexachlorocyclopentadiene	µg/kg dw	97 UJ	98 UJ	98 UJ	98 UJ	96 UJ	97 UJ	98 UJ	98 UJ	490 U	nr
Hexachloroethane	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
Isophorone	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr

Table A-1-1. Samples SS1-010 through SS18-010, cont.

ANALYTE	UNIT	LDW-SS1-010	LDW-SS4-010	LDW-SS5-010	LDW-SS10-010	LDW-SS12-010	LDW-SS13-010	LDW-SS14-010	LDW-SS15-010	LDW-SS17-010	LDW-SS18-010
Nitrobenzene	µg/kg dw	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U	nr
N-Nitrosodimethylamine	µg/kg dw	32 U	74 U	33 U	68 U	32 U	33 U	41 U	98 U	490 U	32 U
N-Nitroso-di-n-propylamine	µg/kg dw	32 U	74 U	33 U	68 U	32 U	33 U	41 U	98 U	490 U	32 U
N-Nitrosodiphenylamine	µg/kg dw	6.5 U	15 U	6.5 U	14 U	6.5	6.6	8.2 U	20 U	98 U	6.4 U
Pentachlorophenol	µg/kg dw	32 UJ	74 U	33 UJ	68 U	32 UJ	33 UJ	41 U	98 U	490 U	32 U
Phenol	µg/kg dw	19 U	20 U	20 U	24	25	20 U	20 U	20 U	98 U	nr
Polychlorinated biphenyls											
Aroclor-1016	µg/kg dw	19 UJ	20 UJ	20 UJ	19 U	19 UJ	16 UJ	20 UJ	20 UJ	20 U	nr
Aroclor-1221	µg/kg dw	19 UJ	20 UJ	20 UJ	19 U	19 UJ	16 UJ	20 UJ	20 UJ	20 U	nr
Aroclor-1232	µg/kg dw	38 UJ	20 UJ	20 UJ	19 U	19 UJ	16 UJ	20 UJ	20 UJ	20 U	nr
Aroclor-1242	µg/kg dw	19 UJ	20 UJ	20 UJ	19 U	19 UJ	32 J	20 UJ	20 UJ	31	nr
Aroclor-1248	µg/kg dw	32 J	41 J	20 UJ	19 U	45 J	16 UJ	30 J	35 J	20 U	nr
Aroclor-1254	µg/kg dw	79	62 J	20 U	31	77	79	20 J	56	54	nr
Aroclor-1260	µg/kg dw	50	50 J	20 U	19 U	49	80	20 U	37 J	35	nr
Total PCBs (calc'd)	µg/kg dw	161 J	153 J	20 UJ	31	171 J	191 J	50 J	128 J	120	nr
Pesticides											
2,4'-DDD	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
2,4'-DDE	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
2,4'-DDT	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
4,4'-DDD	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
4,4'-DDE	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
4,4'-DDT	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
Total DDTs (calc'd)	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
Aldrin	µg/kg dw	na	na	0.98 U	na	na	1.6 U	na	na	na	nr
Dieldrin	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
Total aldrin/dieldrin (calc'd)	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
alpha-BHC	µg/kg dw	na	na	0.98 U	na	na	1.6 U	na	na	na	nr
beta-BHC	µg/kg dw	na	na	0.98 U	na	na	1.6 U	na	na	na	nr
delta-BHC	µg/kg dw	na	na	0.98 U	na	na	1.6 U	na	na	na	nr
gamma-BHC	µg/kg dw	na	na	0.98 U	na	na	1.6 UJ	na	na	na	nr
alpha-Chlordane	µg/kg dw	na	na	0.98 U	na	na	1.6 U	na	na	na	nr

Table A-1-1. Samples SS1-010 through SS18-010, cont.

ANALYTE	UNIT	LDW-SS1-010	LDW-SS4-010	LDW-SS5-010	LDW-SS10-010	LDW-SS12-010	LDW-SS13-010	LDW-SS14-010	LDW-SS15-010	LDW-SS17-010	LDW-SS18-010
gamma-Chlordane	µg/kg dw	na	na	0.98 U	na	na	1.6 U	na	na	na	nr
Total chlordane (calc'd)	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
alpha-Endosulfan	µg/kg dw	na	na	0.98 U	na	na	1.6 U	na	na	na	nr
beta-Endosulfan	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
Endosulfan sulfate	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
Endrin	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
Endrin aldehyde	µg/kg dw	na	na	2.0 UJ	na	na	3.1 UJ	na	na	na	nr
Endrin ketone	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
Heptachlor	µg/kg dw	na	na	0.98 U	na	na	1.6 U	na	na	na	nr
Heptachlor epoxide	µg/kg dw	na	na	0.98 U	na	na	1.6 U	na	na	na	nr
Methoxychlor	µg/kg dw	na	na	9.8 U	na	na	16 U	na	na	na	nr
Mirex	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
Cis-Nonachlor	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
Oxychlordane	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
Toxaphene	µg/kg dw	na	na	98 U	na	na	160 U	na	na	na	nr
Trans-Nonachlor	µg/kg dw	na	na	2.0 U	na	na	3.1 U	na	na	na	nr
Sediment grain size											
Fractional % phi >-1 (>2,000 µm)	% dw	0.6	2.2	9.6	0.5	1.7	2.4	28.1	0.1 U	0.9	nr
Fractional % phi -1-0 (1,000-2,000 µm)	% dw	1.0	2.0	2.4	0.6	1.8	1.2	5.6	0.4	0.5	nr
Fractional % phi 0-1 (500-1,000 µm)	% dw	10.9	2.5	18.3	3.0	5.7	1.9	12.6	1.3	3	nr
Fractional % phi 1-2 (250-500 µm)	% dw	46.1	4.4	50.0	5.1	18.6	5.7	29.3	6.4	6.3	nr
Fractional % phi 2-3 (125-250 µm)	% dw	26.7	5.9	16.0	5.7	17.6	11.6	17.6	6.7	15.3	nr
Fractional % phi 3-4 (62.5-125 µm)	% dw	5.4	7.2	0.9	8.3	12.3	13.3	3.2	11.2	12	nr
Fractional % phi 4-5 (31.2-62.5 µm)	% dw	1.2	8.7	0.3	9.1	4.7	11.8	0.7	11.3	12	nr
Fractional % phi 5-6 (15.6-31.2 µm)	% dw	1.3	12.4	0.4	15.1	9.3	13.2	0.3	14.5	7.3	nr
Fractional % phi 6-7 (7.8-15.6 µm)	% dw	1.6	14.5	0.4	17.4	8.1	12.0	0.4	16.3	12.9	nr
Fractional % phi 7-8 (3.9-7.8 µm)	% dw	1.6	12.0	0.3	11.9	6.3	8.9	0.4	10.0	9.1	nr
Fractional % phi 8-9 (1.95-3.9 µm)	% dw	1.1	8.7	0.3	7.7	4.3	5.6	0.5	7.0	6.2	nr
Fractional % phi 9-10 (0.98-1.95 µm)	% dw	0.9	6.5	0.2	5.3	3.1	4.0	0.3	4.6	4.8	nr
Fractional % phi 10+ (<0.98 µm)	% dw	1.6	13.3	0.9	10.4	6.6	8.2	0.8	10.3	10.7	nr
Rocks (total calc'd)	% dw	0.6	2.2	9.6	0.5	1.7	2.4	28.1	0.1 U	0.9	nr

Table A-1-1. Samples SS1-010 through SS18-010, cont.

ANALYTE	UNIT	LDW-SS1-010	LDW-SS4-010	LDW-SS5-010	LDW-SS10-010	LDW-SS12-010	LDW-SS13-010	LDW-SS14-010	LDW-SS15-010	LDW-SS17-010	LDW-SS18-010
Sand (total calc'd)	% dw	90.1	22.0	87.6	22.7	56.0	33.7	68.3	26.0	37	nr
Silt (total calc'd)	% dw	5.7	47.6	1.4	53.5	28.4	45.9	1.8	52.1	41	nr
Clay (total calc'd)	% dw	3.6	28.5	1.4	23.4	14.0	17.8	1.6	21.9	21.7	nr
Fines (percent silt+clay)	% dw	9.3	76.1	2.8	76.9	42.4	63.7	3.4	74.0	63	nr
Conventional parameters											
Total organic carbon (TOC)	% dw	1.58	2.44	0.732	1.63	1.88	1.80	0.790	1.79	1.72	0.122 ^a
Total solids	% ww	70.88	44.90	78.70	47.10	58.20	52.10	76.20	49.70	56.90	nr
Total solids (preserved)	% ww	72.33	41.60	77.80	44.60	59.50	50.90	77.80	45.50	61.95	nr
Sulfides (total)	mg/kg dw	15	290	18	90	190	140	2.9 U	32	45	nr
Ammonia (total as nitrogen)	mg-N/kg	3.57	19.6	0.25	7.00	6.67	6.95	2.47	11.3	4.45	nr

^a TOC in this sample was analyzed by King County. The TOC result is presented in this report because the value is used to calculate the organic carbon-normalized concentrations presented in Tables A-3-1 through A-3-9.

dw – dry weight

ww – wet weight

na – not analyzed

nr – not reported; data will be provided separately

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PAHs, total PCBs, and total DDTs are presented in Appendix B.

Totals were calculated for each sediment grain size category using the following grain size ranges: rock – all fractions >2,000 µm; sand – all fractions between 63 and 2,000 µm; silt – all fractions between 3.9 and 63 µm; and clay – all fractions <3.9 µm.

Data qualifiers: U – not detected at reporting limit shown
 J – estimated concentration
 UJ – not detected at estimated reporting limit shown
 R – result was rejected

Table A-1-2. Concentrations of all analytes in Round 1 LDW surface sediment samples: Samples SS20-010 through SS33-010

ANALYTE	UNIT	LDW-SS20-010	LDW-SS22-010	LDW-SS23-010	LDW-SS26-010	LDW-SS27-010	LDW-SS200-010 (field duplicate) ^a	LDW-SS28-010	LDW-SS31-010	LDW-SS32-010	LDW-SS33-010
Metals and trace elements											
Antimony	mg/kg dw	nr	0.3 UJ	0.3 U	0.4 UJ	0.4 UJ	0.4 UJ	0.3 UJ	2.2 J	0.4 UJ	0.3 UJ
Arsenic	mg/kg dw	nr	8.5	4.4	11.5	13.7	10.6	12.5	122	15.7	11.3
Cadmium	mg/kg dw	nr	1.4	0.2 U	1.1	0.4 U	0.4 U	0.5	3.2	1.8	0.3 U
Chromium	mg/kg dw	nr	41.5	15.4	40.8	24	22.9	32.1	55	40	29.4
Cobalt	mg/kg dw	nr	12.3	4.8	9.8	6.4	6.3	6.6	17.3	12.5	6.6
Copper	mg/kg dw	nr	103	26.1	96.5	52.5	52.3	47.8	245	124	29.4
Lead	mg/kg dw	nr	73	16	73	28	30	87	172	77	51
Mercury	mg/kg dw	nr	0.28	0.07	0.39	0.11	0.12	0.12	0.33	0.34	0.05 U
Molybdenum	mg/kg dw	nr	2.2	0.9	2.1	3	2.7	2.1	13	2	0.9
Nickel	mg/kg dw	nr	25	10	23	14	14	25	35	304	32
Selenium	mg/kg dw	nr	8 UJ	6 U	9 U	10 U	9 U	8 U	10 U	10 UJ	7 U
Silver	mg/kg dw	nr	1.0	0.4 U	1.1	0.6 U	0.6 U	0.5	1.2	0.8	0.4 U
Thallium	mg/kg dw	nr	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.3 U
Vanadium	mg/kg dw	nr	71.5	41.6	66.9	49.8	49.7	49.4	84.9	70.5	42.4
Zinc	mg/kg dw	nr	145	48.8	163	87	88	150	997	414	110
Organometals											
Monobutyltin as ion	µg/kg dw	R	na	na	na	R	R	R	4.8 J	R	R
Dibutyltin as ion	µg/kg dw	5.7 U	na	na	na	9.0	5.6 U	3.9 J	30	11	5.8 U
Tributyltin as ion	µg/kg dw	12	na	na	na	34	22	7.5	81	33	3.9 U
PAHs											
2-Chloronaphthalene	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
2-Methylnaphthalene	µg/kg dw	nr	30 U	21	19 U	20 U	20 U	97 U	97 U	20 U	20 U
Acenaphthene	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	23	20 U
Acenaphthylene	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
Anthracene	µg/kg dw	nr	43	19 U	37	28	57	97 U	170	59	20 U
Benzo(a)anthracene	µg/kg dw	nr	200	25	180	310	160	100	280	190	57

Table A-1-2. Samples SS20-010 through SS33-010, cont.

ANALYTE	UNIT	LDW-SS20-010	LDW-SS22-010	LDW-SS23-010	LDW-SS26-010	LDW-SS27-010	LDW-SS200-010 (field duplicate) ^a	LDW-SS28-010	LDW-SS31-010	LDW-SS32-010	LDW-SS33-010
Benzo(a)pyrene	µg/kg dw	nr	220	29	220	290	220	130	420	240	51
Benzo(b)fluoranthene	µg/kg dw	nr	270	44	220	400	270	210	580	320	100
Benzo(g,h,i)perylene	µg/kg dw	nr	150 U	19 U	97 U	97 U	98 U	59 J	110	98 U	16 J
Benzo(k)fluoranthene	µg/kg dw	nr	150 U	19 U	97 U	100	120	210	570	200	70
Total benzofluoranthenes (calc'd)	µg/kg dw	nr	270	44	220	500	390	420	1,150	520	170
Chrysene	µg/kg dw	nr	270	36	220	240	370	240	630	410	150
Dibenzo(a,h)anthracene	µg/kg dw	nr	150 U	19 U	97 U	97 U	98 U	97 U	97 U	98 U	20 U
Dibenzofuran	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
Fluoranthene	µg/kg dw	nr	390	41	240	390	390	380	670	590	200
Fluorene	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	21	20 U
Indeno(1,2,3-cd)pyrene	µg/kg dw	nr	100	21	140	150	180	16	110	98 U	18 J
Naphthalene	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
Phenanthrene	µg/kg dw	nr	140	23	93	120	130	170	240	180	22
Pyrene	µg/kg dw	nr	510	28	240	270	300	370	700	460	97
Total HPAH (calc'd)	µg/kg dw	nr	1,960	224	1,460	2,150	2,010	1,720 J	4,070	2,410	760 J
Total LPAH (calc'd)	µg/kg dw	nr	180	23	130	150	190	170	410	280	22
Total PAH (calc'd)	µg/kg dw	nr	2,140	247	1,590	2,300	2,200	1,890 J	4,480	2,690	780 J
Phthalates											
Bis(2-ethylhexyl)phthalate	µg/kg dw	nr	1,100	19 U	200	30 U	88 U	74 J	160	93 U	26
Butyl benzyl phthalate	µg/kg dw	nr	49	8.6 U	350	42	17	6.6 U	97 U	20 U	6.5 U
Diethyl phthalate	µg/kg dw	nr	29 U	8.6 U	12 U	14 U	14 U	6.6 U	97 U	20 U	20 U
Dimethyl phthalate	µg/kg dw	nr	29 U	8.6 U	12 U	14 U	14 U	6.6 U	97 U	20 U	6.5 U
Di-n-butyl phthalate	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
Di-n-octyl phthalate	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
Other SVOCs											
1,2,4-Trichlorobenzene	µg/kg dw	nr	29 U	8.6 U	12 U	7.1 UJ	14 U	6.6 U	97 U	20 U	6.5 U
1,2-Dichlorobenzene	µg/kg dw	nr	29 U	8.6 U	12 U	14 U	14 U	6.6 U	97 U	20 U	6.5 U
1,3-Dichlorobenzene	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
1,4-Dichlorobenzene	µg/kg dw	nr	29 U	8.6 U	12 U	14 U	14 U	6.6 U	97 U	20 U	6.5 U
2,4,5-Trichlorophenol	µg/kg dw	nr	150 U	97 U	97 U	97 U	98 U	490 U	480 U	98 U	98 U

Table A-1-2. Samples SS20-010 through SS33-010, cont.

ANALYTE	UNIT	LDW-SS20-010	LDW-SS22-010	LDW-SS23-010	LDW-SS26-010	LDW-SS27-010	LDW-SS200-010 (field duplicate) ^a	LDW-SS28-010	LDW-SS31-010	LDW-SS32-010	LDW-SS33-010
2,4,6-Trichlorophenol	µg/kg dw	nr	150 U	97 U	97 U	97 U	98 U	490 U	480 U	98 U	98 U
2,4-Dichlorophenol	µg/kg dw	nr	150 U	97 U	97 U	97 U	98 U	490 U	480 U	98 U	98 U
2,4-Dimethylphenol	µg/kg dw	nr	29 U	8.6 U	12 U	14 U	14 U	6.6 U	97 U	20 U	6.5 U
2,4-Dinitrophenol	µg/kg dw	nr	300 U	190 U	190 U	200 U	200 U	970 U	970 U	200 U	200 U
2,4-Dinitrotoluene	µg/kg dw	nr	150 U	97 U	97 U	97 U	98 U	490 U	480 U	98 U	98 U
2,6-Dinitrotoluene	µg/kg dw	nr	150 U	97 U	97 U	97 U	98 U	490 U	480 U	98 U	98 U
2-Chlorophenol	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
2-Methylphenol	µg/kg dw	nr	29 U	8.6 U	12 U	14 U	14 U	6.6 U	97 U	20 U	6.5 U
2-Nitroaniline	µg/kg dw	nr	150 U	97 U	97 U	97 U	98 U	490 U	480 U	98 U	98 U
2-Nitrophenol	µg/kg dw	nr	150 U	97 U	97 U	97 U	98 U	490 U	480 U	98 U	98 U
3,3'-Dichlorobenzidine	µg/kg dw	nr	150 U	97 U	97 U	97 U	98 U	490 U	480 U	98 U	98 U
3-Nitroaniline	µg/kg dw	nr	150 U	97 U	97 U	97 U	98 U	490 U	480 U	98 U	98 U
4,6-Dinitro-o-cresol	µg/kg dw	nr	300 U	190 U	190 U	200 U	200 U	970 U	970 U	200 U	200 U
4-Bromophenyl phenyl ether	µg/kg dw	nr	30 U	31	19 U	20 U	20 U	97 U	97 U	20 U	20 U
4-Chloro-3-methylphenol	µg/kg dw	nr	150 U	97 U	97 U	97 U	98 U	490 U	480 U	98 U	98 U
4-Chloroaniline	µg/kg dw	nr	150 U	97 U	97 U	97 U	98 U	490 U	480 U	98 U	98 U
4-Chlorophenyl phenyl ether	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
4-Methylphenol	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
4-Nitroaniline	µg/kg dw	nr	150 U	97 U	97 U	97 U	98 U	490 U	480 U	98 U	98 U
4-Nitrophenol	µg/kg dw	nr	150 U	97 U	97 U	97 U	98 U	490 U	480 U	98 U	98 U
Aniline	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
Benzoic acid	µg/kg dw	nr	290 UJ	86 UJ	120 UJ	140 UJ	140 UJ	66 U	970 U	200 U	170
Benzyl alcohol	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	33 U	97 U	20 U	20 U
bis(2-chloroethoxy)methane	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
bis(2-chloroethyl)ether	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
bis(2-chloroisopropyl)ether	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
Carbazole	µg/kg dw	nr	30 U	19 U	19 U	20 U	21	97 U	97 U	28	20 U
Hexachlorobenzene	µg/kg dw	nr	29 U	4.3 UJ	12 U	1.8 U	1.8 U	0.97 U	97 U	1.7 U	3.2 UJ
Hexachlorobutadiene	µg/kg dw	nr	29 U	8.6 U	12 U	1.8 UJ	1.8 UJ	0.97 U	97 U	1.7 UJ	6.5 U
Hexachlorocyclopentadiene	µg/kg dw	nr	150 UJ	97 UJ	97 UJ	97 UJ	98 UJ	490 U	480 U	98 UJ	98 U

Table A-1-2. Samples SS20-010 through SS33-010, cont.

ANALYTE	UNIT	LDW-SS20-010	LDW-SS22-010	LDW-SS23-010	LDW-SS26-010	LDW-SS27-010	LDW-SS200-010 (field duplicate) ^a	LDW-SS28-010	LDW-SS31-010	LDW-SS32-010	LDW-SS33-010
Hexachloroethane	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
Isophorone	µg/kg dw	nr	30 U	26	19 U	20 U	20 U	97 U	97 U	20 U	20 U
Nitrobenzene	µg/kg dw	nr	30 U	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
N-Nitrosodimethylamine	µg/kg dw	nr	140 U	43 U	63 U	71 U	71 U	33 U	480 U	98 U	32 U
N-Nitroso-di-n-propylamine	µg/kg dw	nr	140 U	43 U	63 U	71 U	71 U	33 U	480 U	98 U	32 U
N-Nitrosodiphenylamine	µg/kg dw	nr	29 U	8.6 U	12 U	14 U	14 U	6.6 U	97 U	20 U	6.5 U
Pentachlorophenol	µg/kg dw	nr	140 U	43 U	63 U	71 U	71 U	33 U	480 U	98 U	32 UJ
Phenol	µg/kg dw	nr	130	19 U	19 U	20 U	20 U	97 U	97 U	20 U	20 U
Polychlorinated biphenyls											
Aroclor-1016	µg/kg dw	nr	19 UJ	19 U	75 U	20 U	20 UJ	20 U	20 U	19 UJ	20 U
Aroclor-1221	µg/kg dw	nr	19 UJ	19 U	75 U	20 U	20 UJ	20 U	20 U	19 UJ	20 U
Aroclor-1232	µg/kg dw	nr	19 UJ	19 U	75 U	20 U	20 UJ	20 U	20 U	19 UJ	20 U
Aroclor-1242	µg/kg dw	nr	100 J	19 U	220	21 J	23 J	20 U	20 U	22 J	20 U
Aroclor-1248	µg/kg dw	nr	19 UJ	19 U	75 U	20 U	20 UJ	29	39 U	19 UJ	20 U
Aroclor-1254	µg/kg dw	nr	98	30	270	32	37	51	53	56	26
Aroclor-1260	µg/kg dw	nr	54	30	160	20 U	40	32	43	44	20 U
Total PCBs (calc'd)	µg/kg dw	nr	250 J	60	650	53 J	100 J	112	96	122 J	26
Pesticides											
2,4'-DDD	µg/kg dw	nr	na	na	na	3.6 U	3.6 U	1.9 U	na	3.3 U	na
2,4'-DDE	µg/kg dw	nr	na	na	na	3.6 U	3.6 U	1.9 U	na	3.3 U	na
2,4'-DDT	µg/kg dw	nr	na	na	na	3.6 U	3.6 U	1.9 U	na	3.3 U	na
4,4'-DDD	µg/kg dw	nr	na	na	na	3.6 U	3.6 U	1.9 U	na	3.3 U	na
4,4'-DDE	µg/kg dw	nr	na	na	na	3.6 U	3.6 U	3.8 U	na	3.3 U	na
4,4'-DDT	µg/kg dw	nr	na	na	na	3.6 U	3.6 U	1.9 U	na	3.3 U	na
Total DDTs (calc'd)	µg/kg dw	nr	na	na	na	3.6 U	3.6 U	3.8 U	na	3.3 U	na
Aldrin	µg/kg dw	nr	na	na	na	1.8 U	1.8 U	0.97 U	na	1.7 U	na
Dieldrin	µg/kg dw	nr	na	na	na	6.8 U	3.6 U	1.9 U	na	3.3 U	na
Total aldrin/dieldrin (calc'd)	µg/kg dw	nr	na	na	na	6.8 U	3.6 U	1.9 U	na	3.3 U	na
alpha-BHC	µg/kg dw	nr	na	na	na	1.8 U	1.8 U	0.97 U	na	1.7 U	na
beta-BHC	µg/kg dw	nr	na	na	na	1.8 U	1.8 U	0.97 U	na	1.7 U	na

Table A-1-2. Samples SS20-010 through SS33-010, cont.

ANALYTE	UNIT	LDW-SS20-010	LDW-SS22-010	LDW-SS23-010	LDW-SS26-010	LDW-SS27-010	LDW-SS200-010 (field duplicate) ^a	LDW-SS28-010	LDW-SS31-010	LDW-SS32-010	LDW-SS33-010
delta-BHC	µg/kg dw	nr	na	na	na	1.8 U	1.8 U	0.97 U	na	1.7 U	na
gamma-BHC	µg/kg dw	nr	na	na	na	1.8 UJ	1.8 UJ	0.97 U	na	1.7 UJ	na
alpha-Chlordane	µg/kg dw	nr	na	na	na	1.8 U	1.8 U	0.97 U	na	1.7 U	na
gamma-Chlordane	µg/kg dw	nr	na	na	na	1.8 U	1.8 U	0.97 U	na	1.7 U	na
Total chlordane (calc'd)	µg/kg dw	nr	na	na	na	3.6 U	3.6 U	1.9 U	na	1.7 U	na
alpha-Endosulfan	µg/kg dw	nr	na	na	na	1.8 U	1.8 U	0.97 U	na	1.7 U	na
beta-Endosulfan	µg/kg dw	nr	na	na	na	3.6 U	3.6 U	1.9 U	na	3.3 U	na
Endosulfan sulfate	µg/kg dw	nr	na	na	na	3.6 U	3.6 U	1.9 U	na	3.3 U	na
Endrin	µg/kg dw	nr	na	na	na	3.6 U	3.6 U	1.9 U	na	3.3 U	na
Endrin aldehyde	µg/kg dw	nr	na	na	na	12 UJ	3.6 UJ	1.9 UJ	na	3.3 UJ	na
Endrin ketone	µg/kg dw	nr	na	na	na	3.6 U	3.6 U	1.9 U	na	3.3 U	na
Heptachlor	µg/kg dw	nr	na	na	na	1.8 U	1.8 U	0.97 U	na	1.7 U	na
Heptachlor epoxide	µg/kg dw	nr	na	na	na	1.8 U	1.8 U	0.97 U	na	1.7 U	na
Methoxychlor	µg/kg dw	nr	na	na	na	18 U	18 U	9.7 U	na	17 U	na
Mirex	µg/kg dw	nr	na	na	na	3.6 U	3.6 U	1.9 U	na	3.3 U	na
Cis-Nonachlor	µg/kg dw	nr	na	na	na	3.6 U	3.6 U	1.9 U	na	3.3 U	na
Oxychlordane	µg/kg dw	nr	na	na	na	3.6 U	3.6 U	1.9 U	na	3.3 U	na
Toxaphene	µg/kg dw	nr	na	na	na	180 U	180 U	97 U	na	170 U	na
Trans-Nonachlor	µg/kg dw	nr	na	na	na	3.6 U	3.6 U	1.9 U	na	3.3 U	na
Sediment grain size											
Fractional % phi >-1 (>2,000 µm)	% dw	nr	0.7	0.8	0.8	1.4	1.3	2.3	2.1	3.5	3.9
Fractional % phi -1-0 (1,000-2,000 µm)	% dw	nr	1.5	2.3	1.1	1.7	2.1	1.9	1.5	2.1	1.6
Fractional % phi 0-1 (500-1,000 µm)	% dw	nr	3.3	12.1	1.6	3.9	3.9	1.4	2.6	2.5	3.0
Fractional % phi 1-2 (250-500 µm)	% dw	nr	8.8	41.9	5.8	11.9	12.4	9.3	5.7	7.0	9.6
Fractional % phi 2-3 (125-250 µm)	% dw	nr	17.0	21.0	9.2	21.7	21.5	16.9	6.3	9.5	20.3
Fractional % phi 3-4 (62.5-125 µm)	% dw	nr	16.1	5.0	15.5	21.6	22.0	31.8	4.9	7.4	34.5
Fractional % phi 4-5 (31.2-62.5 µm)	% dw	nr	13.7	2.8	16.1	7.8	8.4	12.8	5.9	8.5	15.0
Fractional % phi 5-6 (15.6-31.2 µm)	% dw	nr	10.8	4.6	12.1	9.9	9.2	5.7	13.6	12.9	4.5
Fractional % phi 6-7 (7.8-15.6 µm)	% dw	nr	9.3	1.4	12.3	7.6	7.5	4.5	18.9	14.9	1.9
Fractional % phi 7-8 (3.9-7.8 µm)	% dw	nr	5.3	2.4	8.6	3.5	3.2	3.5	13.5	10.7	1.5

Table A-1-2. Samples SS20-010 through SS33-010, cont.

ANALYTE	UNIT	LDW-SS20-010	LDW-SS22-010	LDW-SS23-010	LDW-SS26-010	LDW-SS27-010	LDW-SS200-010 (field duplicate) ^a	LDW-SS28-010	LDW-SS31-010	LDW-SS32-010	LDW-SS33-010
Fractional % phi 8-9 (1.95-3.9 µm)	% dw	nr	3.7	1.8	5.0	2.6	2.2	3.0	8.2	6.1	1.3
Fractional % phi 9-10 (0.98-1.95 µm)	% dw	nr	2.8	1.4	3.7	1.6	1.7	1.9	5.7	4.9	1.0
Fractional % phi 10+ (<0.98 µm)	% dw	nr	7.0	2.6	8.2	4.8	4.7	5.0	11.2	10.0	1.9
Rocks (total calc'd)	% dw	nr	0.7	0.8	0.8	1.4	1.3	2.3	2.1	3.5	3.9
Sand (total calc'd)	% dw	nr	46.7	82.3	33.2	60.8	61.9	61.3	21.0	28.5	69.0
Silt (total calc'd)	% dw	nr	39.1	11.2	49.1	28.8	28.3	26.5	51.9	47.0	22.9
Clay (total calc'd)	% dw	nr	13.5	5.8	16.9	9.0	8.6	9.9	25.1	21.0	4.2
Fines (percent silt+clay)	% dw	nr	52.6	17.0	66.0	37.8	36.9	36.4	77.0	68.0	27.1
Conventional parameters											
Total organic carbon (TOC)	% dw	nr	1.77	1.23	1.81	1.60	1.68	1.22	2.17	2.26	1.66
Total solids	% ww	nr	62.30	77.80	54.30	47.30	48.50	55.70	45.20	48.70	66.30
Total solids (preserved)	% ww	nr	63.60	73.80	46.00	44.30	44.80	56.73	44.20	47.90	67.00
Sulfides (total)	mg/kg dw	nr	260	2.2 UJ	64 J	310 J	220 J	130	820 J	390 J	2.6 U
Ammonia (total as nitrogen)	mg-N/kg	nr	21.8	2.59	5.86	5.59	5.25	3.60	12.7	8.98	2.86

^a Field duplicate at same location as LDW-SS27

dw – dry weight

ww – wet weight

na – not analyzed

nr – not reported; data will be provided separately

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PAHs, total PCBs, and total DDTs are presented in Appendix B.

Totals were calculated for each sediment grain size category using the following grain size ranges: rock – all fractions >2,000 µm; sand – all fractions between 63 and 2,000 µm; silt – all fractions between 3.9 and 63 µm; and clay – all fractions <3.9 µm.

Data qualifiers: U – not detected at reporting limit shown
 J – estimated concentration
 UJ – not detected at estimated reporting limit shown
 R – result was rejected

Table A-1-3. Concentrations of all analytes in Round 1 LDW surface sediment samples: Samples SS36-010 through SS49-010

ANALYTE	UNIT	LDW-SS36-010	LDW-SS37-010	LDW-SS38-010	LDW-SS40-010	LDW-SS42-010	LDW-SS43-010	LDW-SS44-010	LDW-SS48-010	LDW-SS49-010
Metals and trace elements										
Antimony	mg/kg dw	0.4 UJ	0.3 UJ	0.4 UJ	0.3 UJ	0.4 UJ	0.6 J	0.9 J	6.8 J	1.8 J
Arsenic	mg/kg dw	18.0	13.6	14.5	16.7	17.1	23.5	46.8	807	171
Cadmium	mg/kg dw	0.5	3.0	0.6	0.8	0.7	0.4 U	0.7	3	1.0
Chromium	mg/kg dw	38	89.2	39	36.4	36.6	32.9	33.2	153	53
Cobalt	mg/kg dw	9.8	9.6	10.9	9.5	10.0	11.2	9.8	50	24
Copper	mg/kg dw	104	108	107	84.2	107	121	214	1,420	605
Lead	mg/kg dw	61	103	58	56	62	48	68	780	210
Mercury	mg/kg dw	0.24	0.69	0.3	0.35	0.31	0.17	0.23	0.79	0.36
Molybdenum	mg/kg dw	2	3.1	2	1.7	2.1	2.0	4.5	75	18
Nickel	mg/kg dw	24	27	27	23	23	26	21	82	30
Selenium	mg/kg dw	10 U	8 UJ	10 U	8 UJ	9 U	9 U	9 U	40 U	20 U
Silver	mg/kg dw	0.7 U	3.9	0.7	0.7	0.6	0.6 U	0.5 U	2 U	1 U
Thallium	mg/kg dw	0.4 U	0.3 U	0.4 U	0.3 U	0.4 U	0.4 U	0.3 U	0.4	0.4 U
Vanadium	mg/kg dw	77.6	70.3	76.7	65.8	74.2	72.2	61.0	76	79
Zinc	mg/kg dw	256	220	155	141	157	165	242	2,830	768
Organometals										
Monobutyltin as ion	µg/kg dw	na	na	R	na	na	R	na	na	8.0 J
Dibutyltin as ion	µg/kg dw	na	na	7.9	na	na	26	na	na	59
Tributyltin as ion	µg/kg dw	na	na	23	na	na	99	na	na	140
PAHs										
2-Chloronaphthalene	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	19 U	98 U
2-Methylnaphthalene	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	58	98 U
Acenaphthene	µg/kg dw	69 J	20 U	20 U	20 U	99 U	20 U	58 U	230	50 J
Acenaphthylene	µg/kg dw	88 J	20 U	20 U	20 U	99 U	20 U	58 U	54	98 U
Anthracene	µg/kg dw	140	27	37	20 U	99	22	200	530	150
Benzo(a)anthracene	µg/kg dw	400	160	190	67	220	120	570	1,200	320

Table A-1-3. Samples SS36-010 through SS49-010, cont.

ANALYTE	UNIT	LDW-SS36-010	LDW-SS37-010	LDW-SS38-010	LDW-SS40-010	LDW-SS42-010	LDW-SS43-010	LDW-SS44-010	LDW-SS48-010	LDW-SS49-010
Benzo(a)pyrene	µg/kg dw	280	140	270	66	230	150	470	1,000	280
Benzo(b)fluoranthene	µg/kg dw	460	230	290	77	330	140	510	1,000	320
Benzo(g,h,i)perylene	µg/kg dw	90 J	98 U	62	36	58 J	46	170	290	150
Benzo(k)fluoranthene	µg/kg dw	440	98 U	87	53	380	99	550	950	200
Total benzofluoranthenes (calc'd)	µg/kg dw	900	230	380	130	710	240	1,060	2,000	520
Chrysene	µg/kg dw	890	110	230	120	350	130	650	1,900	570
Dibenzo(a,h)anthracene	µg/kg dw	100 U	98 U	20 U	20 U	99 U	20 U	58 U	160	98 U
Dibenzofuran	µg/kg dw	130	20 U	20 U	20 U	99 U	20 U	58 U	100	98 U
Fluoranthene	µg/kg dw	2,300	230	190	170	470	150	940	2,900	1,000
Fluorene	µg/kg dw	96 J	20 U	20 U	20 U	99 U	20 U	63	230	68 J
Indeno(1,2,3-cd)pyrene	µg/kg dw	77	80	180	38	20	110	170	360	140
Naphthalene	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	110	98 U
Phenanthrene	µg/kg dw	1,800	52	75	55	170	68	450	1,700	490
Pyrene	µg/kg dw	1,700	270	180	140	480	180	1,100	2,300	720
Total HPAH (calc'd)	µg/kg dw	6,600 J	1,220	1,680	770	2,540 J	1,130	5,100	12,100	3,700
Total LPAH (calc'd)	µg/kg dw	2,200 J	79	112	55	270	90	710	2,900	760 J
Total PAH (calc'd)	µg/kg dw	8,800 J	1,300	1,790	820	2,810 J	1,220	5,800	14,900	4,500 J
Phthalates										
Bis(2-ethylhexyl)phthalate	µg/kg dw	130	760	100 U	270	380	80	120	770	160
Butyl benzyl phthalate	µg/kg dw	6.6 U	20 U	27	20 U	6.6 U	6.6 U	6.6 U	71	98 U
Diethyl phthalate	µg/kg dw	6.6 U	20 U	14 U	20 U	14 U	6.6	11 U	19 U	98 U
Dimethyl phthalate	µg/kg dw	6.6 U	20 U	14 U	20 U	6.6 U	7.3	6.6 U	19 U	98 U
Di-n-butyl phthalate	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	92	98 U
Di-n-octyl phthalate	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	19 U	98 U
Other SVOCs										
1,2,4-Trichlorobenzene	µg/kg dw	6.6 U	20 U	14 U	20 U	6.6 U	6.6 U	6.6 U	19 U	98 U
1,2-Dichlorobenzene	µg/kg dw	6.6 U	20 U	14 U	20 U	6.6 U	6.6 U	6.6 U	19 U	98 U
1,3-Dichlorobenzene	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	19 U	98 U
1,4-Dichlorobenzene	µg/kg dw	6.6 U	20 U	14 U	20 U	6.6 U	6.6 U	6.6 U	19 U	98 U
2,4,5-Trichlorophenol	µg/kg dw	500 U	98 U	98 U	98 U	490 U	98 U	290 U	96 U	490 U

Table A-1-3. Samples SS36-010 through SS49-010, cont.

ANALYTE	UNIT	LDW-SS36-010	LDW-SS37-010	LDW-SS38-010	LDW-SS40-010	LDW-SS42-010	LDW-SS43-010	LDW-SS44-010	LDW-SS48-010	LDW-SS49-010
2,4,6-Trichlorophenol	µg/kg dw	500 U	98 U	98 U	98 U	490 U	98 U	290 U	96 U	490 U
2,4-Dichlorophenol	µg/kg dw	500 U	98 U	98 U	98 U	490 U	98 U	290 U	96 U	490 U
2,4-Dimethylphenol	µg/kg dw	6.6 U	20 U	14 U	20 U	6.6 U	6.6 U	6.6 U	19 U	98 U
2,4-Dinitrophenol	µg/kg dw	1,000 U	200 U	200 UJ	200 UJ	990 U	200 U	580 U	190 UJ	980 U
2,4-Dinitrotoluene	µg/kg dw	500 U	98 U	98 U	98 U	490 U	98 U	290 U	96 U	490 U
2,6-Dinitrotoluene	µg/kg dw	500 U	98 U	98 U	98 U	490 U	98 U	290 U	96 U	490 U
2-Chlorophenol	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	19 U	98 U
2-Methylphenol	µg/kg dw	6.6 U	20 U	14 U	20 U	6.6 U	6.6 U	6.6 U	21	98 U
2-Nitroaniline	µg/kg dw	500 U	98 U	98 U	98 U	490 U	98 U	290 U	96 U	490 U
2-Nitrophenol	µg/kg dw	500 U	98 U	98 U	98 U	490 U	98 U	290 U	96 U	490 U
3,3'-Dichlorobenzidine	µg/kg dw	500 U	98 U	98 U	98 U	490 U	98 U	290 U	96 U	490 U
3-Nitroaniline	µg/kg dw	500 U	98 U	98 U	98 U	490 U	98 U	290 U	96 U	490 U
4,6-Dinitro-o-cresol	µg/kg dw	1,000 U	200 U	200 UJ	200 UJ	990 U	200 U	580 U	190 UJ	980 U
4-Bromophenyl phenyl ether	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	19 U	98 U
4-Chloro-3-methylphenol	µg/kg dw	500 U	98 U	98 U	98 U	490 U	98 U	290 U	96 U	490 U
4-Chloroaniline	µg/kg dw	500 U	98 U	98 U	98 U	490 U	98 U	290 U	96 U	490 U
4-Chlorophenyl phenyl ether	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	19 U	98 U
4-Methylphenol	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	88	98 U
4-Nitroaniline	µg/kg dw	500 U	98 U	98 U	98 U	490 U	98 U	290 U	96 U	490 U
4-Nitrophenol	µg/kg dw	500 U	98 U	98 U	98 U	490 U	98 U	290 U	96 U	490 U
Aniline	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	19 U	98 U
Benzoic acid	µg/kg dw	66 U	200 U	140 UJ	200 U	66 U	66 U	66 U	190 U	980 U
Benzyl alcohol	µg/kg dw	33 U	20 U	20 UJ	20 UJ	33 U	20 U	33 U	19 UJ	98 U
bis(2-chloroethoxy)methane	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	19 U	98 U
bis(2-chloroethyl)ether	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	19 U	98 U
bis(2-chloroisopropyl)ether	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	19 U	98 U
Carbazole	µg/kg dw	170	20 U	20 U	20 U	99 U	20 U	58 U	300	53 J
Hexachlorobenzene	µg/kg dw	0.99 U	20 U	7.1 UJ	20 U	0.98 U	3.3 UJ	3.3 UJ	19 U	98 U
Hexachlorobutadiene	µg/kg dw	0.99 U	20 U	14 U	20 U	0.98 U	6.6 U	6.6 U	19 U	98 U
Hexachlorocyclopentadiene	µg/kg dw	500 U	98 UJ	98 U	98 U	490 U	98 U	290 U	96 U	490 U

Table A-1-3. Samples SS36-010 through SS49-010, cont.

ANALYTE	UNIT	LDW-SS36-010	LDW-SS37-010	LDW-SS38-010	LDW-SS40-010	LDW-SS42-010	LDW-SS43-010	LDW-SS44-010	LDW-SS48-010	LDW-SS49-010
Hexachloroethane	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	19 U	98 U
Isophorone	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	19 U	98 U
Nitrobenzene	µg/kg dw	100 U	20 U	20 U	20 U	99 U	20 U	58 U	19 U	98 U
N-Nitrosodimethylamine	µg/kg dw	33 U	98 U	71 U	98 U	33 U	33 U	33 U	96 U	98 U
N-Nitroso-di-n-propylamine	µg/kg dw	33 U	98 U	71 U	98 U	33 U	33 U	33 U	96 U	490 U
N-Nitrosodiphenylamine	µg/kg dw	6.6 U	20 U	14 U	20 U	6.6 U	6.6 U	6.6 U	19 U	98 U
Pentachlorophenol	µg/kg dw	33 U	98 U	71 U	98 U	33 UJ	33 U	33 UJ	96 U	490 U
Phenol	µg/kg dw	100 U	20 U	20 U	22	180	20 U	58 U	370	240
Polychlorinated biphenyls										
Aroclor-1016	µg/kg dw	20 U	1,100 U	20 U	39 UJ	20 U	20 U	20 U	20 UJ	20 U
Aroclor-1221	µg/kg dw	20 U	1,100 U	20 U	39 UJ	20 U	20 U	20 U	20 UJ	20 U
Aroclor-1232	µg/kg dw	20 U	1,100 U	20 U	39 UJ	20 U	20 U	20 U	20 UJ	20 U
Aroclor-1242	µg/kg dw	20 U	2,100 U	23	170 J	20 U	20 U	24 J	21 J	20 U
Aroclor-1248	µg/kg dw	20 U	4,300 U	20 U	39 UJ	28	20 U	20 U	20 UJ	40 U
Aroclor-1254	µg/kg dw	24	3,300	50	220	42	18 J	45	61	39
Aroclor-1260	µg/kg dw	20 U	1,800	42	120	38	20 U	34	49	31
Total PCBs (calc'd)	µg/kg dw	24	5,100	115	510 J	108	18 J	103 J	131 J	70
Pesticides										
2,4'-DDD	µg/kg dw	2.0 U	na	na	na	2.0 U	na	na	na	na
2,4'-DDE	µg/kg dw	2.0 U	na	na	na	7.3 U	na	na	na	na
2,4'-DDT	µg/kg dw	2.0 U	na	na	na	2.0 U	na	na	na	na
4,4'-DDD	µg/kg dw	2.0 U	na	na	na	2.0 U	na	na	na	na
4,4'-DDE	µg/kg dw	2.0 U	na	na	na	2.0 U	na	na	na	na
4,4'-DDT	µg/kg dw	2.0 U	na	na	na	2.0 U	na	na	na	na
Total DDTs (calc'd)	µg/kg dw	2.0 U	na	na	na	7.3 U	na	na	na	na
Aldrin	µg/kg dw	0.99 U	na	na	na	0.98 U	na	na	na	na
Dieldrin	µg/kg dw	2.0 U	na	na	na	2.0 U	na	na	na	na
Total aldrin/dieldrin (calc'd)	µg/kg dw	2.0 U	na	na	na	2.0 U	na	na	na	na
alpha-BHC	µg/kg dw	0.99 U	na	na	na	0.98 U	na	na	na	na
beta-BHC	µg/kg dw	0.99 U	na	na	na	0.98 U	na	na	na	na

Table A-1-3. Samples SS36-010 through SS49-010, cont.

ANALYTE	UNIT	LDW-SS36-010	LDW-SS37-010	LDW-SS38-010	LDW-SS40-010	LDW-SS42-010	LDW-SS43-010	LDW-SS44-010	LDW-SS48-010	LDW-SS49-010
delta-BHC	µg/kg dw	0.99 U	na	na	na	0.98 U	na	na	na	na
gamma-BHC	µg/kg dw	0.99 U	na	na	na	0.98 U	na	na	na	na
alpha-Chlordane	µg/kg dw	0.99 U	na	na	na	0.98 U	na	na	na	na
gamma-Chlordane	µg/kg dw	0.99 U	na	na	na	0.98 U	na	na	na	na
Total chlordane (calc'd)	µg/kg dw	2.0 U	na	na	na	2.0 U	na	na	na	na
alpha-Endosulfan	µg/kg dw	0.99 U	na	na	na	0.98 U	na	na	na	na
beta-Endosulfan	µg/kg dw	2.0 U	na	na	na	2.0 U	na	na	na	na
Endosulfan sulfate	µg/kg dw	2.0 U	na	na	na	2.0 U	na	na	na	na
Endrin	µg/kg dw	2.0 U	na	na	na	2.0 U	na	na	na	na
Endrin aldehyde	µg/kg dw	2.0 UJ	na	na	na	2.5 UJ	na	na	na	na
Endrin ketone	µg/kg dw	2.0 U	na	na	na	2.0 U	na	na	na	na
Heptachlor	µg/kg dw	0.99 U	na	na	na	1.5 U	na	na	na	na
Heptachlor epoxide	µg/kg dw	0.99 U	na	na	na	0.98 U	na	na	na	na
Methoxychlor	µg/kg dw	9.9 U	na	na	na	9.8 U	na	na	na	na
Mirex	µg/kg dw	2.0 U	na	na	na	2.0 U	na	na	na	na
Cis-Nonachlor	µg/kg dw	2.0 U	na	na	na	2.0 U	na	na	na	na
Oxychlordane	µg/kg dw	2.0 U	na	na	na	2.0 U	na	na	na	na
Toxaphene	µg/kg dw	99 U	na	na	na	98 U	na	na	na	na
Trans-Nonachlor	µg/kg dw	2.0 U	na	na	na	2.0 U	na	na	na	na
Sediment grain size										
Fractional % phi >-1 (>2,000 µm)	% dw	1.6	5.1	0.7	2.3	10.6	10.5	61.7	29.3	5.1
Fractional % phi -1-0 (1,000-2,000 µm)	% dw	1.2	4.4	1.3	2.8	3.4	1.8	2.0	5.5	7.4
Fractional % phi 0-1 (500-1,000 µm)	% dw	2.6	8.6	4.6	7.4	2.5	3.0	2.2	12.4	11.8
Fractional % phi 1-2 (250-500 µm)	% dw	5.0	9.5	7.5	13.8	2.5	6.8	4.9	18.1	10.0
Fractional % phi 2-3 (125-250 µm)	% dw	6.6	3.8	4.6	7.5	2.7	3.5	5.1	10.6	4.0
Fractional % phi 3-4 (62.5-125 µm)	% dw	8.2	4.9	7.5	8.4	4.6	4.1	2.3	7.4	3.9
Fractional % phi 4-5 (31.2-62.5 µm)	% dw	9.1	6.2	10.4	9.2	7.9	6.7	2.1	0.2	6.1
Fractional % phi 5-6 (15.6-31.2 µm)	% dw	14.6	12.4	16.8	11.6	15.9	16.2	4.4	2.7	11.1
Fractional % phi 6-7 (7.8-15.6 µm)	% dw	15.9	17.2	15.9	13.4	16.4	23.3	4.7	3.1	11.7
Fractional % phi 7-8 (3.9-7.8 µm)	% dw	11.2	9.1	10.8	7.9	10.6	7.3	3.5	3.0	8.6

Table A-1-3. Samples SS36-010 through SS49-010, cont.

ANALYTE	UNIT	LDW-SS36-010	LDW-SS37-010	LDW-SS38-010	LDW-SS40-010	LDW-SS42-010	LDW-SS43-010	LDW-SS44-010	LDW-SS48-010	LDW-SS49-010
Fractional % phi 8-9 (1.95-3.9 µm)	% dw	6.9	5.5	6.0	4.6	6.6	4.8	2.2	2.5	6.4
Fractional % phi 9-10 (0.98-1.95 µm)	% dw	5.2	4.3	4.6	4.0	5.2	3.6	1.7	1.8	4.3
Fractional % phi 10+ (<0.98 µm)	% dw	12.0	9.0	9.3	7.3	11.2	8.4	3.2	3.5	9.6
Rocks (total calc'd)	% dw	1.6	5.1	0.7	2.3	10.6	10.5	61.7	29.3	5.1
Sand (total calc'd)	% dw	23.6	31.2	25.5	39.9	15.7	19.2	16.5	54.0	37.1
Silt (total calc'd)	% dw	50.8	44.9	53.9	42.1	50.8	53.5	14.7	9.0	37.5
Clay (total calc'd)	% dw	24.1	18.8	19.9	15.9	23.0	16.8	7.1	7.8	20.3
Fines (percent silt+clay)	% dw	74.9	63.7	73.8	58.0	73.8	70.3	21.8	16.8	57.8
Conventional parameters										
Total organic carbon (TOC)	% dw	1.89	2.33	1.95	1.89	2.04	1.67	1.53	1.36	2.47
Total solids	% ww	43.30	58.30	47.10	56.10	47.10	50.55	74.20	63.20	53.10
Total solids (preserved)	% ww	42.40	53.30	40.50	39.30	37.80	48.33	51.30	56.30	56.70
Sulfides (total)	mg/kg dw	910	650 J	38 J	46 J	37	1,300 J	150 J	90 J	73
Ammonia (total as nitrogen)	mg-N/kg	13.6	8.70	8.48	7.05	26.9	28.8	6.73	9.62	27.6

dw – dry weight

ww – wet weight

na – not analyzed

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PAHs, total PCBs, and total DDTs are presented in Appendix B.

Totals were calculated for each sediment grain size category using the following grain size ranges: rock – all fractions >2,000 µm; sand – all fractions between 63 and 2,000 µm; silt – all fractions between 3.9 and 63 µm; and clay – all fractions <3.9 µm.

Data qualifiers: U – not detected at reporting limit shown
 J – estimated concentration
 UJ – not detected at estimated reporting limit shown
 R – result was rejected

Table A-1-4. Concentrations of all analytes in Round 1 LDW surface sediment samples: Samples SS50-010 through SS60-010

ANALYTE	UNIT	LDW-SS50-010	LDW-SS202-010 (field duplicate) ^a	LDW-SS51-010	LDW-SS52-010	LDW-SS54-010	LDW-SS55-010	LDW-SS56-010	LDW-SS57-010	LDW-SS58-010	LDW-SS60-010
Metals and trace elements											
Antimony	mg/kg dw	0.4 UJ	0.4 UJ	0.4 UJ	0.4 U	0.3 UJ	0.3 UJ	2.2 J	0.4 UJ	0.4 UJ	0.3 UJ
Arsenic	mg/kg dw	16.8	15.8	16.9	15.5	8.8	17.2	161	35.4	33.9	4.1
Cadmium	mg/kg dw	1.2	1.3	0.6	0.7	0.5	0.4	0.6	0.7	1.0	0.3 U
Chromium	mg/kg dw	44	45.5	38	39	25.6	25.4	41.2	43	45.0	12.1
Cobalt	mg/kg dw	8.7	9.2	10.5	10.8	7.6	9.7	18.7	11.3	11.4	4.4
Copper	mg/kg dw	89.4	88.6	127	106	66.2	137	365	179	146	18.4
Lead	mg/kg dw	87	92	64	64	38	53	160	138	287	9
Mercury	mg/kg dw	0.41	0.40	0.3	0.3	0.19	0.15	0.14	0.31	0.29	0.07 U
Molybdenum	mg/kg dw	3	3.3	2	2	2.2	4.7	23.0	5	5.5	0.8
Nickel	mg/kg dw	26	26	24	26	18	20	16	23	28	9
Selenium	mg/kg dw	10 U	9 U	10 UJ	10 U	8 U	7 U	8 U	10 U	9 U	7 U
Silver	mg/kg dw	1.2	1.4	0.8	0.7	0.5 U	0.6	0.9	0.9	1.1	0.4 U
Thallium	mg/kg dw	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.3 U
Vanadium	mg/kg dw	68.3	69.6	73.2	76.3	58.7	63.5	59.3	72.6	68.7	40.6
Zinc	mg/kg dw	181	179	190	167	112	151	607	262	281	38.0
Organometals											
Monobutyltin as ion	µg/kg dw	na	na	R	na	na	R	R	na	R	na
Dibutyltin as ion	µg/kg dw	na	na	7.8	na	na	5.5 U	23	na	6.9	na
Tributyltin as ion	µg/kg dw	na	na	28	na	na	16	96	na	28	na
PAHs											
2-Chloronaphthalene	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
2-Methylnaphthalene	µg/kg dw	97 U	160 U	20 U	20 U	97 U	58 J	98 U	140 U	150 U	19 U
Acenaphthene	µg/kg dw	97 U	160 U	20 U	20 U	97 U	200	98 U	140 U	150 U	19 U
Acenaphthylene	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	77 J	140 U	150 U	19 U
Anthracene	µg/kg dw	110	150 J	39	36	120	87 J	57 J	140 U	150 U	19 U
Benzo(a)anthracene	µg/kg dw	170	280	130	120	250	160	230	190	150	46

Table A-1-4. Samples SS50-010 through SS60-010, cont.

ANALYTE	UNIT	LDW-SS50-010	LDW-SS202-010 (field duplicate) ^a	LDW-SS51-010	LDW-SS52-010	LDW-SS54-010	LDW-SS55-010	LDW-SS56-010	LDW-SS57-010	LDW-SS58-010	LDW-SS60-010
Benzo(a)pyrene	µg/kg dw	260	300	120	110	270	110	330	230	180	26
Benzo(b)fluoranthene	µg/kg dw	400	420	170	140	400	190	280	280	220	38
Benzo(g,h,i)perylene	µg/kg dw	61 J	87 J	38	28	55 J	98 U	130	99 J	86 J	19 U
Benzo(k)fluoranthene	µg/kg dw	350	410	110	100	410	170	310	300	220	24
Total benzofluoranthenes (calc'd)	µg/kg dw	750	830	280	240	810	360	590	580	440	62
Chrysene	µg/kg dw	300	460	270	240	430	220	360	290	290	84
Dibenzo(a,h)anthracene	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
Dibenzofuran	µg/kg dw	97 U	160 U	20 U	20 U	97 U	140	98 U	140 U	150 U	19 U
Fluoranthene	µg/kg dw	270	470	330	250	420	640	400	420	320	180
Fluorene	µg/kg dw	97 U	160 U	20 U	20 U	97 U	240	98 U	140 U	150 U	19 U
Indeno(1,2,3-cd)pyrene	µg/kg dw	10	140	46	32	30	39	130	100 J	80 J	6.5 U
Naphthalene	µg/kg dw	97 U	160 U	20 U	20 U	97 U	140	98 U	140 U	150 U	19 U
Phenanthrene	µg/kg dw	160	430	110	74	200	470	160	190	170	30
Pyrene	µg/kg dw	670	890	240	150	830	590	530	580	400	99
Total HPAH (calc'd)	µg/kg dw	2,490 J	3,460 J	1,450	1,170	3,100 J	2,120	2,700	2,490 J	1,950 J	500
Total LPAH (calc'd)	µg/kg dw	270	580 J	150	110	320	1,140 J	290 J	190	170	30
Total PAH (calc'd)	µg/kg dw	2,760 J	4,040 J	1,600	1,280	3,420 J	3,260 J	2,990 J	2,680 J	2,120 J	530
Phthalates											
Bis(2-ethylhexyl)phthalate	µg/kg dw	560	560	120 U	95	200	98	210	290	280	20
Butyl benzyl phthalate	µg/kg dw	6.5 U	31 U	28	6.5 U	6.5 U	6.5 U	6.5 U	140 U	150 U	6.5 U
Diethyl phthalate	µg/kg dw	6.5 U	31 U	6.6 U	7.8 U	15 U	6.5 U	6.5 U	140 U	150 U	6.5 U
Dimethyl phthalate	µg/kg dw	6.5 U	31 U	6.6 U	6.5 U	6.5 U	6.5 U	6.5 U	140 U	150 U	6.5 U
Di-n-butyl phthalate	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
Di-n-octyl phthalate	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
Other SVOCs											
1,2,4-Trichlorobenzene	µg/kg dw	6.5 U	31 U	6.6 U	6.5 U	6.5 U	6.5 U	6.5 U	140 U	150 U	6.5 U
1,2-Dichlorobenzene	µg/kg dw	6.5 U	31 U	6.6 U	6.5 U	6.5 U	6.5 U	6.5 U	140 U	150 U	6.5 U
1,3-Dichlorobenzene	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
1,4-Dichlorobenzene	µg/kg dw	6.5 U	31 U	6.6 U	6.5 U	6.5 U	6.5 U	6.5 U	140 U	150 U	6.5 U
2,4,5-Trichlorophenol	µg/kg dw	480 U	770 U	98 U	99 U	480 U	490 U	490 U	720 U	740 U	97 U

Table A-1-4. Samples SS50-010 through SS60-010, cont.

ANALYTE	UNIT	LDW-SS50-010	LDW-SS202-010 (field duplicate) ^a	LDW-SS51-010	LDW-SS52-010	LDW-SS54-010	LDW-SS55-010	LDW-SS56-010	LDW-SS57-010	LDW-SS58-010	LDW-SS60-010
2,4,6-Trichlorophenol	µg/kg dw	480 U	770 U	98 U	99 U	480 U	490 U	490 U	720 U	740 U	97 U
2,4-Dichlorophenol	µg/kg dw	480 U	770 U	98 U	99 U	480 U	490 U	490 U	720 U	740 U	97 U
2,4-Dimethylphenol	µg/kg dw	6.5 U	31 U	6.6 U	6.5 U	6.5 U	6.5 U	6.5 U	140 U	150 U	6.5 U
2,4-Dinitrophenol	µg/kg dw	970 U	1,600 U	200 UJ	200 U	970 U	980 U	980 U	1,400 U	1,500 U	190 U
2,4-Dinitrotoluene	µg/kg dw	480 U	770 U	98 U	99 U	480 U	490 U	490 U	720 U	740 U	97 U
2,6-Dinitrotoluene	µg/kg dw	480 U	770 U	98 U	99 U	480 U	490 U	490 U	720 U	740 U	97 U
2-Chlorophenol	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
2-Methylphenol	µg/kg dw	6.5 U	31 U	6.6 U	6.5 U	6.5 U	6.5 U	6.5 U	140 U	150 U	6.5 U
2-Nitroaniline	µg/kg dw	480 U	770 U	98 U	99 U	480 U	490 U	490 U	720 U	740 U	97 U
2-Nitrophenol	µg/kg dw	480 U	770 U	98 U	99 U	480 U	490 U	490 U	720 U	740 U	97 U
3,3'-Dichlorobenzidine	µg/kg dw	480 U	770 U	98 U	99 U	480 U	490 U	490 U	720 U	740 U	97 U
3-Nitroaniline	µg/kg dw	480 U	770 U	98 U	99 U	480 U	490 U	490 U	720 U	740 U	97 U
4,6-Dinitro-o-cresol	µg/kg dw	970 U	1,600 U	200 UJ	200 U	970 U	980 U	980 U	1,400 U	1,500 U	190 U
4-Bromophenyl phenyl ether	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
4-Chloro-3-methylphenol	µg/kg dw	480 U	770 U	98 U	99 U	480 U	490 U	490 U	720 U	740 U	97 U
4-Chloroaniline	µg/kg dw	480 U	770 U	98 U	99 U	480 U	490 U	490 U	720 U	740 U	97 U
4-Chlorophenyl phenyl ether	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
4-Methylphenol	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
4-Nitroaniline	µg/kg dw	480 U	770 U	98 U	99 U	480 U	490 U	490 U	720 U	740 U	97 U
4-Nitrophenol	µg/kg dw	480 U	770 U	98 U	99 U	480 U	490 U	490 U	720 U	740 U	97 U
Aniline	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
Benzoic acid	µg/kg dw	65 U	310 U	66 U	65 U	65 U	65 U	65 U	1,400 U	1,500 U	65 U
Benzyl alcohol	µg/kg dw	32 U	160 U	20 UJ	20 U	32 U	32 U	33 U	140 U	150 U	19 U
bis(2-chloroethoxy)methane	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
bis(2-chloroethyl)ether	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
bis(2-chloroisopropyl)ether	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
Carbazole	µg/kg dw	97 U	160 U	20 U	20 U	97 U	160	98 U	140 U	150 U	19 U
Hexachlorobenzene	µg/kg dw	0.97 U	0.98 U	6.6 U	6.5 U	0.99 U	0.98 U	6.5 U	140 U	0.98 U	6.5 U
Hexachlorobutadiene	µg/kg dw	0.97 U	0.98 U	6.6 U	6.5 U	0.99 U	0.98 U	6.5 U	140 U	0.98 U	6.5 U
Hexachlorocyclopentadiene	µg/kg dw	480 U	770 U	98 U	99 U	480 U	490 U	490 U	720 U	740 U	97 U

Table A-1-4. Samples SS50-010 through SS60-010, cont.

ANALYTE	UNIT	LDW-SS50-010	LDW-SS202-010 (field duplicate) ^a	LDW-SS51-010	LDW-SS52-010	LDW-SS54-010	LDW-SS55-010	LDW-SS56-010	LDW-SS57-010	LDW-SS58-010	LDW-SS60-010
Hexachloroethane	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
Isophorone	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
Nitrobenzene	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
N-Nitrosodimethylamine	µg/kg dw	32 U	160 U	33 U	33 U	32 U	32 U	33 U	720 U	740 U	33 U
N-Nitroso-di-n-propylamine	µg/kg dw	32 U	160 U	33 U	33 U	32 U	32 U	33 U	720 U	740 U	33 U
N-Nitrosodiphenylamine	µg/kg dw	6.5 U	31 U	6.6 U	6.5 U	6.5	6.5 U	6.5 U	140 U	150 U	6.5 U
Pentachlorophenol	µg/kg dw	32 U	160 U	33 UJ	33 UJ	32 UJ	32 U	33 U	720 U	740 U	33 U
Phenol	µg/kg dw	97 U	160 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
Polychlorinated biphenyls											
Aroclor-1016	µg/kg dw	19 U	20 U	20 UJ	20 U	20 U	20 U	100 U	77 U	20 U	20 U
Aroclor-1221	µg/kg dw	19 U	20 U	20 UJ	20 U	20 U	20 U	100 U	77 U	20 U	20 U
Aroclor-1232	µg/kg dw	19 U	20 U	20 UJ	20 U	20 U	20 U	100 U	77 U	20 U	20 U
Aroclor-1242	µg/kg dw	19 U	20 U	25 J	20 U	20 U	20 U	100 U	77 U	20 U	20 U
Aroclor-1248	µg/kg dw	330	160	20 UJ	65	26	20 U	100 U	160	84	55 J
Aroclor-1254	µg/kg dw	320	150	72	84	38	24 J	500 J	350	120	110 J
Aroclor-1260	µg/kg dw	140	59	58	60	27	20 U	250 J	240	59	80 J
Total PCBs (calc'd)	µg/kg dw	790	370	155 J	209	91	24 J	750 J	750	260	250 J
Pesticides											
2,4'-DDD	µg/kg dw	1.9 U	2.0 U	na	na	2.0 U	2.0 U	na	na	2.0 U	na
2,4'-DDE	µg/kg dw	21 U	15 U	na	na	2.0 U	2.0 U	na	na	12 U	na
2,4'-DDT	µg/kg dw	17 U	2.0 U	na	na	2.0 U	2.0 U	na	na	2.0 U	na
4,4'-DDD	µg/kg dw	1.9 U	2.0 U	na	na	2.0 U	2.0 U	na	na	2.0 U	na
4,4'-DDE	µg/kg dw	21 U	14 U	na	na	2.0 U	2.0 U	na	na	8.7 U	na
4,4'-DDT	µg/kg dw	1.9 U	2.0 U	na	na	2.0 U	2.0 U	na	na	2.0 U	na
Total DDTs (calc'd)	µg/kg dw	21 U	15 U	na	na	2.0 U	2.0 U	na	na	12 U	na
Aldrin	µg/kg dw	0.97 U	0.98 U	na	na	0.99 U	0.98 U	na	na	0.98 U	na
Dieldrin	µg/kg dw	1.9 U	2.0 U	na	na	2.0 U	2.0 U	na	na	2.0 U	na
Total aldrin/dieldrin (calc'd)	µg/kg dw	1.9 U	2.0 U	na	na	2.0 U	2.0 U	na	na	2.0 U	na
alpha-BHC	µg/kg dw	0.97 U	0.98 U	na	na	0.99 U	0.98 U	na	na	0.98 U	na
beta-BHC	µg/kg dw	3.0 U	0.98 U	na	na	0.99 U	0.98 U	na	na	0.98 U	na

Table A-1-4. Samples SS50-010 through SS60-010, cont.

ANALYTE	UNIT	LDW-SS50-010	LDW-SS202-010 (field duplicate) ^a	LDW-SS51-010	LDW-SS52-010	LDW-SS54-010	LDW-SS55-010	LDW-SS56-010	LDW-SS57-010	LDW-SS58-010	LDW-SS60-010
delta-BHC	µg/kg dw	0.97 U	0.98 U	na	na	0.99 U	0.98 U	na	na	0.98 U	na
gamma-BHC	µg/kg dw	0.97 U	0.98 U	na	na	0.99 U	0.98 U	na	na	0.98 U	na
alpha-Chlordane	µg/kg dw	0.97 U	0.98 U	na	na	0.99 U	0.98 U	na	na	0.98 U	na
gamma-Chlordane	µg/kg dw	0.97 U	0.98 U	na	na	0.99 U	0.98 U	na	na	0.98 U	na
Total chlordane (calc'd)	µg/kg dw	2.0 U	2.0 U	na	na	2.0 U	2.0 U	na	na	2.0 U	na
alpha-Endosulfan	µg/kg dw	0.97 U	0.98 U	na	na	0.99 U	0.98 U	na	na	0.98 U	na
beta-Endosulfan	µg/kg dw	8.8 U	2.0 U	na	na	2.0 U	2.0 U	na	na	2.0 U	na
Endosulfan sulfate	µg/kg dw	1.9 U	2.0 U	na	na	2.0 U	2.0 U	na	na	2.0 U	na
Endrin	µg/kg dw	1.9 U	2.0 U	na	na	2.0 U	2.0 U	na	na	2.0 U	na
Endrin aldehyde	µg/kg dw	7.0 UJ	4.4 UJ	na	na	2.0 UJ	2.0 UJ	na	na	3.2 UJ	na
Endrin ketone	µg/kg dw	1.9 U	2.0 U	na	na	2.0 U	2.0 U	na	na	2.0 U	na
Heptachlor	µg/kg dw	5.2 U	3.8 U	na	na	0.99 U	0.98 U	na	na	1.7 U	na
Heptachlor epoxide	µg/kg dw	0.97 U	0.98 U	na	na	0.99 U	0.98 U	na	na	0.98 U	na
Methoxychlor	µg/kg dw	9.7 U	9.8 U	na	na	9.9 U	9.8 U	na	na	9.8 U	na
Mirex	µg/kg dw	1.9 U	2.0 U	na	na	2.0 U	2.0 U	na	na	5.6 U	na
Cis-Nonachlor	µg/kg dw	20 U	2.0 U	na	na	2.0 U	2.0 U	na	na	2.0 U	na
Oxychlordane	µg/kg dw	1.9 U	2.0 U	na	na	2.0 U	2.0 U	na	na	2.0 U	na
Toxaphene	µg/kg dw	97 U	98 U	na	na	99 U	98 U	na	na	98 U	na
Trans-Nonachlor	µg/kg dw	1.9 U	2.0 U	na	na	2.0 U	2.0 U	na	na	2.0 U	na
Sediment grain size											
Fractional % phi >-1 (>2,000 µm)	% dw	0.8	0.7	0.5	0.1 U	6.2	0.2	5.9	0.1	1.0	3.5
Fractional % phi -1-0 (1,000-2,000 µm)	% dw	0.7	0.7	2.5	0.8	2.2	0.8	2.4	0.7	0.6	1.7
Fractional % phi 0-1 (500-1,000 µm)	% dw	3.6	3.7	2.4	4.4	6.3	6.6	9.7	2.5	4.0	6.2
Fractional % phi 1-2 (250-500 µm)	% dw	11.2	10.9	4.1	5.7	17.8	13.8	20.0	7.3	9.4	29.8
Fractional % phi 2-3 (125-250 µm)	% dw	8.7	8.0	3.5	3.2	13.0	5.1	21.6	7.4	7.4	32.5
Fractional % phi 3-4 (62.5-125 µm)	% dw	8.3	8.3	10.2	8.1	6.3	10.6	19.1	12.9	11.4	11.5
Fractional % phi 4-5 (31.2-62.5 µm)	% dw	12.0	15.1	12.8	12.6	5.8	13.4	3.6	13.7	9.9	2.6
Fractional % phi 5-6 (15.6-31.2 µm)	% dw	12.9	14.5	17.0	18.8	10.9	14.0	4.5	16.5	14.8	2.6
Fractional % phi 6-7 (7.8-15.6 µm)	% dw	16.8	18.4	15.3	15.5	12.3	11.8	3.8	15.0	13.2	2.8
Fractional % phi 7-8 (3.9-7.8 µm)	% dw	8.7	6.3	9.0	11.0	5.7	8.0	2.3	6.6	9.1	2.4

Table A-1-4. Samples SS50-010 through SS60-010, cont.

ANALYTE	UNIT	LDW-SS50-010	LDW-SS202-010 (field duplicate) ^a	LDW-SS51-010	LDW-SS52-010	LDW-SS54-010	LDW-SS55-010	LDW-SS56-010	LDW-SS57-010	LDW-SS58-010	LDW-SS60-010
Fractional % phi 8-9 (1.95-3.9 µm)	% dw	4.4	3.6	5.9	6.4	4.2	4.4	2.3	4.4	6.0	1.6
Fractional % phi 9-10 (0.98-1.95 µm)	% dw	4.2	3.1	4.7	4.3	3.0	3.6	1.2	3.4	3.8	1.1
Fractional % phi 10+ (<0.98 µm)	% dw	7.8	6.8	12.0	9.5	6.3	7.6	3.6	9.4	9.4	1.7
Rocks (total calc'd)	% dw	0.8	0.7	0.5	0.1 U	6.2	0.2	5.9	0.1	1.0	3.5
Sand (total calc'd)	% dw	32.5	31.6	22.7	22.2	45.6	36.9	72.8	30.8	32.8	81.7
Silt (total calc'd)	% dw	50.4	54.3	54.1	57.9	34.7	47.2	14.2	51.8	47.0	10.4
Clay (total calc'd)	% dw	16.4	13.5	22.6	20.2	13.5	15.6	7.1	17.2	19.2	4.4
Fines (percent silt+clay)	% dw	66.8	67.8	76.7	78.1	48.2	62.8	21.3	69.0	66.2	14.8
Conventional parameters											
Total organic carbon (TOC)	% dw	1.94	1.94	2.13	2.40	2.02	1.53	1.13	1.73	1.78	1.08
Total solids	% ww	50.90	51.50	47.90	44.23	58.40	59.50	62.40	50.00	50.70	68.00
Total solids (preserved)	% ww	46.20	46.40	39.60	35.00	63.40	48.40	62.00	46.20	53.80	67.60
Sulfides (total)	mg/kg dw	110	770	19 J	11	100	880	37	130	250	3.3 UJ
Ammonia (total as nitrogen)	mg-N/kg	8.22	8.03	8.06	13.9	4.30	5.91	1.83	5.63	2.82	2.53

^a Field duplicate at same location as LDW-SS50

dw – dry weight

ww – wet weight

na – not analyzed

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PAHs, total PCBs, and total DDTs are presented in Appendix B.

Totals were calculated for each sediment grain size category using the following grain size ranges: rock – all fractions >2,000 µm; sand – all fractions between 63 and 2,000 µm; silt – all fractions between 3.9 and 63 µm; and clay – all fractions <3.9 µm.

Data qualifiers: U – not detected at reporting limit shown
 J – estimated concentration
 UJ – not detected at estimated reporting limit shown
 R – result was rejected

Table A-1-5. Concentrations of all analytes in Round 1 LDW surface sediment samples: Samples SS63-010 through SS84-010

ANALYTE	UNIT	LDW-SS63-010	LDW-SS64-010	LDW-SS67-010	LDW-SS70-010	LDW-SS72-010	LDW-SS75-010	LDW-SS76-010	LDW-SS79-010	LDW-SS83-010	LDW-SS84-010
Metals and trace elements											
Antimony	mg/kg dw	0.3 UJ	0.3 UJ	0.2 UJ	0.3 UJ	0.4 UJ	0.3 UJ	0.4 UJ	0.3 UJ	0.4 UJ	0.3 UJ
Arsenic	mg/kg dw	10.2	21.2	2.4	14.8	15.5	8.3	14.5	10.7	17.9	12.3
Cadmium	mg/kg dw	0.3 U	0.5	0.3 U	0.7	0.6	0.3 U	0.4 UJ	0.3	0.6	2.0 J
Chromium	mg/kg dw	24.7	27.0	12.4	38.3	35	24.9	36 J	27.7	37	122 J
Cobalt	mg/kg dw	6.1	10.8	4.5	8.2	9.8	5.2	10.8	9.7	8.4	13.1
Copper	mg/kg dw	48.3	107	16.9	84.2	85.5	41.8	75.3	49.7	109	117
Lead	mg/kg dw	28	50	11	84	50	44	41	19	55	615
Mercury	mg/kg dw	0.08	0.15	0.06	0.14	0.3	0.12	0.2	0.20	0.2	2.46
Molybdenum	mg/kg dw	1.1	2.4	0.7	2.6	2	1.2	1	1.4	2	5.1
Nickel	mg/kg dw	21	20	10	28	22	12	26	19	23	39
Selenium	mg/kg dw	7 U	9 U	6 U	8 U	10 U	9 U	10 U	9 U	10 U	8 U
Silver	mg/kg dw	0.4 U	0.5 U	0.4 U	0.5 U	0.6 U	1.3	0.6 U	0.5 U	0.6 U	1.7
Thallium	mg/kg dw	0.3 U	0.3 U	0.2 U	0.3 U	0.4 U	0.3 U	0.4 U	0.3 U	0.4 U	0.3 U
Vanadium	mg/kg dw	48.1	63.9	40.6	59.9	75.7	52.6	78.3	66.8	74.6	55.1
Zinc	mg/kg dw	93.0	195	41.0	277	152	79	134	86	382	417
Organometals											
Monobutyltin as ion	µg/kg dw	na	na	R	na	na	na	na	R	na	na
Dibutyltin as ion	µg/kg dw	na	na	5.5 U	na	na	na	na	5.5 U	na	na
Tributyltin as ion	µg/kg dw	na	na	3.7 U	na	na	na	na	3.7 U	na	na
PAHs											
2-Chloronaphthalene	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
2-Methylnaphthalene	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
Acenaphthene	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
Acenaphthylene	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
Anthracene	µg/kg dw	62 J	120	19 U	180 U	200	26	20 U	59 U	240	290 U

Table A-1-5. Samples SS63-010 through SS84-010, cont.

ANALYTE	UNIT	LDW-SS63-010	LDW-SS64-010	LDW-SS67-010	LDW-SS70-010	LDW-SS72-010	LDW-SS75-010	LDW-SS76-010	LDW-SS79-010	LDW-SS83-010	LDW-SS84-010
Benzo(a)anthracene	µg/kg dw	140	320	12	300	410	80	68	7.8	650	400
Benzo(a)pyrene	µg/kg dw	110	280	9.9	240	330	88	80	6.5	490	510
Benzo(b)fluoranthene	µg/kg dw	180	380	23	410	500	120	120	9.1	840	690
Benzo(g,h,i)perylene	µg/kg dw	98 U	140	19 U	180 U	59 J	41	28	59 U	170	230 J
Benzo(k)fluoranthene	µg/kg dw	210	380	24	470	530	120	70	56 J	740	440
Total benzofluoranthenes (calc'd)	µg/kg dw	390	760	47	880	1,030	240	190	65 J	1,580	1,130
Chrysene	µg/kg dw	260	530	23	550	600	220	130	60	1,400	700
Dibenzo(a,h)anthracene	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	95 J	290 U
Dibenzofuran	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
Fluoranthene	µg/kg dw	470	820	33	1,100	1,100	230	130	100	1,500	1,100
Fluorene	µg/kg dw	98 U	100 U	19 U	180 U	58 J	20 U	20 U	59 U	57 J	290 U
Indeno(1,2,3-cd)pyrene	µg/kg dw	15	130	7.3	180 U	17	40	32	6.5 U	200	220 J
Naphthalene	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
Phenanthrene	µg/kg dw	190	210	19 U	200	240	110	45	62	400	330
Pyrene	µg/kg dw	310	620	28	860	920	180	120	110	1,400	980
Total HPAH (calc'd)	µg/kg dw	1,700	3,600	160	3,900	4,500 J	1,120	780	350 J	7,500 J	5,300 J
Total LPAH (calc'd)	µg/kg dw	250 J	330	19 U	200	500 J	140	45	62	700 J	330
Total PAH (calc'd)	µg/kg dw	1,950 J	3,930	160	4,100	5,000 J	1,260	820	410 J	8,200 J	5,600 J
Phthalates											
Bis(2-ethylhexyl)phthalate	µg/kg dw	150	240	22	1,700	400	74	59	110	460	4,200
Butyl benzyl phthalate	µg/kg dw	6.5 U	6.6 U	6.6 U	180 U	6.5 U	20 U	9.9	6.5 U	7.2	290 U
Diethyl phthalate	µg/kg dw	10	6.6 U	12 U	180 U	6.5 U	20 U	14 U	6.5 U	6.5 U	290 U
Dimethyl phthalate	µg/kg dw	6.5 U	6.6 U	6.6 U	180 U	6.5 U	20 U	6.6 U	6.5 U	6.5 U	290 U
Di-n-butyl phthalate	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	380
Di-n-octyl phthalate	µg/kg dw	98 U	100 U	19 U	1,000	99 U	20 U	20 U	59 U	97 U	290 U
Other SVOCs											
1,2,4-Trichlorobenzene	µg/kg dw	6.5 U	6.6 U	3.3 UJ	180 U	6.5 U	20 U	6.6 U	6.5 U	6.5 U	290 U
1,2-Dichlorobenzene	µg/kg dw	6.5 U	6.6 U	6.6 U	180 U	6.5 U	20 U	6.6 U	6.5 U	6.5 U	290 U
1,3-Dichlorobenzene	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
1,4-Dichlorobenzene	µg/kg dw	6.5 U	6.6 U	6.6 U	180 U	6.5 U	20 U	6.6 U	6.5 U	6.5 U	290 U

Table A-1-5. Samples SS63-010 through SS84-010, cont.

ANALYTE	UNIT	LDW-SS63-010	LDW-SS64-010	LDW-SS67-010	LDW-SS70-010	LDW-SS72-010	LDW-SS75-010	LDW-SS76-010	LDW-SS79-010	LDW-SS83-010	LDW-SS84-010
2,4,5-Trichlorophenol	µg/kg dw	490 U	500 U	96 U	890 U	490 U	98 U	99 U	300 U	480 U	1,400 U
2,4,6-Trichlorophenol	µg/kg dw	490 U	500 U	96 U	890 U	490 U	98 U	99 U	300 U	480 U	1,400 U
2,4-Dichlorophenol	µg/kg dw	490 U	500 U	96 U	890 U	490 U	98 U	99 U	300 U	480 U	1,400 U
2,4-Dimethylphenol	µg/kg dw	6.5 U	6.6 U	6.6 U	180 U	6.5 U	20 U	6.6 U	6.5 U	6.5 U	290 U
2,4-Dinitrophenol	µg/kg dw	980 U	1,000 U	190 U	1,800 U	990 U	200 U	200 U	590 U	970 U	2,900 U
2,4-Dinitrotoluene	µg/kg dw	490 U	500 U	96 U	890 U	490 U	98 U	99 U	300 U	480 U	1,400 U
2,6-Dinitrotoluene	µg/kg dw	490 U	500 U	96 U	890 U	490 U	98 U	99 U	300 U	480 U	1,400 U
2-Chlorophenol	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
2-Methylphenol	µg/kg dw	6.5 U	6.6 U	6.6 U	180 U	6.5 U	20 U	6.6 U	6.5 U	6.5 U	290 U
2-Nitroaniline	µg/kg dw	490 U	500 U	96 U	890 U	490 U	98 U	99 U	300 U	480 U	1,400 U
2-Nitrophenol	µg/kg dw	490 U	500 U	96 U	890 U	490 U	98 U	99 U	300 U	480 U	1,400 U
3,3'-Dichlorobenzidine	µg/kg dw	490 U	500 U	96 U	890 U	490 U	98 U	99 U	300 U	480 U	1,400 U
3-Nitroaniline	µg/kg dw	490 U	500 U	96 U	890 U	490 U	98 U	99 U	300 U	480 U	1,400 U
4,6-Dinitro-o-cresol	µg/kg dw	980 U	1,000 U	190 U	1,800 U	990 U	200 U	200 U	590 U	970 U	2,900 U
4-Bromophenyl phenyl ether	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
4-Chloro-3-methylphenol	µg/kg dw	490 U	500 U	96 U	890 U	490 U	98 U	99 U	300 U	480 U	1,400 U
4-Chloroaniline	µg/kg dw	490 U	500 U	96 U	890 U	490 U	98 U	99 U	300 U	480 U	1,400 U
4-Chlorophenyl phenyl ether	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
4-Methylphenol	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
4-Nitroaniline	µg/kg dw	490 U	500 U	96 U	890 U	490 U	98 U	99 U	300 U	480 U	1,400 U
4-Nitrophenol	µg/kg dw	490 U	500 U	96 U	890 U	490 U	98 U	99 U	300 U	480 U	1,400 U
Aniline	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
Benzoic acid	µg/kg dw	65 U	66 U	66 U	1,800 U	65 U	200 U	66	65 U	65 U	2,900 U
Benzyl alcohol	µg/kg dw	33 U	33 U	19 U	180 U	33 U	20 U	20 U	32 U	33 U	290 U
bis(2-chloroethoxy)methane	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
bis(2-chloroethyl)ether	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
bis(2-chloroisopropyl)ether	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
Carbazole	µg/kg dw	98 U	100 U	19 U	180 U	51 J	20 U	20 U	59 U	99	290 U
Hexachlorobenzene	µg/kg dw	0.97 U	0.99 U	0.96 U	0.98 U	0.99 U	20 U	0.98 U	0.99 U	6.5 U	17 U
Hexachlorobutadiene	µg/kg dw	0.97 U	0.99 U	0.96 U	0.98 U	0.99 U	20 U	0.98 U	0.99 U	6.5 U	17 U

Table A-1-5. Samples SS63-010 through SS84-010, cont.

ANALYTE	UNIT	LDW-SS63-010	LDW-SS64-010	LDW-SS67-010	LDW-SS70-010	LDW-SS72-010	LDW-SS75-010	LDW-SS76-010	LDW-SS79-010	LDW-SS83-010	LDW-SS84-010
Hexachlorocyclopentadiene	µg/kg dw	490 U	500 U	96 U	890 U	490 U	98 U	99 U	300 U	480 U	1,400 U
Hexachloroethane	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
Isophorone	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
Nitrobenzene	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
N-Nitrosodimethylamine	µg/kg dw	33 U	33 U	33 U	890 U	33 U	98 U	33 U	32 U	33 U	290 U
N-Nitroso-di-n-propylamine	µg/kg dw	33 U	33 U	33 U	890 U	33 U	98 U	33 U	32 U	33 U	1,400 U
N-Nitrosodiphenylamine	µg/kg dw	6.5 U	6.6 U	6.6 U	180 U	6.5 U	20 U	7.2	6.5 U	6.5 U	290 U
Pentachlorophenol	µg/kg dw	33 U	33 U	33 UJ	890 U	33 U	98 U	33 UJ	32 U	33 U	1,400 U
Phenol	µg/kg dw	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
Polychlorinated biphenyls											
Aroclor-1016	µg/kg dw	20 U	20 U	19 U	20 U	20 U	68 U	20 U	20 U	19 U	690 U
Aroclor-1221	µg/kg dw	20 U	20 U	19 U	20 U	20 U	68 U	20 U	20 U	19 U	690 U
Aroclor-1232	µg/kg dw	20 U	20 U	19 U	20 U	20 U	68 U	20 U	20 U	19 U	690 U
Aroclor-1242	µg/kg dw	20 U	20 U	19 U	20 U	20 U	68 U	20 U	20 U	19 U	690 U
Aroclor-1248	µg/kg dw	39 U	29	19 U	40 U	22	68 U	31	32	20 J	12,000
Aroclor-1254	µg/kg dw	53	56	36	46	32	170	46	36	38	6,800
Aroclor-1260	µg/kg dw	42	42	19 U	50	28 J	350	40	20 U	39	4,300
Total PCBs (calc'd)	µg/kg dw	95	127	36	96	82 J	520	117	68	97 J	23,000
Pesticides											
2,4'-DDD	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	34 U
2,4'-DDE	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	6.3 U	na	34 U
2,4'-DDT	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	460 U
4,4'-DDD	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	540 U
4,4'-DDE	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	4.0 U	na	800 U
4,4'-DDT	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	34 U
Total DDTs (calc'd)	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	6.3 U	na	800 U
Aldrin	µg/kg dw	0.97 U	0.99 U	0.96 U	0.98 U	0.99 U	na	0.98 U	0.99 U	na	17 U
Dieldrin	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	34 U
Total aldrin/dieldrin (calc'd)	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	34 U
alpha-BHC	µg/kg dw	0.97 U	0.99 U	0.96 U	0.98 U	0.99 U	na	0.98 U	0.99 U	na	17 U

Table A-1-5. Samples SS63-010 through SS84-010, cont.

ANALYTE	UNIT	LDW-SS63-010	LDW-SS64-010	LDW-SS67-010	LDW-SS70-010	LDW-SS72-010	LDW-SS75-010	LDW-SS76-010	LDW-SS79-010	LDW-SS83-010	LDW-SS84-010
beta-BHC	µg/kg dw	0.97 U	0.99 U	0.96 U	0.98 U	0.99 U	na	0.98 U	0.99 U	na	17 U
delta-BHC	µg/kg dw	0.97 U	0.99 U	0.96 U	0.98 U	0.99 U	na	0.98 U	0.99 U	na	17 U
gamma-BHC	µg/kg dw	0.97 U	0.99 U	0.96 U	0.98 U	0.99 U	na	0.98 U	0.99 U	na	17 U
alpha-Chlordane	µg/kg dw	0.97 U	0.99 U	0.96 U	0.98 U	0.99 U	na	0.98 U	0.99 U	na	17 U
gamma-Chlordane	µg/kg dw	0.97 U	0.99 U	0.96 U	0.98 U	0.99 U	na	0.98 U	0.99 U	na	17 U
Total chlordane (calc'd)	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	330 U
alpha-Endosulfan	µg/kg dw	0.97 U	0.99 U	0.96 U	0.98 U	0.99 U	na	0.98 U	0.99 U	na	17 U
beta-Endosulfan	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	34 U
Endosulfan sulfate	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	34 U
Endrin	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	34 U
Endrin aldehyde	µg/kg dw	1.9 UJ	2.0 UJ	1.9 UJ	2.0 UJ	2.0 UJ	na	2.0 UJ	2.0 UJ	na	250 UJ
Endrin ketone	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	34 U
Heptachlor	µg/kg dw	0.97 U	0.99 U	0.96 U	0.98 U	0.99 U	na	0.98 U	0.99 U	na	70 U
Heptachlor epoxide	µg/kg dw	0.97 U	0.99 U	0.96 U	0.98 U	0.99 U	na	0.98 U	0.99 U	na	510 U
Methoxychlor	µg/kg dw	9.7 U	9.9 U	9.6 U	9.8 U	9.9 U	na	9.8 U	9.9 U	na	170 U
Mirex	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	34 U
Cis-Nonachlor	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	330 U
Oxychlordane	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	34 U
Toxaphene	µg/kg dw	97 U	99 U	96 U	98 U	99 U	na	98 U	99 U	na	1,700 U
Trans-Nonachlor	µg/kg dw	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	34 U
Sediment grain size											
Fractional % phi >-1 (>2,000 µm)	% dw	2.7	38.6	0.3	2.7	5.4	2.7	1.0	2.1	0.9	5.7
Fractional % phi -1-0 (1,000-2,000 µm)	% dw	2.7	7.2	2.2	3.2	1.8	2.1	0.6	1.0	1.8	2.5
Fractional % phi 0-1 (500-1,000 µm)	% dw	13.7	7.7	26.2	7.9	2.1	8.4	1.3	3.3	5.1	7.0
Fractional % phi 1-2 (250-500 µm)	% dw	36.1	9.3	51.7	18.7	3.8	25.4	3.5	8.0	14.7	26.1
Fractional % phi 2-3 (125-250 µm)	% dw	18.4	5.8	11.0	17.2	4.7	14.6	2.8	6.0	10.6	21.2
Fractional % phi 3-4 (62.5-125 µm)	% dw	5.8	4.5	2.2	10.8	10.6	19.1	6.8	12.9	15.0	8.2
Fractional % phi 4-5 (31.2-62.5 µm)	% dw	3.1	2.8	1.7	5.2	9.4	6.4	10.7	21.4	11.7	2.7
Fractional % phi 5-6 (15.6-31.2 µm)	% dw	4.1	7.1	1.1	8.4	15.5	5.5	19.8	17.0	13.3	6.2
Fractional % phi 6-7 (7.8-15.6 µm)	% dw	4.1	5.5	1.0	7.2	16.0	4.4	18.4	11.0	8.9	7.6

Table A-1-5. Samples SS63-010 through SS84-010, cont.

ANALYTE	UNIT	LDW-SS63-010	LDW-SS64-010	LDW-SS67-010	LDW-SS70-010	LDW-SS72-010	LDW-SS75-010	LDW-SS76-010	LDW-SS79-010	LDW-SS83-010	LDW-SS84-010
Fractional % phi 7-8 (3.9-7.8 µm)	% dw	3.1	3.5	0.8	5.6	9.6	3.5	13.4	6.5	5.8	5.7
Fractional % phi 8-9 (1.95-3.9 µm)	% dw	1.9	4.2	0.6	3.5	6.3	2.6	6.5	3.2	3.5	2.6
Fractional % phi 9-10 (0.98-1.95 µm)	% dw	1.4	0.2	0.5	2.5	5.0	1.4	4.2	2.1	2.6	1.1
Fractional % phi 10+ (<0.98 µm)	% dw	2.8	4.0	0.5	7.0	9.9	3.8	11.0	5.6	6.1	3.2
Rocks (total calc'd)	% dw	2.7	38.6	0.3	2.7	5.4	2.7	1.0	2.1	0.9	5.7
Sand (total calc'd)	% dw	76.7	34.5	93.3	57.8	23.0	69.6	15.0	31.2	47.2	65.0
Silt (total calc'd)	% dw	14.4	18.9	4.6	26.4	50.5	19.8	62.3	55.9	39.7	22.2
Clay (total calc'd)	% dw	6.1	8.4	1.6	13.0	21.2	7.8	21.7	10.9	12.2	6.9
Fines (percent silt+clay)	% dw	20.5	27.3	6.2	39.4	71.7	27.6	84.0	66.8	51.9	29.1
Conventional parameters											
Total organic carbon (TOC)	% dw	2.39	1.69	0.620	3.05	2.54	1.75	2.17	1.45	2.07	4.12
Total solids	% ww	63.90	58.10	75.50	56.30	45.40	57.30	44.60	50.60	47.80	56.60
Total solids (preserved)	% ww	69.40	54.50	71.00	57.30	43.20	55.10	36.10	34.40	37.80	58.00
Sulfides (total)	mg/kg dw	41 J	200	130 J	320 J	170	19 J	153 J	17	480	4.0 J
Ammonia (total as nitrogen)	mg-N/kg	13.2	9.68	3.46	8.34	39.1	1.97	14.8	11.3	17.7	5.45

dw – dry weight

ww – wet weight

na – not analyzed

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PAHs, total PCBs, and total DDTs are presented in Appendix B.

Totals were calculated for each sediment grain size category using the following grain size ranges: rock – all fractions >2,000 µm; sand – all fractions between 63 and 2,000 µm; silt – all fractions between 3.9 and 63 µm; and clay – all fractions <3.9 µm.

Data qualifiers: U – not detected at reporting limit shown
 J – estimated concentration
 UJ – not detected at estimated reporting limit shown
 R – result was rejected

Table A-1-6. Concentrations of all analytes in Round 1 LDW surface sediment samples: Samples SS87-010 through SS101-010

ANALYTE	UNIT	LDW-SS87-010	LDW-SS88-010	LDW-SS89-010	LDW-SS201-010 (field duplicate) ^a	LDW-SS92-010	LDW-SS94-010	LDW-SS96-010	LDW-SS97-010	LDW-SS99-010	LDW-SS101-010
Metals and trace elements											
Antimony	mg/kg dw	0.4 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.4 J	0.4 UJ	0.3 UJ	0.3 UJ	0.3 UJ
Arsenic	mg/kg dw	13.9	11.6	4.2	4.2	9.8	26.5	12.7	8.0	6.8	4.9
Cadmium	mg/kg dw	0.4 U	1.0	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.3 U	0.3 U	0.2 U
Chromium	mg/kg dw	31	57.1	14.8	14.0	23.4	21.2	31	25.8	20.0	12
Cobalt	mg/kg dw	8.9	8.7	4.9	4.8	6.2	7.4	9.3	5.7	5.7	4.5
Copper	mg/kg dw	72.6	48.7	18.6	18.5	35.0	71.9	53.6	29.4	30.9	17.2
Lead	mg/kg dw	36	74	10	9	24	37	26	26	27	31
Mercury	mg/kg dw	0.17	0.62	0.06 U	0.06 U	0.09	0.09	0.1	0.06 U	0.09	0.06 U
Molybdenum	mg/kg dw	1	1.3	0.7	0.7	1.5	2.4	1	1.1	1.5	0.9
Nickel	mg/kg dw	21	19	10	9	15	16	21	14	13	9
Selenium	mg/kg dw	10 U	8 U	6 U	6 U	7 U	8 U	10 U	7 U	9 U	6 U
Silver	mg/kg dw	0.6 U	0.9	0.4 U	0.4 U	0.4 U	0.5 U	0.6 U	0.4 U	0.5 U	0.4 U
Thallium	mg/kg dw	0.4 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.3 U	0.3 U	0.3 U
Vanadium	mg/kg dw	68.1	62.1	43.9	43.3	48.7	52.9	68.6	46.9	52.5	41.2
Zinc	mg/kg dw	143	127	38.4	39.7	91.7	218	100	58.9	66	53.5
Organometals											
Monobutyltin as ion	µg/kg dw	na	na	na	na	na	na	na	na	na	na
Dibutyltin as ion	µg/kg dw	na	na	na	na	na	na	na	na	na	na
Tributyltin as ion	µg/kg dw	na	na	na	na	na	na	na	na	na	na
PAHs											
2-Chloronaphthalene	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
2-Methylnaphthalene	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
Acenaphthene	µg/kg dw	20 U	21	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
Acenaphthylene	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
Anthracene	µg/kg dw	27	47	19 U	20 U	55 J	26	20 U	20 U	98 U	60 U
Benzo(a)anthracene	µg/kg dw	78	130	48	59	360	95	38	40	10 J	12

Table A-1-6. Samples SS87-010 through SS101-010, cont.

ANALYTE	UNIT	LDW-SS87-010	LDW-SS88-010	LDW-SS89-010	LDW-SS201-010 (field duplicate) ^a	LDW-SS92-010	LDW-SS94-010	LDW-SS96-010	LDW-SS97-010	LDW-SS99-010	LDW-SS101-010
Benzo(a)pyrene	µg/kg dw	58	130	47	54	320	69	42	44	9.1 J	12
Benzo(b)fluoranthene	µg/kg dw	81	140	62	72	330	82	51	57	100	18
Benzo(g,h,i)perylene	µg/kg dw	20 U	88 J	19 U	20 U	78	20 U	20 U	20 U	98 U	60 U
Benzo(k)fluoranthene	µg/kg dw	88	84 J	38	49	280	84	56	59	98 U	31 J
Total benzofluoranthenes (calc'd)	µg/kg dw	169	220 J	100	121	610	166	107	116	100	49 J
Chrysene	µg/kg dw	120	250	78	120	540	120	61	64	160	56 J
Dibenzo(a,h)anthracene	µg/kg dw	20 U	98 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
Dibenzofuran	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
Fluoranthene	µg/kg dw	180	780	90	170	770	200	83	92	280	99
Fluorene	µg/kg dw	20 U	24	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
Indeno(1,2,3-cd)pyrene	µg/kg dw	20	21	20	22	90	20	13	10	6.5 J	12
Naphthalene	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
Phenanthrene	µg/kg dw	98	200	32	42	140	79	31	42	140	41 J
Pyrene	µg/kg dw	160	520	100	160	630 J	190	75	73	200	65
Total HPAH (calc'd)	µg/kg dw	790	2,140 J	480	710	3,400 J	860	419	439	770 J	305 J
Total LPAH (calc'd)	µg/kg dw	125	290	32	42	200 J	105	31	42	140	41 J
Total PAH (calc'd)	µg/kg dw	910	2,440 J	520	750	3,590 J	970	450	481	910 J	346 J
Phthalates											
Bis(2-ethylhexyl)phthalate	µg/kg dw	97	27	25	36	63	46	70	57	98 U	52 J
Butyl benzyl phthalate	µg/kg dw	46	6.6 U	6.6 U	6.6 U	6.4 U	6.6 U	6.6 U	6.6 U	6.5 UJ	6.6 U
Diethyl phthalate	µg/kg dw	9.2 U	6.6 U	6.6 U	6.6 U	6.4 U	14 U	12 U	12	6.5 UJ	6.6
Dimethyl phthalate	µg/kg dw	6.6 U	6.6 U	6.6 U	6.6 U	6.4 U	6.6 U	6.6 U	6.6 U	6.5 UJ	6.6 U
Di-n-butyl phthalate	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
Di-n-octyl phthalate	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	36 J
Other SVOCs											
1,2,4-Trichlorobenzene	µg/kg dw	6.6 U	6.6 U	6.6 U	6.6 U	6.4 U	6.6 U	6.6 U	6.6 U	6.5 UJ	6.6 U
1,2-Dichlorobenzene	µg/kg dw	6.6 U	6.6 U	6.6 U	6.6 U	6.4 U	6.6 U	6.6 U	6.6 U	6.5 UJ	6.6 U
1,3-Dichlorobenzene	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
1,4-Dichlorobenzene	µg/kg dw	6.6 U	6.6 U	6.6 U	6.6 U	6.4 U	6.6 U	6.6 U	6.6 U	6.5 UJ	6.6 U
2,4,5-Trichlorophenol	µg/kg dw	97 U	98 U	97 U	98 U	290 U	98 U	97 U	98 U	490 U	300 U

Table A-1-6. Samples SS87-010 through SS101-010, cont.

ANALYTE	UNIT	LDW-SS87-010	LDW-SS88-010	LDW-SS89-010	LDW-SS201-010 (field duplicate) ^a	LDW-SS92-010	LDW-SS94-010	LDW-SS96-010	LDW-SS97-010	LDW-SS99-010	LDW-SS101-010
2,4,6-Trichlorophenol	µg/kg dw	97 U	98 U	97 U	98 U	290 U	98 U	97 U	98 U	490 U	300 U
2,4-Dichlorophenol	µg/kg dw	97 U	98 U	97 U	98 U	290 U	98 U	97 U	98 U	490 U	300 U
2,4-Dimethylphenol	µg/kg dw	6.6 U	6.6 U	6.6 U	6.6 U	6.4 U	6.6 U	6.6 U	6.6 U	6.5 UJ	6.6 U
2,4-Dinitrophenol	µg/kg dw	200 U	200 U	190 U	200 U	580 U	200 U	200 U	200 U	980 U	600 U
2,4-Dinitrotoluene	µg/kg dw	97 U	98 U	97 U	98 U	290 U	98 U	97 U	98 U	490 U	300 U
2,6-Dinitrotoluene	µg/kg dw	97 U	98 U	97 U	98 U	290 U	98 U	97 U	98 U	490 U	300 U
2-Chlorophenol	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
2-Methylphenol	µg/kg dw	6.6 U	6.6 U	6.6 U	6.6 U	6.4 U	6.6 U	6.6 U	6.6 U	6.5 UJ	6.6 U
2-Nitroaniline	µg/kg dw	97 U	98 U	97 U	98 U	290 U	98 U	97 U	98 U	490 U	300 U
2-Nitrophenol	µg/kg dw	97 U	98 U	97 U	98 U	290 U	98 U	97 U	98 U	490 U	300 U
3,3'-Dichlorobenzidine	µg/kg dw	97 U	98 U	97 U	98 U	290 U	98 U	97 U	98 U	490 U	300 U
3-Nitroaniline	µg/kg dw	97 U	98 U	97 U	98 U	290 U	98 U	97 U	98 U	490 U	300 U
4,6-Dinitro-o-cresol	µg/kg dw	200 U	200 U	190 U	200 U	580 U	200 U	200 U	200 U	980 U	600 U
4-Bromophenyl phenyl ether	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
4-Chloro-3-methylphenol	µg/kg dw	97 U	98 U	97 U	98 U	290 U	98 U	97 U	98 U	490 U	300 U
4-Chloroaniline	µg/kg dw	97 U	98 U	97 U	98 U	290 U	98 U	97 U	98 U	490 U	300 U
4-Chlorophenyl phenyl ether	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
4-Methylphenol	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	24	20 U	98 U	60 U
4-Nitroaniline	µg/kg dw	97 U	98 U	97 U	98 U	290 U	98 U	97 U	98 U	490 U	300 U
4-Nitrophenol	µg/kg dw	97 U	98 U	97 U	98 U	290 U	98 U	97 U	98 U	490 U	300 U
Aniline	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
Benzoic acid	µg/kg dw	66 U	66 U	66 U	66 U	64 U	66 U	66 U	66 U	65 UJ	110
Benzyl alcohol	µg/kg dw	20 U	20 U	19 U	20 U	32 U	20 U	20 U	20 U	32 UJ	33 U
bis(2-chloroethoxy)methane	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
bis(2-chloroethyl)ether	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
bis(2-chloroisopropyl)ether	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
Carbazole	µg/kg dw	20 U	27	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
Hexachlorobenzene	µg/kg dw	0.97 U	6.6 U	6.6 U	6.6 U	0.97 U	6.6 U	0.98 U	3.3 UJ	0.98 U	3.3 UJ
Hexachlorobutadiene	µg/kg dw	0.97 U	6.6 U	6.6 U	6.6 U	0.97 U	6.6 U	0.98 U	6.6 U	0.98 U	6.6 U
Hexachlorocyclopentadiene	µg/kg dw	97 U	98 U	97 U	98 U	290 U	98 U	97 U	98 U	490 U	300 U

Table A-1-6. Samples SS87-010 through SS101-010, cont.

ANALYTE	UNIT	LDW-SS87-010	LDW-SS88-010	LDW-SS89-010	LDW-SS201-010 (field duplicate) ^a	LDW-SS92-010	LDW-SS94-010	LDW-SS96-010	LDW-SS97-010	LDW-SS99-010	LDW-SS101-010
Hexachloroethane	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
Isophorone	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
Nitrobenzene	µg/kg dw	20 U	20 U	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
N-Nitrosodimethylamine	µg/kg dw	33 U	33 U	33 U	33 U	32 U	33 U	33 U	33 U	32 UJ	33 U
N-Nitroso-di-n-propylamine	µg/kg dw	33 U	33 U	33 U	33 U	32 U	33 U	33 U	33 U	32 UJ	33 U
N-Nitrosodiphenylamine	µg/kg dw	6.6 U	6.6 U	6.6 U	6.6 U	6.4 U	6.6 U	6.6 U	6.6 U	6.5 UJ	6.6 U
Pentachlorophenol	µg/kg dw	33 UJ	33 U	33 U	33 U	32 U	33 UJ	33 UJ	33 U	32 UJ	33 U
Phenol	µg/kg dw	20 U	26	19 U	20 U	58 U	20 U	20 U	20 U	98 U	60 U
Polychlorinated biphenyls											
Aroclor-1016	µg/kg dw	20 U	20 U	390 U	20 U	19 U	19 U	20 U	20 U	20 U	20 U
Aroclor-1221	µg/kg dw	20 U	20 U	390 U	20 U	19 U	19 U	20 U	20 U	20 U	20 U
Aroclor-1232	µg/kg dw	20 U	20 U	390 U	20 U	19 U	19 U	20 U	20 U	20 U	20 U
Aroclor-1242	µg/kg dw	20 U	20 U	390 U	20 U	39 U	19 U	20 U	20 U	20 U	20 U
Aroclor-1248	µg/kg dw	20 U	20 U	390 U	20 U	77 U	19 U	20 U	20 U	20 U	20 U
Aroclor-1254	µg/kg dw	40	380	2,300	46	480	37	24	40	20 U	20 U
Aroclor-1260	µg/kg dw	32	280	1,200	39	490	35	20 U	41	20 U	20 U
Total PCBs (calc'd)	µg/kg dw	72	660	3,500	85	970	72	24	81	20 U	20 U
Pesticides											
2,4'-DDD	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
2,4'-DDE	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
2,4'-DDT	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
4,4'-DDD	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
4,4'-DDE	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
4,4'-DDT	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
Total DDTs (calc'd)	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
Aldrin	µg/kg dw	0.97 U	na	na	na	0.97 U	na	0.98 U	na	0.98 U	na
Dieldrin	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
Total aldrin/dieldrin (calc'd)	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
alpha-BHC	µg/kg dw	0.97 U	na	na	na	0.97 U	na	0.98 U	na	0.98 U	na
beta-BHC	µg/kg dw	0.97 U	na	na	na	0.97 U	na	0.98 U	na	0.98 U	na

Table A-1-6. Samples SS87-010 through SS101-010, cont.

ANALYTE	UNIT	LDW-SS87-010	LDW-SS88-010	LDW-SS89-010	LDW-SS201-010 (field duplicate) ^a	LDW-SS92-010	LDW-SS94-010	LDW-SS96-010	LDW-SS97-010	LDW-SS99-010	LDW-SS101-010
delta-BHC	µg/kg dw	0.97 U	na	na	na	0.97 U	na	0.98 U	na	0.98 U	na
gamma-BHC	µg/kg dw	0.97 U	na	na	na	0.97 U	na	0.98 U	na	0.98 U	na
alpha-Chlordane	µg/kg dw	0.97 U	na	na	na	0.97 U	na	0.98 U	na	0.98 U	na
gamma-Chlordane	µg/kg dw	0.97 U	na	na	na	0.97 U	na	0.98 U	na	0.98 U	na
Total chlordane (calc'd)	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
alpha-Endosulfan	µg/kg dw	0.97 U	na	na	na	0.97 U	na	0.98 U	na	0.98 U	na
beta-Endosulfan	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
Endosulfan sulfate	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
Endrin	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
Endrin aldehyde	µg/kg dw	2.0 UJ	na	na	na	4.0 UJ	na	2.0 UJ	na	2.0 UJ	na
Endrin ketone	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
Heptachlor	µg/kg dw	0.97 U	na	na	na	1.1 U	na	0.98 U	na	0.98 U	na
Heptachlor epoxide	µg/kg dw	0.97 U	na	na	na	12 U	na	0.98 U	na	0.98 U	na
Methoxychlor	µg/kg dw	9.7 U	na	na	na	9.7 U	na	9.8 U	na	9.8 U	na
Mirex	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
Cis-Nonachlor	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
Oxychlordane	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
Toxaphene	µg/kg dw	97 U	na	na	na	97 U	na	98 U	na	98 U	na
Trans-Nonachlor	µg/kg dw	2.0 U	na	na	na	2.0 U	na	2.0 U	na	2.0 U	na
Sediment grain size											
Fractional % phi >-1 (>2,000 µm)	% dw	0.2	3.8	0.5	0.5	2.7	8.6	0.3	7.3	2.7	0.6
Fractional % phi -1-0 (1,000-2,000 µm)	% dw	0.4	1.2	1.8	1.7	1.2	1.3	0.5	7.9	0.5	1.7
Fractional % phi 0-1 (500-1,000 µm)	% dw	1	7.3	21.2	21.2	12.2	11.1	2.3	24.3	4.9	15.3
Fractional % phi 1-2 (250-500 µm)	% dw	4.6	18.7	33.6	33.1	28.8	29.0	6.1	24.5	16.1	48.8
Fractional % phi 2-3 (125-250 µm)	% dw	7.0	7.7	11.9	12.3	15.7	12.8	4.8	10.8	18.1	21.1
Fractional % phi 3-4 (62.5-125 µm)	% dw	17.9	8.4	14.7	14.7	14.2	8.5	13.1	8.5	21.0	5
Fractional % phi 4-5 (31.2-62.5 µm)	% dw	14.1	9.2	5.4	5.6	6.4	4.7	14.9	4.6	13.2	1.8
Fractional % phi 5-6 (15.6-31.2 µm)	% dw	17.4	11.7	3.2	3.1	5.8	7.8	18.1	3.7	8.8	1.3
Fractional % phi 6-7 (7.8-15.6 µm)	% dw	13.5	12.3	2.5	2.6	4.1	6.3	14.7	2.9	5.8	1.4
Fractional % phi 7-8 (3.9-7.8 µm)	% dw	8.6	7.7	1.7	1.7	3.1	4.0	9.5	2.1	3.5	1

Table A-1-6. Samples SS87-010 through SS101-010, cont.

ANALYTE	UNIT	LDW-SS87-010	LDW-SS88-010	LDW-SS89-010	LDW-SS201-010 (field duplicate) ^a	LDW-SS92-010	LDW-SS94-010	LDW-SS96-010	LDW-SS97-010	LDW-SS99-010	LDW-SS101-010
Fractional % phi 8-9 (1.95-3.9 µm)	% dw	5.2	3.9	1.1	1.1	1.9	2.2	4.9	1.2	1.8	0.9
Fractional % phi 9-10 (0.98-1.95 µm)	% dw	3.3	2.5	0.7	0.7	1.3	1.3	3.6	0.9	1.1	0.5
Fractional % phi 10+ (<0.98 µm)	% dw	6.7	5.5	1.6	1.7	2.4	2.5	7.4	1.3	2.5	0.6
Rocks (total calc'd)	% dw	0.2	3.8	0.5	0.5	2.7	8.6	0.3	7.3	2.7	0.6
Sand (total calc'd)	% dw	31	43.3	83.2	83.0	72.1	62.7	26.8	76.0	60.6	92
Silt (total calc'd)	% dw	53.6	40.9	12.8	13.0	19.4	22.8	57.2	13.3	31.3	6
Clay (total calc'd)	% dw	15.2	11.9	3.4	3.5	5.6	6.0	15.9	3.4	5.4	2.0
Fines (percent silt+clay)	% dw	68.8	52.8	16.2	16.5	25.0	28.8	73.1	16.7	36.7	8
Conventional parameters											
Total organic carbon (TOC)	% dw	2.18	1.75	1.01	1.02	1.27	2.05	2.19	1.35	1.24	1.09
Total solids	% ww	45.50	61.50	71.70	69.30	66.10	58.80	45.50	64.60	55.00	72.95
Total solids (preserved)	% ww	37.60	72.80	64.40	63.90	44.10	42.00	38.70	57.10	56.40	62.30
Sulfides (total)	mg/kg dw	76 J	2.7 U	5.5 UJ	4.9 UJ	4.1 U	38 J	34 J	4.7 UJ	350 J	5.1 U
Ammonia (total as nitrogen)	mg-N/kg	15.2	6.96	1.30	1.41	5.13	6.74	16.5	5.43	7.33	2.17

^a Field duplicate at same location as LDW-SS89

dw – dry weight

ww – wet weight

na – not analyzed

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PAHs, total PCBs, and total DDTs are presented in Appendix B.

Totals were calculated for each sediment grain size category using the following grain size ranges: rock – all fractions >2,000 µm; sand – all fractions between 63 and 2,000 µm; silt – all fractions between 3.9 and 63 µm; and clay – all fractions <3.9 µm.

Data qualifiers: U – not detected at reporting limit shown
 J – estimated concentration
 UJ – not detected at estimated reporting limit shown

Table A-1-7. Concentrations of all analytes in Round 1 LDW surface sediment samples: Samples SS102-010 through SS116-010

ANALYTE	UNIT	LDW-SS102-010	LDW-SS104-010	LDW-SS109-010	LDW-SS110-010	LDW-SS111-010	LDW-SS112-010	LDW-SS113b-010	LDW-SS114-010	LDW-SS115-010	LDW-SS116-010
Metals and trace elements											
Antimony	mg/kg dw	0.3 UJ	0.3 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.3 U	0.3 UJ	0.3 UJ
Arsenic	mg/kg dw	6.6	11.5	17.4	24.7	31.7	481	8.3	1,100	44.4	9.6
Cadmium	mg/kg dw	0.3 U	0.3 U	3.6	2	1.3	0.7	0.4 UJ	1.6 J	1.1	0.3 UJ
Chromium	mg/kg dw	17.9	17.8	83	181	455	62.4	26 J	72.8 J	55	26.2 J
Cobalt	mg/kg dw	6.2	5.8	9.9	13	17	7.6	7.7	9.0	11	7.6
Copper	mg/kg dw	39.8	34.0	225	124	186	77.7	41.5	58.5	99.7	38.5
Lead	mg/kg dw	28	22	288	870	635	82	21	110	98	30
Mercury	mg/kg dw	0.10	0.08 U	0.2	0.16	0.17	0.08 U	0.10	0.12	0.07	0.07
Molybdenum	mg/kg dw	1.1	1.3	8	18	49	3.5	2	3.4	4	1.2
Nickel	mg/kg dw	12	13	70	131	387	25	18	26	35	20
Selenium	mg/kg dw	7 U	8 U	10 U	20 U	20 U	9 U	10 U	8 U	20 U	8 U
Silver	mg/kg dw	0.4 U	0.5 U	2.1	2	3	0.5	0.6 U	0.8	1	0.5 U
Thallium	mg/kg dw	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.3 U	0.3 U
Vanadium	mg/kg dw	52.4	53.9	73.1	75	87	71.9	64.2	72.6	81	61.3
Zinc	mg/kg dw	115	77	1,690	385	460	206	86	230	343	92.8
Organometals											
Monobutyltin as ion	µg/kg dw	na	na	na	na	na	na	na	na	na	na
Dibutyltin as ion	µg/kg dw	na	na	na	na	na	na	na	na	na	na
Tributyltin as ion	µg/kg dw	na	na	na	na	na	na	na	na	na	na
PAHs											
2-Chloronaphthalene	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
2-Methylnaphthalene	µg/kg dw	98 U	58 U	200 U	59 U	260	98 U	98 U	130 U	200 U	99 U
Acenaphthene	µg/kg dw	98 U	58 U	200 U	59 U	330	98 U	98 U	140	150 J	99 U
Acenaphthylene	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
Anthracene	µg/kg dw	98 U	58 U	200 U	40 J	650	200	98 U	250	390	51 J
Benzo(a)anthracene	µg/kg dw	8.9	30 J	360	160	1,300	930	110	1,100	1,500	310

Table A-1-7. Samples SS102-010 through SS116-010, cont.

ANALYTE	UNIT	LDW-SS102-010	LDW-SS104-010	LDW-SS109-010	LDW-SS110-010	LDW-SS111-010	LDW-SS112-010	LDW-SS113b-010	LDW-SS114-010	LDW-SS115-010	LDW-SS116-010
Benzo(a)pyrene	µg/kg dw	11	30 J	360	180	1,400	1,100	130	1,300	1,700	390
Benzo(b)fluoranthene	µg/kg dw	130	43 J	420	210	1,100	1,400	180	1,300	1,900	560
Benzo(g,h,i)perylene	µg/kg dw	98 U	58 U	120 J	56 J	460	370	54 J	460	490	120
Benzo(k)fluoranthene	µg/kg dw	140	23 J	340	150	1,500	1,200	120	1,200	1,700	360
Total benzofluoranthenes (calc'd)	µg/kg dw	270	66 J	760	360	2,600	2,600	300	2,500	3,600	920
Chrysene	µg/kg dw	120	59	620	280	1,700	1,600	220	1,900	2,500	660
Dibenzo(a,h)anthracene	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	86 J	240	99 U
Dibenzofuran	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
Fluoranthene	µg/kg dw	190	110	1,300	470	3,000	3,400	320	3,100	5,200	1,000
Fluorene	µg/kg dw	98 U	58 U	200 U	59 U	640	98 U	98 U	130	180 J	99 U
Indeno(1,2,3-cd)pyrene	µg/kg dw	8.3	6.6 U	140 J	62	460	410	6.5	560	600	150
Naphthalene	µg/kg dw	98 U	58 U	200 U	59 U	360	98 U	98 U	130 U	200 U	99 U
Phenanthrene	µg/kg dw	64 J	44 J	510	210	3,200	1,200	100	1,600	2,400	280
Pyrene	µg/kg dw	180	69	700	420	3,400	2,000	280	2,500	3,200	780 J
Total HPAH (calc'd)	µg/kg dw	790	360 J	4,400 J	1,990 J	14,300	12,400	1,420 J	13,500 J	19,000	4,300 J
Total LPAH (calc'd)	µg/kg dw	64 J	44 J	510	250 J	5,200	1,400	100	2,100	3,100 J	330 J
Total PAH (calc'd)	µg/kg dw	850 J	410 J	4,900 J	2,240 J	19,500	13,800	1,520 J	15,600 J	22,200 J	4,700 J
Phthalates											
Bis(2-ethylhexyl)phthalate	µg/kg dw	130	36 J	250	170	580	320	200	1,200	330	240
Butyl benzyl phthalate	µg/kg dw	6.4 U	6.6 U	200 U	7.0	200 U	220	6.5 U	130 U	200 U	63 J
Diethyl phthalate	µg/kg dw	6.4 U	6.6 U	200 U	6.4 U	200 U	110	6.5 U	130 U	200 U	7.3 U
Dimethyl phthalate	µg/kg dw	6.4 U	6.6 U	200 U	6.4 U	200 U	98 U	6.5 U	130 U	200 U	8.6
Di-n-butyl phthalate	µg/kg dw	98 U	58 U	340	59 U	200 U	98 U	98 U	83 J	200 U	99 U
Di-n-octyl phthalate	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
Other SVOCs											
1,2,4-Trichlorobenzene	µg/kg dw	6.4 U	6.6 U	200 U	6.4 U	200 U	98 U	6.5 U	130 U	200 U	6.6 U
1,2-Dichlorobenzene	µg/kg dw	6.4 U	6.6 U	200 U	6.4 U	200 U	98 U	6.5 U	130 U	200 U	6.6 U
1,3-Dichlorobenzene	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
1,4-Dichlorobenzene	µg/kg dw	6.4 U	6.6 U	200 U	6.4 U	200 U	98 U	6.5 U	130 U	200 U	6.6 U
2,4,5-Trichlorophenol	µg/kg dw	490 U	290 U	990 U	300 U	1,000 U	490 U	490 U	640 U	980 U	490 U

Table A-1-7. Samples SS102-010 through SS116-010, cont.

ANALYTE	UNIT	LDW-SS102-010	LDW-SS104-010	LDW-SS109-010	LDW-SS110-010	LDW-SS111-010	LDW-SS112-010	LDW-SS113b-010	LDW-SS114-010	LDW-SS115-010	LDW-SS116-010
2,4,6-Trichlorophenol	µg/kg dw	490 U	290 U	990 U	300 U	1,000 U	490 U	490 U	640 U	980 U	490 U
2,4-Dichlorophenol	µg/kg dw	490 U	290 U	990 U	300 U	1,000 U	490 U	490 U	640 U	980 U	490 U
2,4-Dimethylphenol	µg/kg dw	6.4 U	6.6 U	200 U	6.4 U	200 U	98 U	6.5 U	130 U	200 U	6.6 U
2,4-Dinitrophenol	µg/kg dw	980 U	580 U	2,000 U	590 U	2,000 U	980 U	980 U	1,300 U	2,000 U	990 U
2,4-Dinitrotoluene	µg/kg dw	490 U	290 U	990 U	300 U	1,000 U	490 U	490 U	640 U	980 U	490 U
2,6-Dinitrotoluene	µg/kg dw	490 U	290 U	990 U	300 U	1,000 U	490 U	490 U	640 U	980 U	490 U
2-Chlorophenol	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
2-Methylphenol	µg/kg dw	6.4 U	6.6 U	200 U	6.4 U	200 U	98 U	6.5 U	130 U	200 U	6.6 U
2-Nitroaniline	µg/kg dw	490 U	290 U	990 U	300 U	1,000 U	490 U	490 U	640 U	980 U	490 U
2-Nitrophenol	µg/kg dw	490 U	290 U	990 U	300 U	1,000 U	490 U	490 U	640 U	980 U	490 U
3,3'-Dichlorobenzidine	µg/kg dw	490 U	290 U	990 U	300 U	1,000 U	490 U	490 U	640 U	980 U	490 U
3-Nitroaniline	µg/kg dw	490 U	290 U	990 U	300 U	1,000 U	490 U	490 U	640 U	980 U	490 U
4,6-Dinitro-o-cresol	µg/kg dw	980 U	580 U	2,000 U	590 U	2,000 U	980 U	980 U	1,300 U	2,000 U	990 U
4-Bromophenyl phenyl ether	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
4-Chloro-3-methylphenol	µg/kg dw	490 U	290 U	990 U	300 U	1,000 U	490 U	490 U	640 U	980 U	490 U
4-Chloroaniline	µg/kg dw	490 U	290 U	990 U	300 U	1,000 U	490 U	490 U	640 U	980 U	490 U
4-Chlorophenyl phenyl ether	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
4-Methylphenol	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
4-Nitroaniline	µg/kg dw	490 U	290 U	990 U	300 U	1,000 U	490 U	490 U	640 U	980 U	490 U
4-Nitrophenol	µg/kg dw	490 U	290 U	990 U	300 U	1,000 U	490 U	490 U	640 U	980 U	490 U
Aniline	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
Benzoic acid	µg/kg dw	64 U	66 U	2,000 U	64 U	2,000 U	980 U	65 U	1,300 U	2,000 U	66 U
Benzyl alcohol	µg/kg dw	32 U	33 U	200 U	32 U	200 U	98 U	32 U	130 U	200 U	33 U
bis(2-chloroethoxy)methane	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
bis(2-chloroethyl)ether	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
bis(2-chloroisopropyl)ether	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
Carbazole	µg/kg dw	98 U	58 U	200 U	59 U	260	220	98 U	240	350	55 J
Hexachlorobenzene	µg/kg dw	3.2 UJ	0.97 U	200 U	6.4 U	200 U	98 U	0.98 U	130 U	0.98 U	0.98 U
Hexachlorobutadiene	µg/kg dw	6.4 U	0.97 U	200 U	6.4 U	200 U	98 U	0.98 U	130 U	0.98 U	0.98 U
Hexachlorocyclopentadiene	µg/kg dw	490 U	290 U	990 U	300 U	1,000 U	490 U	490 U	640 U	980 U	490 U

Table A-1-7. Samples SS102-010 through SS116-010, cont.

ANALYTE	UNIT	LDW-SS102-010	LDW-SS104-010	LDW-SS109-010	LDW-SS110-010	LDW-SS111-010	LDW-SS112-010	LDW-SS113b-010	LDW-SS114-010	LDW-SS115-010	LDW-SS116-010
Hexachloroethane	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
Isophorone	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
Nitrobenzene	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
N-Nitrosodimethylamine	µg/kg dw	32 U	33 U	200 U	32 U	1,000 U	490 U	32 U	130 U	200 U	33 U
N-Nitroso-di-n-propylamine	µg/kg dw	32 U	33 U	990 U	32 U	1,000 U	490 U	32 U	640 U	980 U	33 U
N-Nitrosodiphenylamine	µg/kg dw	6.4 U	6.6 U	200 U	6.4 U	200 U	98 U	6.5 U	130 U	200 U	6.6 U
Pentachlorophenol	µg/kg dw	32 U	33 U	990 U	32 U	1,000 U	490 U	32 U	640 U	980 U	33 UJ
Phenol	µg/kg dw	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
Polychlorinated biphenyls											
Aroclor-1016	µg/kg dw	20 U	19 U	810 U	350 U	340 U	34 U	20 U	110 U	20 U	20 U
Aroclor-1221	µg/kg dw	20 U	19 U	810 U	350 U	340 U	34 U	20 U	110 U	20 U	20 U
Aroclor-1232	µg/kg dw	20 U	19 U	810 U	350 U	340 U	34 U	20 U	110 U	20 U	20 U
Aroclor-1242	µg/kg dw	20 U	19 U	810 U	350 U	340 U	34 U	20 U	110 U	20 U	20 U
Aroclor-1248	µg/kg dw	20 U	19 U	810 U	350 U	340 U	76	20 U	210 U	39 U	39 UJ
Aroclor-1254	µg/kg dw	38	32	110,000	10,000	1,600	240	18 J	540	110	65 J
Aroclor-1260	µg/kg dw	36	43	8,100 U	3,400	1,600 J	150	20 U	280	110	53 J
Total PCBs (calc'd)	µg/kg dw	74	75	110,000	13,000	3,200 J	470	18 J	820	220	118 J
Pesticides											
2,4'-DDD	µg/kg dw	na	1.9 U	na	na	na	na	2.0 U	na	2.0 U	2.0 U
2,4'-DDE	µg/kg dw	na	1.9 U	na	na	na	na	2.0 U	na	2.0 U	2.0 U
2,4'-DDT	µg/kg dw	na	1.9 U	na	na	na	na	2.0 U	na	2.0 U	2.0 U
4,4'-DDD	µg/kg dw	na	1.9 U	na	na	na	na	2.0 U	na	2.0 U	2.0 U
4,4'-DDE	µg/kg dw	na	1.9 U	na	na	na	na	2.0 U	na	2.0 U	2.0 U
4,4'-DDT	µg/kg dw	na	1.9 U	na	na	na	na	4.7 U	na	20 U	2.0 U
Total DDTs (calc'd)	µg/kg dw	na	1.9 U	na	na	na	na	4.7 U	na	20 U	2.0 U
Aldrin	µg/kg dw	na	0.97 U	na	na	na	na	0.98 U	na	0.98 U	0.98 U
Dieldrin	µg/kg dw	na	1.9 U	na	na	na	na	2.0 U	na	2.0 U	2.0 U
Total aldrin/dieldrin (calc'd)	µg/kg dw	na	1.9 U	na	na	na	na	2.0 U	na	2.0 U	2.0 U
alpha-BHC	µg/kg dw	na	0.97 U	na	na	na	na	0.98 U	na	0.98 U	0.98 U
beta-BHC	µg/kg dw	na	0.97 U	na	na	na	na	0.98 U	na	0.98 U	0.98 U

Table A-1-7. Samples SS102-010 through SS116-010, cont.

ANALYTE	UNIT	LDW-SS102-010	LDW-SS104-010	LDW-SS109-010	LDW-SS110-010	LDW-SS111-010	LDW-SS112-010	LDW-SS113b-010	LDW-SS114-010	LDW-SS115-010	LDW-SS116-010
delta-BHC	µg/kg dw	na	0.97 U	na	na	na	na	0.98 U	na	0.98 U	0.98 U
gamma-BHC	µg/kg dw	na	0.97 U	na	na	na	na	0.98 U	na	0.98 U	0.98 U
alpha-Chlordane	µg/kg dw	na	0.97 U	na	na	na	na	0.98 U	na	0.98 U	0.98 U
gamma-Chlordane	µg/kg dw	na	0.97 U	na	na	na	na	0.98 U	na	0.98 U	0.98 U
Total chlordane (calc'd)	µg/kg dw	na	1.9 U	na	na	na	na	2.0 U	na	15 U	2.0 U
alpha-Endosulfan	µg/kg dw	na	0.97 U	na	na	na	na	0.98 U	na	0.98 U	0.98 U
beta-Endosulfan	µg/kg dw	na	1.9 U	na	na	na	na	2.0 U	na	2.0 U	2.0 U
Endosulfan sulfate	µg/kg dw	na	1.9 U	na	na	na	na	2.0 U	na	2.0 U	2.0 U
Endrin	µg/kg dw	na	1.9 U	na	na	na	na	2.0 U	na	2.0 U	2.0 U
Endrin aldehyde	µg/kg dw	na	1.9 UJ	na	na	na	na	2.0 UJ	na	3.8 UJ	2.0 UJ
Endrin ketone	µg/kg dw	na	1.9 U	na	na	na	na	2.0 U	na	2.0 U	2.0 U
Heptachlor	µg/kg dw	na	0.97 U	na	na	na	na	0.98 U	na	0.98 U	0.98 U
Heptachlor epoxide	µg/kg dw	na	0.97 U	na	na	na	na	0.98 U	na	11 U	0.98 U
Methoxychlor	µg/kg dw	na	9.7 U	na	na	na	na	9.8 U	na	9.8 U	9.8 U
Mirex	µg/kg dw	na	1.9 U	na	na	na	na	2.0 U	na	2.0 U	2.0 U
Cis-Nonachlor	µg/kg dw	na	1.9 U	na	na	na	na	2.0 U	na	15 U	2.0 U
Oxychlordane	µg/kg dw	na	1.9 U	na	na	na	na	2.0 U	na	2.0 U	2.0 U
Toxaphene	µg/kg dw	na	97 U	na	na	na	na	98 U	na	98 U	98 U
Trans-Nonachlor	µg/kg dw	na	1.9 U	na	na	na	na	2.0 U	na	2.0 U	2.0 U
Sediment grain size											
Fractional % phi >-1 (>2,000 µm)	% dw	0.3	0.2	10.3	4.4	7.5	2.4	0.7	2.1	53.3	1.3
Fractional % phi -1-0 (1,000-2,000 µm)	% dw	0.7	0.8	4.6	4.2	3.8	2.0	0.7	2.1	3.0	1.0
Fractional % phi 0-1 (500-1,000 µm)	% dw	8.3	4.0	7.0	7.9	7.6	4.8	1.9	4.0	4.8	6.5
Fractional % phi 1-2 (250-500 µm)	% dw	37.1	23.3	13.8	12.7	13.3	20.0	2.2	13.3	15.0	22.4
Fractional % phi 2-3 (125-250 µm)	% dw	16.1	22.3	11.3	11.3	13.2	18.1	7.6	16.8	9.0	21.2
Fractional % phi 3-4 (62.5-125 µm)	% dw	13.4	17.0	7.4	9.0	10.9	14.6	17.5	16.6	2.8	15.3
Fractional % phi 4-5 (31.2-62.5 µm)	% dw	6.3	8.0	12.3	10.7	9.3	11.0	21.3	14.6	0.6	10.3
Fractional % phi 5-6 (15.6-31.2 µm)	% dw	5.7	8.0	10.4	13.8	11.6	8.5	20.2	11.2	3.5	7.8
Fractional % phi 6-7 (7.8-15.6 µm)	% dw	3.8	5.6	7.9	11.1	8.7	6.7	11.7	7.2	2.8	5.3
Fractional % phi 7-8 (3.9-7.8 µm)	% dw	2.3	3.9	5.5	5.6	5.5	3.8	5.5	4.1	2.0	3.1

Table A-1-7. Samples SS102-010 through SS116-010, cont.

ANALYTE	UNIT	LDW-SS102-010	LDW-SS104-010	LDW-SS109-010	LDW-SS110-010	LDW-SS111-010	LDW-SS112-010	LDW-SS113b-010	LDW-SS114-010	LDW-SS115-010	LDW-SS116-010
Fractional % phi 8-9 (1.95-3.9 µm)	% dw	2.3	2.8	3.1	3.4	3.1	2.7	3.8	2.8	1.2	2.4
Fractional % phi 9-10 (0.98-1.95 µm)	% dw	1.4	1.7	2.2	2.1	2.1	2.0	2.1	1.8	0.8	1.8
Fractional % phi 10+ (<0.98 µm)	% dw	2.4	2.5	4.3	3.7	3.5	3.4	4.8	3.3	1.1	1.8
Rocks (total calc'd)	% dw	0.3	0.2	10.3	4.4	7.5	2.4	0.7	2.1	53.3	1.3
Sand (total calc'd)	% dw	75.6	67.4	44.1	45.1	48.8	59.5	29.9	52.8	34.6	66.4
Silt (total calc'd)	% dw	18.1	25.5	36.1	41.2	35.1	30.0	58.7	37.1	8.9	26.5
Clay (total calc'd)	% dw	6.1	7.0	9.6	9.2	8.7	8.1	10.7	7.9	3.1	6.0
Fines (percent silt+clay)	% dw	24.2	32.5	45.7	50.4	43.8	38.1	69.4	45.0	12.0	32.5
Conventional parameters											
Total organic carbon (TOC)	% dw	1.37	1.35	2.94	2.26	2.32	1.82	1.42	1.53	1.92	1.34
Total solids	% ww	64.30	57.40	46.70	50.10	52.73	53.00	50.00	57.98	64.80	64.10
Total solids (preserved)	% ww	56.30	52.30	40.90	52.80	43.00	55.00	43.50	55.15	54.80	57.60
Sulfides (total)	mg/kg dw	4.6 U	4.3 U	5.4 U	5.3 U	100 J	6.2 UJ	250 J	5.8 UJ	3.7 U	6.5 UJ
Ammonia (total as nitrogen)	mg-N/kg	4.88	5.53	10.8	3.66	10.3	4.99	6.54	2.71	4.61	4.81

dw – dry weight

ww – wet weight

na – not analyzed

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PAHs, total PCBs, and total DDTs are presented in Appendix B.

Totals were calculated for each sediment grain size category using the following grain size ranges: rock – all fractions >2,000 µm; sand – all fractions between 63 and 2,000 µm; silt – all fractions between 3.9 and 63 µm; and clay – all fractions <3.9 µm.

Data qualifiers: U – not detected at reporting limit shown
 J – estimated concentration
 UJ – not detected at estimated reporting limit shown

Table A-1-8. Concentrations of all analytes in Round 1 LDW surface sediment samples: Samples SS117-010 through SS127-010

ANALYTE	UNIT	LDW-SS117-010	LDW-SS118-010	LDW-SS119-010	LDW-SS120-010	LDW-SS121-010	LDW-SS123-010	LDW-SS125-010	LDW-SS126-010	LDW-SS127-010	LDW-SS203-010 (field duplicate) ^a
Metals and trace elements											
Antimony	mg/kg dw	0.4 UJ	0.4 UJ	0.3 U	0.3 UJ	0.3 UJ	0.3 UJ	0.4 UJ	0.4 UJ	0.6 UJ	0.3 UJ
Arsenic	mg/kg dw	14.4	13.0	10.9	15.6	23.1	7.2	8.6	7.3	13.2	7.5
Cadmium	mg/kg dw	0.4 UJ	0.4 UJ	0.6	1.4	0.8 U	0.3	0.4 UJ	0.4 UJ	0.6 UJ	0.3
Chromium	mg/kg dw	26.7 J	29 J	37.6	64.9	61	20.9	27 J	24 J	36 J	18.8
Cobalt	mg/kg dw	8.6	8.5	8.3	9.0	12	7.0	9.1	8.5	10.3	6.6
Copper	mg/kg dw	37.0	47.4	46.8	290	190	28.0	39.0	34.9	72.0	27.6
Lead	mg/kg dw	19	28	71	386	533	18	18	17	37	17
Mercury	mg/kg dw	0.1 U	0.12	0.16	0.20	0.27	0.08	0.09	0.1 U	0.2	0.08
Molybdenum	mg/kg dw	1.4	1	1.7	3.1	9	1.4	1	1	2	1.3
Nickel	mg/kg dw	20	20	19	25	30	14	21	19	25	13
Selenium	mg/kg dw	9 U	10 U	9 U	9 U	20 U	7 U	10 U	10 U	10 U	7 U
Silver	mg/kg dw	0.5 U	0.6 U	0.7	0.9	1 U	0.4 U	0.6 U	0.6 U	0.9 U	0.4 U
Thallium	mg/kg dw	0.4 U	0.4 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.6 U	0.3 U
Vanadium	mg/kg dw	66.0	67.6	58.8	61.7	60	55.6	68.9	63.8	89.6	54.5
Zinc	mg/kg dw	86	103	115	328	342	60.9	91	82	141	58.7
Organometals											
Monobutyltin as ion	µg/kg dw	na	na	na	na	na	na	na	na	na	na
Dibutyltin as ion	µg/kg dw	na	na	na	na	na	na	na	na	na	na
Tributyltin as ion	µg/kg dw	na	na	na	na	na	na	na	na	na	na
PAHs											
2-Chloronaphthalene	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
2-Methylnaphthalene	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
Acenaphthene	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	24	58 U
Acenaphthylene	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
Anthracene	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	60	58 U
Benzo(a)anthracene	µg/kg dw	39	130	160	210	200 U	15	100	110	400	9.6

Table A-1-8. Samples SS117-010 through SS127-010, cont.

ANALYTE	UNIT	LDW-SS117-010	LDW-SS118-010	LDW-SS119-010	LDW-SS120-010	LDW-SS121-010	LDW-SS123-010	LDW-SS125-010	LDW-SS126-010	LDW-SS127-010	LDW-SS203-010 (field duplicate) ^a
Benzo(a)pyrene	µg/kg dw	52	140	180	290	100 J	11	110	110	450	9.6
Benzo(b)fluoranthene	µg/kg dw	90	210	230	330	110 J	24	190	200	720	12
Benzo(g,h,i)perylene	µg/kg dw	26	71 J	96 U	100	200 U	20 U	98 U	100 U	170	58 U
Benzo(k)fluoranthene	µg/kg dw	58	120	160	260	200 U	27	100	110	430	31 J
Total benzofluoranthenes (calc'd)	µg/kg dw	150	330	390	590	110 J	51	290	310	1,150	43 J
Chrysene	µg/kg dw	58	270	350	440	200	22	290	300	690	36 J
Dibenzo(a,h)anthracene	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	28	58 U
Dibenzofuran	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
Fluoranthene	µg/kg dw	130	490	510	800	170 J	48	340	420	1,100	78
Fluorene	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	32	58 U
Indeno(1,2,3-cd)pyrene	µg/kg dw	25	46	63	130	200 U	11	10	9.2	200	6.4 U
Naphthalene	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
Phenanthrene	µg/kg dw	41	140	160	220	200 U	21	73 J	77 J	530	39 J
Pyrene	µg/kg dw	140	360	380	550	120 J	57	240	320	910	89
Total HPAH (calc'd)	µg/kg dw	620	1,840 J	2,030	3,110	700 J	215	1,380	1,580	5,100	265 J
Total LPAH (calc'd)	µg/kg dw	41	140	160	220	200 U	21	73 J	77 J	650	39 J
Total PAH (calc'd)	µg/kg dw	660	1,980 J	2,190	3,330	700 J	236	1,450 J	1,660 J	5,700	304 J
Phthalates											
Bis(2-ethylhexyl)phthalate	µg/kg dw	140	240	280	300	200 U	31	97 J	92 J	140	36 J
Butyl benzyl phthalate	µg/kg dw	51	25	140	230	320	7.6	6.5 U	60 J	20	6.4 U
Diethyl phthalate	µg/kg dw	11 U	8.6	110	110	200 U	6.3 U	6.5 U	6.6 U	20 U	6.4 U
Dimethyl phthalate	µg/kg dw	6.6 U	7.3	37	40	200 U	18	6.5 U	6.6 U	20 U	6.4 U
Di-n-butyl phthalate	µg/kg dw	26 UJ	99 U	96 U	97 U	120 J	20 U	98 U	100 U	20 U	58 U
Di-n-octyl phthalate	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
Other SVOCs											
1,2,4-Trichlorobenzene	µg/kg dw	6.6 U	6.6 U	6.6 U	22 U	200 U	6.3 U	6.5 U	6.6 U	20 U	6.4 U
1,2-Dichlorobenzene	µg/kg dw	6.6 U	6.6 U	6.6 U	22 U	200 U	6.3 U	6.5 U	6.6 U	20 U	6.4 U
1,3-Dichlorobenzene	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
1,4-Dichlorobenzene	µg/kg dw	6.6 U	6.6 U	6.6 U	22 U	200 U	6.3 U	6.5 U	6.6 U	20 U	6.4 U
2,4,5-Trichlorophenol	µg/kg dw	98 U	500 U	480 U	490 U	990 U	98 U	490 U	500 U	99 U	290 U

Table A-1-8. Samples SS117-010 through SS127-010, cont.

ANALYTE	UNIT	LDW-SS117-010	LDW-SS118-010	LDW-SS119-010	LDW-SS120-010	LDW-SS121-010	LDW-SS123-010	LDW-SS125-010	LDW-SS126-010	LDW-SS127-010	LDW-SS203-010 (field duplicate) ^a
2,4,6-Trichlorophenol	µg/kg dw	98 U	500 U	480 U	490 U	990 U	98 U	490 U	500 U	99 U	290 U
2,4-Dichlorophenol	µg/kg dw	98 U	500 U	480 U	490 U	990 U	98 U	490 U	500 U	99 U	290 U
2,4-Dimethylphenol	µg/kg dw	6.6 U	6.6 U	6.6 U	22 U	200 U	6.3 U	6.5 U	6.6 U	20 U	6.4 U
2,4-Dinitrophenol	µg/kg dw	200 U	990 U	960 U	970 U	2,000 U	200 U	980 U	1,000 U	200 U	580 U
2,4-Dinitrotoluene	µg/kg dw	98 U	500 U	480 U	490 U	990 U	98 U	490 U	500 U	99 U	290 U
2,6-Dinitrotoluene	µg/kg dw	98 U	500 U	480 U	490 U	990 U	98 U	490 U	500 U	99 U	290 U
2-Chlorophenol	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
2-Methylphenol	µg/kg dw	6.6 U	6.6 U	6.6 U	22 U	200 U	6.3 U	6.5 U	6.6 U	20 U	6.4 U
2-Nitroaniline	µg/kg dw	98 U	500 U	480 U	490 U	990 U	98 U	490 U	500 U	99 U	290 U
2-Nitrophenol	µg/kg dw	98 U	500 U	480 U	490 U	990 U	98 U	490 U	500 U	99 U	290 U
3,3'-Dichlorobenzidine	µg/kg dw	98 U	500 U	480 U	490 U	990 U	98 U	490 U	500 U	99 U	290 U
3-Nitroaniline	µg/kg dw	98 U	500 U	480 U	490 U	990 U	98 U	490 U	500 U	99 U	290 U
4,6-Dinitro-o-cresol	µg/kg dw	200 U	990 U	960 U	970 U	2,000 U	200 U	980 U	1,000 U	200 U	580 U
4-Bromophenyl phenyl ether	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
4-Chloro-3-methylphenol	µg/kg dw	98 U	500 U	480 U	490 U	990 U	98 U	490 U	500 U	99 U	290 U
4-Chloroaniline	µg/kg dw	98 U	500 U	480 U	490 U	990 U	98 U	490 U	500 U	99 U	290 U
4-Chlorophenyl phenyl ether	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
4-Methylphenol	µg/kg dw	20 U	99 U	96 U	97 U	200 U	15 J	98 U	100 U	20 U	30 J
4-Nitroaniline	µg/kg dw	98 U	500 U	480 U	490 U	990 U	98 U	490 U	500 U	99 U	290 U
4-Nitrophenol	µg/kg dw	98 U	500 U	480 U	490 U	990 U	98 U	490 U	500 U	99 U	290 U
Aniline	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
Benzoic acid	µg/kg dw	100 J	84	130	250	2,000 U	63 U	65 U	66 U	200 U	64 U
Benzyl alcohol	µg/kg dw	20 U	33 U	33 U	97 U	200 U	20 U	33 U	33 U	20 U	32 U
bis(2-chloroethoxy)methane	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
bis(2-chloroethyl)ether	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
bis(2-chloroisopropyl)ether	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
Carbazole	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	91	58 U
Hexachlorobenzene	µg/kg dw	3.3 UJ	6.6 U	6.6 U	22 U	200 U	6.3 U	0.97 U	0.99 U	0.99 U	6.4 U
Hexachlorobutadiene	µg/kg dw	6.6 U	6.6 U	6.6 U	22 U	200 U	6.3 U	0.97 U	0.99 U	0.99 U	6.4 U
Hexachlorocyclopentadiene	µg/kg dw	98 U	500 U	480 U	490 U	990 U	98 U	490 U	500 U	99 U	290 U

Table A-1-8. Samples SS117-010 through SS127-010, cont.

ANALYTE	UNIT	LDW-SS117-010	LDW-SS118-010	LDW-SS119-010	LDW-SS120-010	LDW-SS121-010	LDW-SS123-010	LDW-SS125-010	LDW-SS126-010	LDW-SS127-010	LDW-SS203-010 (field duplicate) ^a
Hexachloroethane	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
Isophorone	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
Nitrobenzene	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
N-Nitrosodimethylamine	µg/kg dw	33 U	33 U	33 U	110 U	200 U	32 U	33 U	33 U	99 U	32 U
N-Nitroso-di-n-propylamine	µg/kg dw	33 U	33 U	33 U	110 U	990 U	32 U	33 U	33 U	99 U	32 U
N-Nitrosodiphenylamine	µg/kg dw	6.6 U	6.6 U	6.6 U	22 U	200 U	6.3 U	6.5 U	6.6 U	20 U	6.4 U
Pentachlorophenol	µg/kg dw	66 UJ	33 U	33 U	110 U	990 U	32 U	33 U	33 U	99 U	32 U
Phenol	µg/kg dw	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U	58 U
Polychlorinated biphenyls											
Aroclor-1016	µg/kg dw	20 U	20 U	120 U	72 U	20 U	20 U	19 U	20 U	20 U	19 U
Aroclor-1221	µg/kg dw	20 U	20 U	120 U	72 U	20 U	20 U	19 U	20 U	20 U	19 U
Aroclor-1232	µg/kg dw	20 U	20 U	120 U	72 U	20 U	20 U	19 U	20 U	20 U	19 U
Aroclor-1242	µg/kg dw	20 U	20 U	120 U	72 U	20 U	20 U	19 U	20 U	20 U	19 U
Aroclor-1248	µg/kg dw	20 U	20 U	180	100	20 U	25	19 U	20 U	20 U	30
Aroclor-1254	µg/kg dw	43	24	460	330	700	69	19 U	20 U	28	82
Aroclor-1260	µg/kg dw	36 J	20 U	240 J	200 J	360 J	40	19 U	20 U	30	50
Total PCBs (calc'd)	µg/kg dw	79 J	24	880 J	630 J	1,060 J	134	19 U	20 U	58	162
Pesticides											
2,4'-DDD	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U	na
2,4'-DDE	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U	na
2,4'-DDT	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U	na
4,4'-DDD	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U	na
4,4'-DDE	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U	na
4,4'-DDT	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	5.4 U	na
Total DDTs (calc'd)	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	5.4 U	na
Aldrin	µg/kg dw	na	na	na	na	na	na	0.97 U	0.99 U	0.99 U	na
Dieldrin	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U	na
Total aldrin/dieldrin (calc'd)	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U	na
alpha-BHC	µg/kg dw	na	na	na	na	na	na	0.97 U	0.99 U	0.99 U	na
beta-BHC	µg/kg dw	na	na	na	na	na	na	0.97 U	0.99 U	14 U	na

Table A-1-8. Samples SS117-010 through SS127-010, cont.

ANALYTE	UNIT	LDW-SS117-010	LDW-SS118-010	LDW-SS119-010	LDW-SS120-010	LDW-SS121-010	LDW-SS123-010	LDW-SS125-010	LDW-SS126-010	LDW-SS127-010	LDW-SS203-010 (field duplicate) ^a
delta-BHC	µg/kg dw	na	na	na	na	na	na	0.97 U	0.99 U	0.99 U	na
gamma-BHC	µg/kg dw	na	na	na	na	na	na	0.97 U	0.99 U	0.99 U	na
alpha-Chlordane	µg/kg dw	na	na	na	na	na	na	0.97 U	0.99 U	0.99 U	na
gamma-Chlordane	µg/kg dw	na	na	na	na	na	na	0.97 U	0.99 U	0.99 U	na
Total chlordane (calc'd)	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U	na
alpha-Endosulfan	µg/kg dw	na	na	na	na	na	na	0.97 U	0.99 U	0.99 U	na
beta-Endosulfan	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U	na
Endosulfan sulfate	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U	na
Endrin	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U	na
Endrin aldehyde	µg/kg dw	na	na	na	na	na	na	1.9 UJ	2.0 UJ	2.0 UJ	na
Endrin ketone	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U	na
Heptachlor	µg/kg dw	na	na	na	na	na	na	0.97 U	0.99 U	0.99 U	na
Heptachlor epoxide	µg/kg dw	na	na	na	na	na	na	0.97 U	0.99 U	0.99 U	na
Methoxychlor	µg/kg dw	na	na	na	na	na	na	9.7 U	9.9 U	9.9 U	na
Mirex	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U	na
Cis-Nonachlor	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U	na
Oxychlordane	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U	na
Toxaphene	µg/kg dw	na	na	na	na	na	na	97 U	99 U	99 U	na
Trans-Nonachlor	µg/kg dw	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U	na
Sediment grain size											
Fractional % phi >-1 (>2,000 µm)	% dw	7.5	0.3	2.8	1.3	24.3	0.5	0.1 U	0.1 U	0.4	4.0
Fractional % phi -1-0 (1,000-2,000 µm)	% dw	3.1	0.3	0.8	1.6	4.2	4.4	0.2	0.2	0.4	4.0
Fractional % phi 0-1 (500-1,000 µm)	% dw	3.5	0.4	2.8	5.0	7.6	25.9	0.9	1.2	0.6	25.5
Fractional % phi 1-2 (250-500 µm)	% dw	5.1	1.9	8.6	11.0	19.2	32.0	1.4	2.0	2.6	31.9
Fractional % phi 2-3 (125-250 µm)	% dw	12.0	4.1	15.9	13.1	12.6	5.7	5.2	9.6	2.8	5.2
Fractional % phi 3-4 (62.5-125 µm)	% dw	16.2	16.8	21.0	14.0	6.9	4.5	16.4	20.0	2.6	4.5
Fractional % phi 4-5 (31.2-62.5 µm)	% dw	15.0	23.4	13.3	12.6	2.8	4.1	25.6	20.2	8.0	3.6
Fractional % phi 5-6 (15.6-31.2 µm)	% dw	21.4	18.8	13.2	15.4	5.8	6.8	19.4	18.8	22.4	5.6
Fractional % phi 6-7 (7.8-15.6 µm)	% dw	1.3	11.6	8.0	10.3	5.5	5.1	13.7	11.4	25.5	5.0
Fractional % phi 7-8 (3.9-7.8 µm)	% dw	5.8	7.1	5.2	7.0	3.8	3.5	7.1	6.4	15.3	3.4

Table A-1-8. Samples SS117-010 through SS127-010, cont.

ANALYTE	UNIT	LDW-SS117-010	LDW-SS118-010	LDW-SS119-010	LDW-SS120-010	LDW-SS121-010	LDW-SS123-010	LDW-SS125-010	LDW-SS126-010	LDW-SS127-010	LDW-SS203-010 (field duplicate) ^a
Fractional % phi 8-9 (1.95-3.9 µm)	% dw	3.3	4.1	3.1	3.1	2.7	2.0	4.4	4.4	7.4	2.1
Fractional % phi 9-10 (0.98-1.95 µm)	% dw	2.3	2.8	2.1	2.1	1.8	1.7	2.2	2.3	3.9	1.4
Fractional % phi 10+ (<0.98 µm)	% dw	3.5	8.4	3.1	3.5	2.8	3.8	3.5	3.5	7.9	3.7
Rocks (total calc'd)	% dw	7.5	0.3	2.8	1.3	24.3	0.5	0.1 U	0.1 U	0.4	4.0
Sand (total calc'd)	% dw	39.9	23.5	49.1	44.7	50.5	72.5	24.1	33.0	9.0	71.1
Silt (total calc'd)	% dw	43.5	60.9	39.7	45.3	17.9	19.5	65.8	56.8	71.2	17.6
Clay (total calc'd)	% dw	9.1	15.3	8.3	8.7	7.3	7.5	10.1	10.2	19.2	7.2
Fines (percent silt+clay)	% dw	52.6	76.2	48.0	54.0	25.2	27.0	75.9	67.0	90.4	24.8
Conventional parameters											
Total organic carbon (TOC)	% dw	1.47	1.84	1.50	1.94	1.86	1.77	1.53	1.41	3.34	1.81
Total solids	% ww	53.50	46.90	54.10	53.50	60.10	69.00	47.20	49.70	33.50	68.90
Total solids (preserved)	% ww	51.40	42.40	50.90	40.80	57.20	71.20	40.70	38.40	31.90	74.60
Sulfides (total)	mg/kg dw	4.4 UJ	480 J	7.7 UJ	14 UJ	3.7 U	4.9 U	12 J	11 UJ	210 J	4.4 U
Ammonia (total as nitrogen)	mg-N/kg	13.4	11.3	6.41	4.53	1.23	3.49	5.85	6.68	12.8	5.05

^a Field duplicate at same location as LDW-SS123

dw – dry weight

ww – wet weight

na – not analyzed

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PAHs, total PCBs, and total DDTs are presented in Appendix B.

Totals were calculated for each sediment grain size category using the following grain size ranges: rock – all fractions >2,000 µm; sand – all fractions between 63 and 2,000 µm; silt – all fractions between 3.9 and 63 µm; and clay – all fractions <3.9 µm.

Data qualifiers: U – not detected at reporting limit shown
 J – estimated concentration
 UJ – not detected at estimated reporting limit shown

Table A-1-9. Concentrations of all analytes in Round 1 LDW surface sediment samples: Samples SS128-010 through SS143-010, B9a-S, and three reference sediment samples from Carr Inlet

ANALYTE	UNIT	LDW-SS128-010	LDW-SS129-010	LDW-SS130-010	LDW-SS134-010	LDW-SS142-010	LDW-SS143-010	LDW-B9a-S ^a	LDW-SSCR20-010 ^b	LDW-SSCR23-010 ^b	LDW-SSMSM P43-010 ^b
Metals and trace elements											
Antimony	mg/kg dw	0.5 UJ	0.3 UJ	0.5 UJ	0.3 U	0.4 UJ	0.4 UJ	na	0.3	0.3 UJ	0.3 UJ
Arsenic	mg/kg dw	26.2	10.6	15.0	3.5	10.5	8.8	na	3.6	3.3	1.8
Cadmium	mg/kg dw	0.5 U	0.3 UJ	0.5 UJ	0.3 U	0.4 U	0.3 U	na	0.3 U	0.3	0.3 U
Chromium	mg/kg dw	33	19.6 J	33 J	15.7	24	22.1	na	32.4	26.0	12.6
Cobalt	mg/kg dw	9.9	5.8	9.6	4.7	7.9	9.6	na	6.5	5.0	2.5
Copper	mg/kg dw	69.8	36.6	60.8	25.0	33.5	34.4	na	19.9	14.9	4.7
Lead	mg/kg dw	33	19	29	4	17	19	na	5	4	3
Mercury	mg/kg dw	0.3	0.08 U	0.1	0.07 U	0.1	0.07	na	0.08 U	0.07 U	0.05 U
Molybdenum	mg/kg dw	2	1.2	1	0.8	1	1.1	na	1.3	1.3	0.7 U
Nickel	mg/kg dw	23	13	22	8	17	20	na	31	24	10
Selenium	mg/kg dw	10 U	9 U	10 U	6 U	10 U	9 U	na	8 U	7 U	7 U
Silver	mg/kg dw	0.8 U	0.5 U	0.7 U	0.4 U	0.6 U	0.5 U	na	0.5 U	0.4 U	0.4 U
Thallium	mg/kg dw	0.5 U	0.3 U	0.5 U	0.3 U	0.4 U	0.4 U	na	0.3 U	0.3 U	0.3 U
Vanadium	mg/kg dw	84.4	60.3	79.4	51.7	70.8	65.5	na	51.5	38.7	17.2
Zinc	mg/kg dw	129	68	115	38.2	88	83	na	42	33.2	15.1
Organometals											
Monobutyltin as ion	µg/kg dw	na	na	na	na	na	na	na	na	na	na
Dibutyltin as ion	µg/kg dw	na	na	na	na	na	na	na	na	na	na
Tributyltin as ion	µg/kg dw	na	na	na	na	na	na	na	na	na	na
PAHs											
2-Chloronaphthalene	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
2-Methylnaphthalene	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
Acenaphthene	µg/kg dw	100 U	34	20 U	19 U	160	120 U	na	20 U	19 U	19 U
Acenaphthylene	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
Anthracene	µg/kg dw	59 J	66	30	19 U	99 U	120 U	na	20 U	19 U	19 U
Benzo(a)anthracene	µg/kg dw	310	490	220	19 U	14	21	76	20 U	19 U	19 U

Table A-1-9. Samples SS128-010 through SS143-010, B9a-S, and three reference sediment samples from Carr Inlet, cont.

ANALYTE	UNIT	LDW-SS128-010	LDW-SS129-010	LDW-SS130-010	LDW-SS134-010	LDW-SS142-010	LDW-SS143-010	LDW-B9a-S ^a	LDW-SSCR20-010 ^b	LDW-SSCR23-010 ^b	LDW-SSMSM P43-010 ^b
Benzo(a)pyrene	µg/kg dw	400	580	260	19 U	16	22	65	20 U	19 U	19 U
Benzo(b)fluoranthene	µg/kg dw	610	970	390	19 U	140	20	74	20 U	19 U	19 U
Benzo(g,h,i)perylene	µg/kg dw	110	300	86	19 U	99 U	120 U	na	20 U	19 U	19 U
Benzo(k)fluoranthene	µg/kg dw	640	460	270	19 U	150	120 U	na	20 U	19 U	19 U
Total benzofluoranthenes (calc'd)	µg/kg dw	1,250	1,430	660	19 U	290	20	na	20 U	19 U	19 U
Chrysene	µg/kg dw	530	910	400	19 U	130	97 J	na	20 U	19 U	19 U
Dibenzo(a,h)anthracene	µg/kg dw	100 U	110	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
Dibenzofuran	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
Fluoranthene	µg/kg dw	1,100	1,500	700	19 U	270	180	na	20 U	19 U	19 U
Fluorene	µg/kg dw	100 U	42	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
Indeno(1,2,3-cd)pyrene	µg/kg dw	220	340	100	19 U	12	18	63	20 U	19 U	19 U
Naphthalene	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
Phenanthrene	µg/kg dw	440	790	280	19 U	120	64 J	na	20 U	19 U	19 U
Pyrene	µg/kg dw	890	1,100	510	19 U	230	130	na	20 U	19 U	19 U
Total HPAH (calc'd)	µg/kg dw	4,800	6,800	2,940	19 U	960	490 J	na	20 U	19 U	19 U
Total LPAH (calc'd)	µg/kg dw	500 J	930	310	19 U	280	64 J	na	20 U	19 U	19 U
Total PAH (calc'd)	µg/kg dw	5,300 J	7,700	3,250	19 U	1,240	550 J	na	20 U	19 U	19 U
Phthalates											
Bis(2-ethylhexyl)phthalate	µg/kg dw	370	170	72	19 U	240	120 U	na	20 U	19 U	19 U
Butyl benzyl phthalate	µg/kg dw	38	6.4 U	20 U	19 U	6.6 U	6.5 U	17 J	20 U	19 U	19 U
Diethyl phthalate	µg/kg dw	14 U	8.4	20 U	19 U	6.6 U	6.5 U	6.5 U	20 U	19 U	19 U
Dimethyl phthalate	µg/kg dw	13	6.4 U	20 U	19 U	6.6 U	6.5 U	6.5 U	20 U	19 U	19 U
Di-n-butyl phthalate	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
Di-n-octyl phthalate	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
Other SVOCs											
1,2,4-Trichlorobenzene	µg/kg dw	8.0 U	6.4 U	20 U	19 U	6.6 U	6.5 U	6.5 U	20 U	19 U	19 U
1,2-Dichlorobenzene	µg/kg dw	8.0 U	6.4 U	20 U	19 U	6.6 U	6.5 U	6.5 U	20 U	19 U	19 U
1,3-Dichlorobenzene	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
1,4-Dichlorobenzene	µg/kg dw	8.0 U	6.4 U	20 U	19 U	6.6 U	6.5 U	6.5 U	20 U	19 U	19 U
2,4,5-Trichlorophenol	µg/kg dw	500 U	98 U	98 U	96 U	490 U	590 U	na	99 U	96 U	95 U

Table A-1-9. Samples SS128-010 through SS143-010, B9a-S, and three reference sediment samples from Carr Inlet, cont.

ANALYTE	UNIT	LDW-SS128-010	LDW-SS129-010	LDW-SS130-010	LDW-SS134-010	LDW-SS142-010	LDW-SS143-010	LDW-B9a-S ^a	LDW-SSCR20-010 ^b	LDW-SSCR23-010 ^b	LDW-SSMSM P43-010 ^b
2,4,6-Trichlorophenol	µg/kg dw	500 U	98 U	98 U	96 U	490 U	590 U	na	99 U	96 U	95 U
2,4-Dichlorophenol	µg/kg dw	500 U	98 U	98 U	96 U	490 U	590 U	na	99 U	96 U	95 U
2,4-Dimethylphenol	µg/kg dw	8.0 U	6.4 U	20 U	19 U	6.6 U	6.5 U	6.5 U	20 U	19 U	19 U
2,4-Dinitrophenol	µg/kg dw	1,000 U	200 U	200 U	190 U	990 U	1,200 U	na	200 U	190 U	190 U
2,4-Dinitrotoluene	µg/kg dw	500 U	98 U	98 U	96 U	490 U	590 U	na	99 U	96 U	95 U
2,6-Dinitrotoluene	µg/kg dw	500 U	98 U	98 U	96 U	490 U	590 U	na	99 U	96 U	95 U
2-Chlorophenol	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
2-Methylphenol	µg/kg dw	8.0 U	6.4 U	20 U	19 U	6.6 U	6.5 U	6.5 U	20 U	19 U	19 U
2-Nitroaniline	µg/kg dw	500 U	98 U	98 U	96 U	490 U	590 U	na	99 U	96 U	95 U
2-Nitrophenol	µg/kg dw	500 U	98 U	98 U	96 U	490 U	590 U	na	99 U	96 U	95 U
3,3'-Dichlorobenzidine	µg/kg dw	500 U	98 U	98 U	96 U	490 U	590 U	na	99 U	96 U	95 U
3-Nitroaniline	µg/kg dw	500 U	98 U	98 U	96 U	490 U	590 U	na	99 U	96 U	95 U
4,6-Dinitro-o-cresol	µg/kg dw	1,000 U	200 U	200 U	190 U	990 U	1,200 U	na	200 U	190 U	190 U
4-Bromophenyl phenyl ether	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
4-Chloro-3-methylphenol	µg/kg dw	500 U	98 U	98 U	96 U	490 U	590 U	na	99 U	96 U	95 U
4-Chloroaniline	µg/kg dw	500 U	98 U	98 U	96 U	490 U	590 U	na	99 U	96 U	95 U
4-Chlorophenyl phenyl ether	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
4-Methylphenol	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
4-Nitroaniline	µg/kg dw	500 U	98 U	98 U	96 U	490 U	590 U	na	99 U	96 U	95 U
4-Nitrophenol	µg/kg dw	500 U	98 U	98 U	96 U	490 U	590 U	na	99 U	96 U	95 U
Aniline	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
Benzoic acid	µg/kg dw	220	64 U	200 U	190 U	66 U	65 U	54 J	200 U	190 U	190 U
Benzyl alcohol	µg/kg dw	40 U	20 U	20 U	19 U	33 U	33 U	20 U	20 U	19 U	19 U
bis(2-chloroethoxy)methane	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
bis(2-chloroethyl)ether	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
bis(2-chloroisopropyl)ether	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
Carbazole	µg/kg dw	90 J	130	51	19 U	99 U	120 U	na	20 U	19 U	19 U
Hexachlorobenzene	µg/kg dw	1.0 U	0.96 U	0.98 U	0.97 U	6.6 U	6.5 U	1.4 J	20 U	19 U	19 U
Hexachlorobutadiene	µg/kg dw	1.0 U	0.96 U	0.98 U	0.97 U	6.6 U	6.5 U	6.5 U	20 U	19 U	19 U
Hexachlorocyclopentadiene	µg/kg dw	500 U	98 U	98 U	96 U	490 U	590 U	na	99 U	96 U	95 U

Table A-1-9. Samples SS128-010 through SS143-010, B9a-S, and three reference sediment samples from Carr Inlet, cont.

ANALYTE	UNIT	LDW-SS128-010	LDW-SS129-010	LDW-SS130-010	LDW-SS134-010	LDW-SS142-010	LDW-SS143-010	LDW-B9a-S ^a	LDW-SSCR20-010 ^b	LDW-SSCR23-010 ^b	LDW-SSMSM P43-010 ^b
Hexachloroethane	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
Isophorone	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
Nitrobenzene	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	20 U	19 U	19 U
N-Nitrosodimethylamine	µg/kg dw	40 U	32 U	98 U	96 U	33 U	33 U	33 U	99 U	96 U	95 U
N-Nitroso-di-n-propylamine	µg/kg dw	40 U	32 U	98 U	96 U	33 U	33 U	20 U	99 U	96 U	95 U
N-Nitrosodiphenylamine	µg/kg dw	8.0 U	6.4 U	20 U	19 U	6.6 U	6.5 U	6.5 U	20 U	19 U	19 U
Pentachlorophenol	µg/kg dw	40 UJ	32 U	98 U	96 U	33 U	33 U	33 U	99 U	96 U	95 U
Phenol	µg/kg dw	100 U	20 U	20 U	19 U	99 U	120 U	na	38	19 U	19 U
Polychlorinated biphenyls											
Aroclor-1016	µg/kg dw	20 U	19 U	20 U	19 U	20 U	20 U	na	20 U	19 U	19 U
Aroclor-1221	µg/kg dw	20 U	19 U	20 U	19 U	20 U	20 U	na	20 U	19 U	19 U
Aroclor-1232	µg/kg dw	20 U	19 U	20 U	19 U	20 U	20 U	na	20 U	19 U	19 U
Aroclor-1242	µg/kg dw	20 U	19 U	20 U	19 U	20 U	2,700	na	20 U	19 U	19 U
Aroclor-1248	µg/kg dw	20 U	19 U	20 U	19 U	29	20 U	na	20 U	19 U	19 U
Aroclor-1254	µg/kg dw	20 U	19 U	26	19 U	93	20 U	na	20 U	19 U	19 U
Aroclor-1260	µg/kg dw	20 U	19 U	20 U	19 U	40 J	20 U	na	20 U	19 U	19 U
Total PCBs (calc'd)	µg/kg dw	20 U	19 U	26	19 U	162 J	2,700	na	20 U	19 U	19 U
Pesticides											
2,4'-DDD	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
2,4'-DDE	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
2,4'-DDT	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
4,4'-DDD	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
4,4'-DDE	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
4,4'-DDT	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
Total DDTs (calc'd)	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
Aldrin	µg/kg dw	1.0 U	0.96 U	na	0.97 U	na	na	na	na	na	na
Dieldrin	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
Total aldrin/dieldrin (calc'd)	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
alpha-BHC	µg/kg dw	1.0 U	0.96 U	na	0.97 U	na	na	na	na	na	na
beta-BHC	µg/kg dw	1.0 U	0.96 U	na	0.97 U	na	na	na	na	na	na

Table A-1-9. Samples SS128-010 through SS143-010, B9a-S, and three reference sediment samples from Carr Inlet, cont.

ANALYTE	UNIT	LDW-SS128-010	LDW-SS129-010	LDW-SS130-010	LDW-SS134-010	LDW-SS142-010	LDW-SS143-010	LDW-B9a-S ^a	LDW-SSCR20-010 ^b	LDW-SSCR23-010 ^b	LDW-SSMSM P43-010 ^b
delta-BHC	µg/kg dw	1.0 U	0.96 U	na	0.97 U	na	na	na	na	na	na
gamma-BHC	µg/kg dw	1.0 U	0.96 U	na	0.97 U	na	na	na	na	na	na
alpha-Chlordane	µg/kg dw	1.0 U	0.96 U	na	0.97 U	na	na	na	na	na	na
gamma-Chlordane	µg/kg dw	1.0 U	0.96 U	na	0.97 U	na	na	na	na	na	na
Total chlordane (calc'd)	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
alpha-Endosulfan	µg/kg dw	1.0 U	0.96 U	na	0.97 U	na	na	na	na	na	na
beta-Endosulfan	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
Endosulfan sulfate	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
Endrin	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
Endrin aldehyde	µg/kg dw	2.0 UJ	1.9 UJ	na	1.9 UJ	na	na	na	na	na	na
Endrin ketone	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
Heptachlor	µg/kg dw	1.0 U	0.96 U	na	0.97 U	na	na	na	na	na	na
Heptachlor epoxide	µg/kg dw	1.0 U	0.96 U	na	0.97 U	na	na	na	na	na	na
Methoxychlor	µg/kg dw	10 U	9.6 U	na	9.7 U	na	na	na	na	na	na
Mirex	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
Cis-Nonachlor	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
Oxychlordane	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
Toxaphene	µg/kg dw	100 U	96 U	na	97 U	na	na	na	na	na	na
Trans-Nonachlor	µg/kg dw	2.0 U	1.9 U	na	1.9 U	na	na	na	na	na	na
Sediment grain size											
Fractional % phi >-1 (>2,000 µm)	% dw	0.1 U	0.1	0.1 U	0.3	0.3	12.2	na	0.1 U	0.1 U	0.1 U
Fractional % phi -1-0 (1,000-2,000 µm)	% dw	0.3	0.2	0.2	0.4	0.6	13.8	na	0.1	0.1 U	0.1 U
Fractional % phi 0-1 (500-1,000 µm)	% dw	0.8	1.5	0.6	3.5	2.2	8.4	na	0.1 U	0.4	1.0
Fractional % phi 1-2 (250-500 µm)	% dw	1.1	22.4	3.9	14.0	5.9	0.9	na	0.7	1.8	19.0
Fractional % phi 2-3 (125-250 µm)	% dw	1.1	33.1	10.9	10.9	16.6	7.2	na	2.6	8.5	60.0
Fractional % phi 3-4 (62.5-125 µm)	% dw	1.6	10.1	8.1	24.8	26.7	13.3	na	18.9	40.7	13.0
Fractional % phi 4-5 (31.2-62.5 µm)	% dw	5.5	3.2	8.6	24.8	14.0	12.6	na	35.2	26.9	1.4
Fractional % phi 5-6 (15.6-31.2 µm)	% dw	23.7	10.8	19.0	11.1	10.7	10.8	na	24.7	8.9	0.8
Fractional % phi 6-7 (7.8-15.6 µm)	% dw	24.4	8.6	17.9	4.4	7.5	7.6	na	7.3	3.9	0.5
Fractional % phi 7-8 (3.9-7.8 µm)	% dw	13.8	4.4	13.1	2.1	5.0	5.1	na	2.5	1.9	0.6

Table A-1-9. Samples SS128-010 through SS143-010, B9a-S, and three reference sediment samples from Carr Inlet, cont.

ANALYTE	UNIT	LDW-SS128-010	LDW-SS129-010	LDW-SS130-010	LDW-SS134-010	LDW-SS142-010	LDW-SS143-010	LDW-B9a-S ^a	LDW-SSCR20-010 ^b	LDW-SSCR23-010 ^b	LDW-SSMSM P43-010 ^b
Fractional % phi 8-9 (1.95-3.9 µm)	% dw	7.7	1.8	6.2	1.3	2.9	3.4	na	1.7	1.3	0.6
Fractional % phi 9-10 (0.98-1.95 µm)	% dw	5.4	1.3	3.8	0.8	1.8	2.2	na	1.4	1.3	0.8
Fractional % phi 10+ (<0.98 µm)	% dw	14.6	2.6	7.2	1.7	5.9	2.7	na	4.9	4.4	2.2
Rocks (total calc'd)	% dw	0.1 U	0.1	0.1 U	0.3	0.3	12.2	na	0.1 U	0.1 U	0.1 U
Sand (total calc'd)	% dw	4.9	67.3	23.7	53.6	52.0	43.6	na	22.3	51.4	93.0
Silt (total calc'd)	% dw	67.4	27.0	58.6	42.4	37.2	36.1	na	69.7	41.6	3.3
Clay (total calc'd)	% dw	27.7	5.7	17.2	3.8	10.6	8.3	na	8.0	7.0	3.6
Fines (percent silt+clay)	% dw	95.1	32.7	75.8	46.2	47.8	44.4	na	77.7	48.6	6.9
Conventional parameters											
Total organic carbon (TOC)	% dw	3.63	2.51	2.87	0.39	1.95	0.698	na	<i>0.632</i>	0.573	0.478
Total solids	% ww	36.10	55.60	39.90	67.90	48.40	56.90	na	<i>61.85</i>	65.20	75.20
Total solids (preserved)	% ww	30.60	68.30	36.10	65.40	54.70	36.80	na	<i>58.33</i>	61.90	76.50
Sulfides (total)	mg/kg dw	110	3.9 UJ	480 J	450	9.7	8.2 U	na	87	250	<i>2.8 U</i>
Ammonia (total as nitrogen)	mg-N/kg	29.8	5.26	12.1	<i>1.82</i>	10.4	8.29	na	<i>11.3</i>	12.1	8.83

^a Sample LDW-B9a-S was collected as part of the benthic invertebrate sampling event and analyzed for SVOCs by Columbia Analytical Services (CAS). This sample was reanalyzed for SVOC-SIM chemicals by Analytical Resources, Inc (ARI) as part of Round 1. The concentration shown is the concentration selected based on the data management rules presented in Appendix B.

^b Reference samples collected at Carr Inlet

dw – dry weight

ww – wet weight

na – not analyzed

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PAHs, total PCBs, and total DDTs are presented in Appendix B.

Totals were calculated for each sediment grain size category using the following grain size ranges: rock – all fractions >2,000 µm; sand – all fractions between 63 and 2,000 µm; silt – all fractions between 3.9 and 63 µm; and clay – all fractions <3.9 µm.

Data qualifiers: U – not detected at reporting limit shown
 J – estimated concentration
 UJ – not detected at estimated reporting limit shown

Table A-2. Concentrations of arsenic, grain size, and total solids in upstream Duwamish River surface sediment samples

ANALYTE	UNIT	DR-SS5-010	DR-SS6-010	DR-SS9-010 (field duplicate) ^a	DR-SS7-010	DR-SS10-010	DR-SS11-010	DR-SS13-010	DR-SS14-010	DR-SS15-010
Metals and trace elements										
Arsenic	mg/kg dw	8.9	8.5	7.9	4.6	7.3	7.4	7.4	5.4	10.9
Sediment grain size										
Fractional % phi >-1 (>2,000 µm)	% dw	0.2	0.1 U	0.1 U	0.5	0.2	3.3	0.1 U	0.2	0.2
Fractional % phi -1-0 (1,000-2,000 µm)	% dw	1	0.5	0.2	0.4	0.2	2.3	0.1	0.3	0.3
Fractional % phi 0-1 (500-1,000 µm)	% dw	1.7	1.0	0.9	0.5	1.3	3.6	1.0	0.5	2.1
Fractional % phi 1-2 (250-500 µm)	% dw	7.0	3.4	3.2	5.2	5.6	5.8	1.9	4.8	4.1
Fractional % phi 2-3 (125-250 µm)	% dw	26.7	21.2	20.9	19.5	19.6	20.9	14.4	38.1	18.2
Fractional % phi 3-4 (62.5-125 µm)	% dw	24.6	28.1	28.0	24.0	19.6	22.7	26.0	28.5	20.9
Fractional % phi 4-5 (31.2-62.5 µm)	% dw	11	14.6	15.0	19.8	11.5	13.6	16.9	10.3	17.5
Fractional % phi 5-6 (15.6-31.2 µm)	% dw	8.6	9.8	9.7	13.2	13.8	9.7	12.8	5.6	12.3
Fractional % phi 6-7 (7.8-15.6 µm)	% dw	6.0	6.6	6.7	6.9	12.3	8.0	11.0	3.9	8.9
Fractional % phi 7-8 (3.9-7.8 µm)	% dw	5.5	5.4	5.6	3.9	8.0	4.4	6.9	3.3	7.7
Fractional % phi 8-9 (1.95-3.9 µm)	% dw	3.2	3.8	3.8	2.2	3.4	2.3	3.5	2.0	5.4
Fractional % phi 9-10 (0.98-1.95 µm)	% dw	2.3	2.4	2.6	1.5	2.1	1.8	2.1	1.0	1.4
Fractional % phi 10+ (<0.98 µm)	% dw	2.3	3.1	3.3	2.4	2.5	1.7	3.3	1.6	1.1
Rocks (total calc'd)	% dw	0.2	0.1 U	0.1 U	0.5	0.2	3.3	0.1 U	0.2	0.2
Sand (total calc'd)	% dw	61	54.2	53.2	49.6	46.3	55.3	43.4	72.2	45.6
Silt (total calc'd)	% dw	31	36.4	37.0	43.8	45.6	35.7	47.6	23.1	46.4
Clay (total calc'd)	% dw	7.8	9.3	9.7	6.1	8.0	5.8	8.9	4.6	7.9
Fines (percent silt+clay)	% dw	39	45.7	46.7	49.9	53.6	41.5	56.5	27.7	54.3
Conventional parameters										
Total solids	% ww	52.90 J	58.60 J	56.30 J	69.80 J	43.30 J	46.90 J	48.80 J	59.90 J	44.80 J

^a Field duplicate was collected at location DR-SS6

dw – dry weight

ww – wet weight

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Totals were calculated for each sediment grain size category using the following grain size ranges: rock – all fractions >2,000 µm; sand – all fractions between 63 and 2,000 µm; silt – all fractions between 3.9 and 63 µm; and clay – all fractions <3.9 µm.

Data qualifiers: U – not detected at reporting limit shown; J – estimated concentration

Table A-3-1. Concentrations of all analytes in Round 1 LDW surface sediment samples compared to SQS/SL and CSL/ML: Locations SS1 through SS17

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS1	LDW- SS4	LDW- SS5	LDW- SS10	LDW- SS12	LDW- SS13	LDW- SS14	LDW- SS15	LDW- SS17
Metals and trace elements												
Antimony	mg/kg dw	150	200	0.3 UJ	0.4 UJ	0.2 UJ	0.4 UJ	0.3 UJ	0.4 UJ	0.2 UJ	0.4 UJ	0.3 U
Arsenic	mg/kg dw	57	93	6.2	21.2	6.5	12.4	13.0	13.3	12.1	11.5	14.9
Cadmium	mg/kg dw	5.1	6.7	0.3 U	0.8	0.2 U	0.5	0.5	0.8	0.2 U	0.6	1.2
Chromium	mg/kg dw	260	270	18.9	42	11.2	40	33.1	39.0	60.5	39	38.2
Copper	mg/kg dw	390	390	32.3	124	21.4	106	89.7	117	25.4	109	129
Lead	mg/kg dw	450	530	27	86	26	65	59	82	22	67	148
Mercury	mg/kg dw	0.41	0.59	0.09	0.38	0.05	0.39	0.24	0.35	0.06 U	0.6	0.41
Nickel	mg/kg dw	140	370	10	26	8	28	24	26	30	26	26
Silver	mg/kg dw	6.1	6.1	0.4 U	0.8	0.4 U	0.7	0.5 U	0.8	0.4 U	0.6	1.3
Zinc	mg/kg dw	410	960	60.3	198	78.1	162	154	176	96.8	156	185
PAHs												
2-Methylnaphthalene	mg/kg OC	38	64	1.2 U	0.82 U	2.7 U	1.2 U	1.0 U	1.1 U	2.5 U	1.1 U	5.7 U
Acenaphthene	mg/kg OC	16	57	1.2 U	0.82 U	2.7 U	1.2 U	1.0 U	1.1 U	2.5 U	1.1 U	5.7 U
Acenaphthylene	mg/kg OC	66	66	1.2 U	0.82 U	2.7 U	1.2 U	1.0 U	1.1 U	2.5 U	1.1 U	5.7 U
Anthracene	mg/kg OC	220	1,200	1.3	0.86	2.7 U	1.8	1.9	1.4	2.5 U	2.7	4.0 J
Benzo(a)anthracene	mg/kg OC	110	270	3.9	8.2	5.7	20	6.4	4.7	4.6	5.6	11
Benzo(a)pyrene	mg/kg OC	99	210	5.8	7.8	8.9	23	7.4	3.6	6.3	5.5	17
Benzo(g,h,i)perylene	mg/kg OC	31	78	3.2	1.3	5.1	2.4	2.5	5.4 U	4.1	1.6	5.8
Total benzofluoranthenes (calc'd)	mg/kg OC	230	450	11	16	15	26	16	6.7	17	14	49
Chrysene	mg/kg OC	110	460	8.2	7.4	10	12	14	8.9	12	13	18
Dibenzo(a,h)anthracene	mg/kg OC	12	33	1.2 U	0.82 U	2.7 U	1.2 U	1.2	5.4 U	2.5 U	1.1 U	5.7 U
Dibenzofuran	mg/kg OC	15	58	1.2 U	0.82 U	2.7 U	1.2 U	1.0 U	1.1 U	2.5 U	1.1 U	5.7 U
Fluoranthene	mg/kg OC	160	1,200	7.6	13	19	12	21	11	18	12	22
Fluorene	mg/kg OC	23	79	1.2 U	0.82 U	2.7 U	1.2 U	1.0 U	1.1 U	2.5 U	1.1 U	5.7 U
Indeno(1,2,3-cd)pyrene	mg/kg OC	34	88	3.2	4.9	5.3	13	2.8	2.6	5.3	1.7	5.8
Naphthalene	mg/kg OC	99	170	1.2 U	0.82 U	4.6	1.2 U	1.0 U	1.1 U	2.5 U	1.1 U	5.7 U

Table A-3-1. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS1 through SS17, cont.

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS1	LDW- SS4	LDW- SS5	LDW- SS10	LDW- SS12	LDW- SS13	LDW- SS14	LDW- SS15	LDW- SS17
Phenanthrene	mg/kg OC	100	480	3.2	3.2	9.0	4.3	9.6	3.1	6.5	5.5	11
Pyrene	mg/kg OC	1,000	1,400	8.9	9.4	15	9.2	15	9.4	14	8.9	38
Total HPAH (calc'd)	mg/kg OC	960	5,300	53	68	85	117	86	47	81	63	170
Total LPAH (calc'd)	mg/kg OC	370	780	4.5	4.0	14	6.1	12	4.6	6.5	8.2	15 J
Phthalates												
Bis(2-ethylhexyl)phthalate	mg/kg OC	47	78	4.2 U	3.4 U	2.7 U	5.0 U	9.6	10	20	3.6 U	64
Butyl benzyl phthalate	mg/kg OC	4.9	64	0.41 U	0.61U	0.89 U	1.6	0.35 U	1.7	1.0 U	1.1 U	3.1 J
Diethyl phthalate	mg/kg OC	61	110	1.1 U	0.61 U	1.9 U	0.86 U	0.74 U	0.72 U	1.0 U	1.1 U	5.7 U
Dimethyl phthalate	mg/kg OC	53	53	0.41 U	0.61 U	0.89 U	0.86 U	0.35 U	0.37 U	15	1.1 U	5.7 U
Di-n-butyl phthalate	mg/kg OC	220	1,700	1.2 U	0.82U	2.7 U	1.2 U	1.0 U	1.1 U	2.5 U	1.1 U	5.7 U
Di-n-octyl phthalate	mg/kg OC	58	4,500	1.2 U	0.82U	2.7 U	1.2 U	1.0 U	1.1 U	2.5 U	1.1 U	5.7 U
Other SVOCs												
1,2,4-Trichlorobenzene	mg/kg OC	0.81	1.8	0.41 U	0.61 U	0.45 UJ	0.43 UJ	0.35 U	0.37 U	0.52 UJ	1.1 U	<u>5.7 U</u>
1,2-Dichlorobenzene	mg/kg OC	2.3	2.3	0.41 U	0.61U	0.89 U	0.86 U	0.35 U	0.37 U	1.0 U	1.1 U	<u>5.7 U</u>
1,3-Dichlorobenzene	µg/kg dw	170	nv	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U
1,4-Dichlorobenzene	mg/kg OC	3.1	9	0.41 U	0.61U	0.89 U	0.86U	0.35 U	0.37 U	1.0 U	1.1 U	5.7 U
2,4-Dimethylphenol	µg/kg dw	29	29	6.5 U	15 U	6.5 U	14 U	6.5 U	6.6 U	8.2 U	20 U	<u>98 U</u>
2-Methylphenol	µg/kg dw	63	63	6.5 U	15 U	6.5 U	14 U	6.5 U	6.6 U	8.2 U	20 U	<u>98 U</u>
4-Methylphenol	µg/kg dw	670	670	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U
Benzoic acid	µg/kg dw	650	650	54 J	150 UJ	65 U	140 UJ	65 U	66 U	82 UJ	200 U	<u>980 U</u>
Benzyl alcohol	µg/kg dw	57	73	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	<u>98 U</u>
Hexachlorobenzene	mg/kg OC	0.38	2.3	0.20 UJ	0.30 UJ	0.13 U	0.25 UJ	0.35 U	0.089 U	0.13 U	1.1 U	<u>5.7 U</u>
Hexachlorobutadiene	mg/kg OC	3.9	6.2	0.41 U	0.61 U	0.13 U	0.86U	0.35 U	0.089 UJ	1.0 U	1.1 U	5.7 U
Hexachloroethane	µg/kg dw	1,400	14,000	19 U	20 U	20 U	20 U	19 U	20 U	20 U	20 U	98 U
N-Nitrosodiphenylamine	mg/kg OC	11	11	0.41 U	0.61 U	0.89 U	0.86 U	0.35	0.37	1.0 U	1.1 U	5.7 U
Pentachlorophenol	µg/kg dw	360	690	32 UJ	74 U	33 UJ	68 U	32 UJ	33 UJ	41 U	98 U	490 U
Phenol	µg/kg dw	420	1,200	19 U	20 U	20 U	24	25	20 U	20 U	20 U	98 U
Polychlorinated biphenyls												
Total PCBs (calc'd)	mg/kg OC	12	65	10J	6.3 J	2.7 UJ	1.9	9.1 J	11 J	6.3 J	7.2 J	7.0

Table A-3-1. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS1 through SS17, cont.

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS1	LDW- SS4	LDW- SS5	LDW- SS10	LDW- SS12	LDW- SS13	LDW- SS14	LDW- SS15	LDW- SS17
Pesticides												
Total DDTs (calc'd)	µg/kg dw	6.9	69	na	na	2.0 U	na	na	3.1 U	na	na	na
Aldrin	µg/kg dw	10	nv	na	na	0.98 U	na	na	1.6 U	na	na	na
Dieldrin	µg/kg dw	10	nv	na	na	2.0 U	na	na	3.1 U	na	na	na
gamma-BHC	µg/kg dw	10	nv	na	na	0.98 U	na	na	1.6 UJ	na	na	na
Total chlordanes (calc'd)	µg/kg dw	10	nv	na	na	2.0 U	na	na	3.1 U	na	na	na
Heptachlor	µg/kg dw	10	nv	na	na	0.98 U	na	na	1.6 U	na	na	na

dw – dry weight

na – not analyzed

nv – no value

OC – organic-carbon normalized

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Concentration in **bold** indicates SQS/SL exceedance.

Concentration in **bold underline** indicates CSL/ML exceedance.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PCBs, and total DDTs are presented in Appendix B.

Data qualifiers: U – not detected at reporting limit shown

J – estimated concentration

UJ – not detected at estimated reporting limit shown

Table A-3-2. Concentrations of all analytes in Round 1 LDW surface sediment samples compared to SQS/SL and CSL/ML: Locations SS20 through SS33

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS22-	LDW- SS23	LDW- SS26	LDW- SS27	LDW- SS28	LDW- SS31	LDW- SS32	LDW- SS33
Metals and trace elements											
Antimony	mg/kg dw	150	200	0.3 UJ	0.3 U	0.4 UJ	0.4 UJ	0.3 UJ	2.2 J	0.4 UJ	0.3 UJ
Arsenic	mg/kg dw	57	93	8.5	4.4	11.5	12.2	12.5	122	15.7	11.3
Cadmium	mg/kg dw	5.1	6.7	1.4	0.2 U	1.1	0.4 U	0.5	3.2	1.8	0.3 U
Chromium	mg/kg dw	260	270	41.5	15.4	40.8	23	32.1	55	40	29.4
Copper	mg/kg dw	390	390	103	26.1	96.5	52.4	47.8	245	124	29.4
Lead	mg/kg dw	450	530	73	16	73	29	87	172	77	51
Mercury	mg/kg dw	0.41	0.59	0.28	0.07	0.39	0.12	0.12	0.33	0.34	0.05 U
Nickel	mg/kg dw	140	370	25	10	23	14	25	35	304	32
Silver	mg/kg dw	6.1	6.1	1.0	0.4 U	1.1	0.6 U	0.5	1.2	0.8	0.4 U
Zinc	mg/kg dw	410	960	145	48.8	163	88	150	997	414	110
PAHs											
2-Methylnaphthalene	mg/kg OC	38	64	1.7 U	1.7	1.0 U	1.2 U	8.0 U	4.5 U	0.88 U	1.2 U
Acenaphthene	mg/kg OC	16	57	1.7 U	1.5 U	1.0 U	1.2 U	8.0 U	4.5 U	1.0	1.2 U
Acenaphthylene	mg/kg OC	66	66	1.7 U	1.5 U	1.0 U	1.2 U	8.0 U	4.5 U	0.88 U	1.2 U
Anthracene	mg/kg OC	220	1,200	2.4	1.5 U	2.0	2.6	8.0 U	7.8	2.6	1.2 U
Benzo(a)anthracene	mg/kg OC	110	270	11	2.0	9.9	15	8.2	13	8.4	3.4
Benzo(a)pyrene	mg/kg OC	99	210	12	2.4	12	16	11	19	11	3.1
Benzo(g,h,i)perylene	mg/kg OC	31	78	8.5 U	1.5 U	5.4 U	5.9 U	4.8 J	5.1	4.3 U	0.96 J
Total benzofluoranthenes (calc'd)	mg/kg OC	230	450	15	3.6	12	27	34	53	23	10
Chrysene	mg/kg OC	110	460	15	2.9	12	19	20	29	18	9.0
Dibenzo(a,h)anthracene	mg/kg OC	12	33	8.5 U	1.5 U	5.4 U	5.9 U	8.0 U	4.5 U	4.3 U	1.2 U
Dibenzofuran	mg/kg OC	15	58	1.7 U	1.5 U	1.0 U	1.2 U	8.0 U	4.5 U	0.88 U	1.2 U
Fluoranthene	mg/kg OC	160	1,200	22	3.3	13	24	31	31	26	12
Fluorene	mg/kg OC	23	79	1.7 U	1.5 U	1.0 U	1.2 U	8.0 U	4.5 U	0.93	1.2 U
Indeno(1,2,3-cd)pyrene	mg/kg OC	34	88	5.6	1.7	7.7	10	1.3	5.1	4.3 U	1.1 J
Naphthalene	mg/kg OC	99	170	1.7 U	1.5 U	1.0 U	1.2 U	8.0 U	4.5 U	0.88 U	1.2 U

Table A-3-2. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS22 through SS33, cont.

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS22-	LDW- SS23	LDW- SS26	LDW- SS27	LDW- SS28	LDW- SS31	LDW- SS32	LDW- SS33
Phenanthrene	mg/kg OC	100	480	7.9	1.9	5.1	7.9	14	11	8.0	1.3
Pyrene	mg/kg OC	1,000	1,400	29	2.3	13	18	30	32	20	5.8
Total HPAH (calc'd)	mg/kg OC	960	5,300	110	18	81	130	140 J	190	110	46 J
Total LPAH (calc'd)	mg/kg OC	370	780	10	1.9	7.2	10	14	19	12	1.3
Phthalates											
Bis(2-ethylhexyl)phthalate	mg/kg OC	47	78	62	1.5 U	11	1.8 U	6.1 J	7.4	4.1 U	1.6
Butyl benzyl phthalate	mg/kg OC	4.9	64	2.8	0.70 U	19	1.8	0.54 U	4.5 U	0.88 U	0.39 U
Diethyl phthalate	mg/kg OC	61	110	1.6 U	0.70 U	0.66 U	0.85 U	0.54 U	4.5 U	0.88 U	1.2 U
Dimethyl phthalate	mg/kg OC	53	53	1.6 U	0.70 U	0.66 U	0.85 U	0.54 U	4.5 U	0.88 U	0.39 U
Di-n-butyl phthalate	mg/kg OC	220	1,700	1.7 U	1.5 U	1.0 U	1.2 U	8.0 U	4.5 U	0.88 U	1.2 U
Di-n-octyl phthalate	mg/kg OC	58	4,500	1.7 U	1.5 U	1.0 U	1.2 U	8.0 U	4.5 U	0.88 U	1.2 U
Other SVOCs											
1,2,4-Trichlorobenzene	mg/kg OC	0.81	1.8	1.6 U	0.70 U	0.66 U	0.43 UJ	0.54 U	4.5 U	0.88 U	0.39 U
1,2-Dichlorobenzene	mg/kg OC	2.3	2.3	1.6 U	0.70 U	0.66 U	0.85 U	0.54 U	4.5 U	0.88 U	0.39 U
1,3-Dichlorobenzene	µg/kg dw	170	nv	30 U	19 U	19 U	20 U	97 U	97 U	20 U	20 U
1,4-Dichlorobenzene	mg/kg OC	3.1	9	1.6 U	0.70 U	0.66 U	0.85 U	0.54 U	4.5 U	0.88 U	0.39 U
2,4-Dimethylphenol	µg/kg dw	29	29	29 U	8.6 U	12 U	14 U	6.6 U	97 U	20 U	6.5 U
2-Methylphenol	µg/kg dw	63	63	29 U	8.6 U	12 U	14 U	6.6 U	97 U	20 U	6.5 U
4-Methylphenol	µg/kg dw	670	670	30 U	19 U	19 U	20 U	97 U	97 U	20 U	20 U
Benzoic acid	µg/kg dw	650	650	290 UJ	86 UJ	120 UJ	140 UJ	66 U	970 U	200 U	170
Benzyl alcohol	µg/kg dw	57	73	30 U	19 U	19 U	20 U	33 U	97 U	20 U	20 U
Hexachlorobenzene	mg/kg OC	0.38	2.3	1.6 U	0.35 UJ	0.66 U	0.11 U	0.080 U	4.5 U	0.075 U	0.19 UJ
Hexachlorobutadiene	mg/kg OC	3.9	6.2	1.6 U	0.70 U	0.66 U	0.11 UJ	0.080 U	4.5 U	0.075 UJ	0.39 U
Hexachloroethane	µg/kg dw	1,400	14,000	30 U	19 U	19 U	20 U	97 U	97 U	20 U	20 U
N-Nitrosodiphenylamine	mg/kg OC	11	11	1.6 U	0.70 U	0.66 U	0.85 U	0.54 U	4.5 U	0.88 U	0.39 U
Pentachlorophenol	µg/kg dw	360	690	140 U	43 U	63 U	71 U	33 U	480 U	98 U	32 UJ
Phenol	µg/kg dw	420	1,200	130	19 U	19 U	20 U	97 U	97 U	20 U	20 U
Polychlorinated biphenyls											
Total PCBs (calc'd)	mg/kg OC	12	65	14 J	4.9	36	5.9 J	9.2	4.4	5.4 J	1.6

Table A-3-2. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS22 through SS33, cont.

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS22-	LDW- SS23	LDW- SS26	LDW- SS27	LDW- SS28	LDW- SS31	LDW- SS32	LDW- SS33
Pesticides											
Total DDTs (calc'd)	µg/kg dw	6.9	69	na	na	na	3.6 U	3.8 U	na	3.3 U	na
Aldrin	µg/kg dw	10	nv	na	na	na	1.8 U	0.97 U	na	1.7 U	na
Dieldrin	µg/kg dw	10	nv	na	na	na	3.6 U	1.9 U	na	3.3 U	na
gamma-BHC	µg/kg dw	10	nv	na	na	na	1.8 UJ	0.97 U	na	1.7 UJ	na
Total chlordanes (calc'd)	µg/kg dw	10	nv	na	na	na	1.8 U	0.97 U	na	1.7 U	na
Heptachlor	µg/kg dw	10	nv	na	na	na	1.8 U	0.97 U	na	1.7 U	na

dw – dry weight

na – not analyzed

nv – no value

OC – organic-carbon normalized

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Concentration in **bold** indicates SQS/SL exceedance.

Concentration in **bold underline** indicates CSL/ML exceedance.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PCBs, and total DDTs are presented in Appendix B.

Data qualifiers: U – not detected at reporting limit shown
 J – estimated concentration
 UJ – not detected at estimated reporting limit shown

Table A-3-3. Concentrations of all analytes in Round 1 LDW surface sediment samples compared to SQS/SL and CSL/ML: Locations SS36 through SS49

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS36	LDW- SS37	LDW- SS38	LDW- SS40	LDW- SS42	LDW- SS43	LDW- SS44	LDW- SS48	LDW- SS49
Metals and trace elements												
Antimony	mg/kg dw	150	200	0.4 UJ	0.3 UJ	0.4 UJ	0.3 UJ	0.4 UJ	0.6 J	0.9 J	6.8 J	1.8 J
Arsenic	mg/kg dw	57	93	18.0	13.6	14.5	16.7	17.1	23.5	46.8	807	171
Cadmium	mg/kg dw	5.1	6.7	0.5	3.0	0.6	0.8	0.7	0.4 U	0.7	3	1.0
Chromium	mg/kg dw	260	270	38	89.2	39	36.4	36.6	32.9	33.2	153	53
Copper	mg/kg dw	390	390	104	108	107	84.2	107	121	214	1,420	605
Lead	mg/kg dw	450	530	61	103	58	56	62	48	68	780	210
Mercury	mg/kg dw	0.41	0.59	0.24	0.69	0.3	0.35	0.31	0.17	0.23	0.79	0.36
Nickel	mg/kg dw	140	370	24	27	27	23	23	26	21	82	30
Silver	mg/kg dw	6.1	6.1	0.7 U	3.9	0.7	0.7	0.6	0.6 U	0.5 U	2 U	1 U
Zinc	mg/kg dw	410	960	256	220	155	141	157	165	242	2,830	768
PAHs												
2-Methylnaphthalene	mg/kg OC	38	64	5.3 U	0.86 U	1.0 U	1.1 U	4.9 U	1.2 U	3.8 U	4.3	4.0 U
Acenaphthene	mg/kg OC	16	57	3.7 J	0.86 U	1.0 U	1.1 U	4.9 U	1.2 U	3.8 U	17	2.0 J
Acenaphthylene	mg/kg OC	66	66	4.7 J	0.86 U	1.0 U	1.1 U	4.9 U	1.2 U	3.8 U	4.0	4.0 U
Anthracene	mg/kg OC	220	1,200	7.4	1.2	1.9	1.1 U	4.9	1.3	13	39	6.1
Benzo(a)anthracene	mg/kg OC	110	270	21	6.9	9.7	3.5	11	7.2	37	88	13
Benzo(a)pyrene	mg/kg OC	99	210	15	6.0	14	3.5	11	9.0	31	74	11
Benzo(g,h,i)perylene	mg/kg OC	31	78	4.8 J	4.2 U	3.2	1.9	2.8 J	2.8	11	21	6.1
Total benzofluoranthenes (calc'd)	mg/kg OC	230	450	48	9.9	19	6.9	35	14	69	150	21
Chrysene	mg/kg OC	110	460	47	4.7	12	6.3	17	7.8	42	140	23
Dibenzo(a,h)anthracene	mg/kg OC	12	33	5.3 U	4.2 U	1.0 U	1.1 U	4.9 U	1.2 U	3.8 U	12	4.0 U
Dibenzofuran	mg/kg OC	15	58	6.9	0.86 U	1.0 U	1.1 U	4.9 U	1.2 U	3.8 U	7.4	4.0 U
Fluoranthene	mg/kg OC	160	1,200	120	9.9	9.7	9.0	23	9.0	61	210	40
Fluorene	mg/kg OC	23	79	5.1 J	0.86 U	1.0 U	1.1 U	4.9 U	1.2 U	4.1	17	2.8 J
Indeno(1,2,3-cd)pyrene	mg/kg OC	34	88	4.1	3.4	9.2	2.0	0.98	6.6	11	26	5.7
Naphthalene	mg/kg OC	99	170	5.3 U	0.86 U	1.0 U	1.1 U	4.9 U	1.2 U	3.8 U	8.1	4.0 U

Table A-3-3. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS36 through SS49, cont.

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS36	LDW- SS37	LDW- SS38	LDW- SS40	LDW- SS42	LDW- SS43	LDW- SS44	LDW- SS48	LDW- SS49
Phenanthrene	mg/kg OC	100	480	95	2.2	3.8	2.9	8.3	4.1	29	130	20
Pyrene	mg/kg OC	1,000	1,400	90	12	9.2	7.4	24	11	72	170	29
Total HPAH (calc'd)	mg/kg OC	960	5,300	350 J	52	86	41	120 J	68	330	890	150
Total LPAH (calc'd)	mg/kg OC	370	780	120 J	3.4	5.7	2.9	13	5.4	46	210	31 J
Phthalates												
Bis(2-ethylhexyl)phthalate	mg/kg OC	47	78	6.9	33	5.1 U	14	19	4.8	7.8	57	6.5
Butyl benzyl phthalate	mg/kg OC	4.9	64	0.35 U	0.86 U	1.4	1.1 U	0.32 U	0.40 U	0.43 U	5.2	4.0 U
Diethyl phthalate	mg/kg OC	61	110	0.35 U	0.86 U	0.72 U	1.1 U	0.69 U	0.40	0.72 U	1.4 U	4.0 U
Dimethyl phthalate	mg/kg OC	53	53	0.35 U	0.86 U	0.72 U	1.1 U	0.32 U	0.44	0.43 U	1.4 U	4.0 U
Di-n-butyl phthalate	mg/kg OC	220	1,700	5.3 U	0.86 U	1.0 U	1.1 U	4.9 U	1.2 U	3.8 U	6.8	4.0 U
Di-n-octyl phthalate	mg/kg OC	58	4,500	5.3 U	0.86 U	1.0 U	1.1 U	4.9 U	1.2 U	3.8 U	1.4 U	4.0 U
Other SVOCs												
1,2,4-Trichlorobenzene	mg/kg OC	0.81	1.8	0.35 U	0.86 U	0.72 U	1.1 U	0.32 U	0.40 U	0.43 U	1.4 U	4.0 U
1,2-Dichlorobenzene	mg/kg OC	2.3	2.3	0.35 U	0.86 U	0.72 U	1.1 U	0.32 U	0.40 U	0.43 U	1.4 U	4.0 U
1,3-Dichlorobenzene	µg/kg dw	170	nv	100 U	20 U	20 U	20 U	99 U	20 U	58 U	19 U	98 U
1,4-Dichlorobenzene	mg/kg OC	3.1	9	0.35 U	0.86 U	0.72 U	1.1 U	0.32 U	0.40 U	0.43 U	1.4 U	4.0 U
2,4-Dimethylphenol	µg/kg dw	29	29	6.6 U	20 U	14 U	20 U	6.6 U	6.6 U	6.6 U	19 U	98 U
2-Methylphenol	µg/kg dw	63	63	6.6 U	20 U	14 U	20 U	6.6 U	6.6 U	6.6 U	21	98 U
4-Methylphenol	µg/kg dw	670	670	100 U	20 U	20 U	20 U	99 U	20 U	58 U	88	98 U
Benzoic acid	µg/kg dw	650	650	66 U	200 U	140 UJ	200 U	66 U	66 U	66 U	190 U	980 U
Benzyl alcohol	µg/kg dw	57	73	33 U	20 U	20 UJ	20 UJ	33 U	20 U	33 U	19 UJ	98 U
Hexachlorobenzene	mg/kg OC	0.38	2.3	0.052 U	0.86 U	0.36 UJ	1.1 U	0.048 U	0.20 UJ	0.22 UJ	1.4 U	4.0 U
Hexachlorobutadiene	mg/kg OC	3.9	6.2	0.052 U	0.86 U	0.72 U	1.1 U	0.048 U	0.40 U	0.43 U	1.4 U	4.0 U
Hexachloroethane	µg/kg dw	1,400	14,000	100 U	20 U	20 U	20 U	99 U	20 U	58 U	19 U	98 U
N-Nitrosodiphenylamine	mg/kg OC	11	11	0.35 U	0.86 U	0.72 U	1.1 U	0.32 U	0.40 U	0.43 U	1.4 U	4.0 U
Pentachlorophenol	µg/kg dw	360	690	33 U	98 U	71 U	98 U	33 UJ	33 U	33 UJ	96 U	490 U
Phenol	µg/kg dw	420	1,200	100 U	20 U	20 U	22	180	20 U	58 U	370	240
Polychlorinated biphenyls												
Total PCBs (calc'd)	mg/kg OC	12	65	1.3	220	5.9	27 J	5.3	1.1 J	6.7 J	9.6 J	2.8

Table A-3-3. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS36 through SS49, cont.

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS36	LDW- SS37	LDW- SS38	LDW- SS40	LDW- SS42	LDW- SS43	LDW- SS44	LDW- SS48	LDW- SS49
Pesticides												
Total DDTs (calc'd)	µg/kg dw	6.9	69	2.0 U	na	na	na	7.3 U	na	na	na	na
Aldrin	µg/kg dw	10	nv	0.99 U	na	na	na	0.98 U	na	na	na	na
Dieldrin	µg/kg dw	10	nv	2.0 U	na	na	na	2.0 U	na	na	na	na
gamma-BHC	µg/kg dw	10	nv	0.99 U	na	na	na	0.98 U	na	na	na	na
Total chlordanes (calc'd)	µg/kg dw	10	nv	2.0 U	na	na	na	2.0 U	na	na	na	na
Heptachlor	µg/kg dw	10	nv	0.99 U	na	na	na	1.5 U	na	na	na	na

dw – dry weight

na – not analyzed

nv – no value

OC – organic-carbon normalized

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Concentration in **bold** indicates SQS/SL exceedance.

Concentration in **bold underline** indicates CSL/ML exceedance.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PCBs, and total DDTs are presented in Appendix B.

Data qualifiers: U – not detected at reporting limit shown
 J – estimated concentration
 UJ – not detected at estimated reporting limit shown

Table A-3-4. Concentrations of all analytes in Round 1 LDW surface sediment samples compared to SQS/SL and CSL/ML: Locations SS50 through SS60

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS50	LDW- SS51	LDW- SS52	LDW- SS54	LDW- SS55	LDW- SS56	LDW- SS57	LDW- SS58	LDW- SS60
Metals and trace elements												
Antimony	mg/kg dw	150	200	0.4 UJ	0.4 UJ	0.4 U	0.3 UJ	0.3 UJ	2.2 J	0.4 UJ	0.4 UJ	0.3 UJ
Arsenic	mg/kg dw	57	93	16.3	16.9	15.5	8.8	17.2	161	35.4	33.9	4.1
Cadmium	mg/kg dw	5.1	6.7	1.3	0.6	0.7	0.5	0.4	0.6	0.7	1.0	0.3 U
Chromium	mg/kg dw	260	270	45	38	39	25.6	25.4	41.2	43	45.0	12.1
Copper	mg/kg dw	390	390	89.0	127	106	66.2	137	365	179	146	18.4
Lead	mg/kg dw	450	530	90	64	64	38	53	160	138	287	9
Mercury	mg/kg dw	0.41	0.59	0.41	0.3	0.3	0.19	0.15	0.14	0.31	0.29	0.07 U
Nickel	mg/kg dw	140	370	26	24	26	18	20	16	23	28	9
Silver	mg/kg dw	6.1	6.1	1.3	0.8	0.7	0.5 U	0.6	0.9	0.9	1.1	0.4 U
Zinc	mg/kg dw	410	960	180	190	167	112	151	607	262	281	38.0
PAHs												
2-Methylnaphthalene	mg/kg OC	38	64	5.0 U	0.94 U	0.83 U	4.8 U	3.8 J	8.7 U	8.1 U	8.4 U	1.8 U
Acenaphthene	mg/kg OC	16	57	5.0 U	0.94 U	0.83 U	4.8 U	13	8.7 U	8.1 U	8.4 U	1.8 U
Acenaphthylene	mg/kg OC	66	66	5.0 U	0.94 U	0.83 U	4.8 U	6.4 U	6.8 J	8.1 U	8.4 U	1.8 U
Anthracene	mg/kg OC	220	1,200	6.7 J	1.8	1.5	5.9	5.7 J	5.0 J	8.1 U	8.4 U	1.8 U
Benzo(a)anthracene	mg/kg OC	110	270	12	6.1	5.0	12	10	20	11	8.4	4.3
Benzo(a)pyrene	mg/kg OC	99	210	14	5.6	4.6	13	7.2	29	13	10	2.4
Benzo(g,h,i)perylene	mg/kg OC	31	78	3.8 J	1.8	1.2	2.7 J	6.4 U	12	5.7 J	4.8 J	1.8 U
Total benzofluoranthenes (calc'd)	mg/kg OC	230	450	41	13	10	40	24	52	34	25	5.7
Chrysene	mg/kg OC	110	460	20	13	10	21	14	32	17	16	7.8
Dibenzo(a,h)anthracene	mg/kg OC	12	33	5.0 U	0.94 U	0.83 U	4.8 U	6.4 U	8.7 U	8.1 U	8.4 U	1.8 U
Dibenzofuran	mg/kg OC	15	58	5.0 U	0.94 U	0.83 U	4.8 U	9.2	8.7 U	8.1 U	8.4 U	1.8 U
Fluoranthene	mg/kg OC	160	1,200	19	15	10	21	42	35	24	18	17
Fluorene	mg/kg OC	23	79	5.0 U	0.94 U	0.83 U	4.8 U	16	8.7 U	8.1 U	8.4 U	1.8 U
Indeno(1,2,3-cd)pyrene	mg/kg OC	34	88	3.9	2.2	1.3	1.5	2.5	12	5.8 J	4.5 J	0.60 U
Naphthalene	mg/kg OC	99	170	5.0 U	0.94 U	0.83 U	4.8 U	9.2	8.7 U	8.1 U	8.4 U	1.8 U

Table A-3-4. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS50 through SS60, cont.

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS50	LDW- SS51	LDW- SS52	LDW- SS54	LDW- SS55	LDW- SS56	LDW- SS57	LDW- SS58	LDW- SS60
Phenanthrene	mg/kg OC	100	480	15	5.2	3.1	9.9	31	14	11	9.6	2.8
Pyrene	mg/kg OC	1,000	1,400	40	11	6.3	41	39	47	34	22	9.2
Total HPAH (calc'd)	mg/kg OC	960	5,300	150 J	68	49	150 J	140	240	140 J	110 J	46
Total LPAH (calc'd)	mg/kg OC	370	780	22 J	7.0	4.6	16	75 J	26 J	11	9.6	2.8
Phthalates												
Bis(2-ethylhexyl)phthalate	mg/kg OC	47	78	29	5.6 U	4.0	9.9	6.4	19	17	16	1.9
Butyl benzyl phthalate	mg/kg OC	4.9	64	0.34 U	1.3	0.27 U	0.32 U	0.42 U	0.58 U	8.1 U	8.4 U	0.60 U
Diethyl phthalate	mg/kg OC	61	110	0.34 U	0.31 U	0.33 U	0.74 U	0.42 U	0.58 U	8.1 U	8.4 U	0.60 U
Dimethyl phthalate	mg/kg OC	53	53	0.34 U	0.31 U	0.27 U	0.32 U	0.42 U	0.58 U	8.1 U	8.4 U	0.60 U
Di-n-butyl phthalate	mg/kg OC	220	1,700	5.0 U	0.94 U	0.83 U	4.8 U	6.4 U	8.7 U	8.1 U	8.4 U	1.8 U
Di-n-octyl phthalate	mg/kg OC	58	4,500	5.0 U	0.94 U	0.83 U	4.8 U	6.4 U	8.7 U	8.1 U	8.4 U	1.8 U
Other SVOCs												
1,2,4-Trichlorobenzene	mg/kg OC	0.81	1.8	0.34 U	0.31 U	0.27 U	0.32 U	0.42 U	0.58 U	8.1 U	8.4 U	0.60 U
1,2-Dichlorobenzene	mg/kg OC	2.3	2.3	0.34 U	0.31 U	0.27 U	0.32 U	0.42 U	0.58 U	8.1 U	8.4 U	0.60 U
1,3-Dichlorobenzene	µg/kg dw	170	nv	97 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
1,4-Dichlorobenzene	mg/kg OC	3.1	9	0.34 U	0.31 U	0.27 U	0.32 U	0.42 U	0.58 U	8.1 U	8.4 U	0.60 U
2,4-Dimethylphenol	µg/kg dw	29	29	6.5 U	6.6 U	6.5 U	6.5 U	6.5 U	6.5 U	140 U	150 U	6.5 U
2-Methylphenol	µg/kg dw	63	63	6.5 U	6.6 U	6.5 U	6.5 U	6.5 U	6.5 U	140 U	150 U	6.5 U
4-Methylphenol	µg/kg dw	670	670	97 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
Benzoic acid	µg/kg dw	650	650	65 U	66 U	65 U	65 U	65 U	65 U	1,400 U	1,500 U	65 U
Benzyl alcohol	µg/kg dw	57	73	32 U	20 UJ	20 U	32 U	32 U	33 U	140 U	150 U	19 U
Hexachlorobenzene	mg/kg OC	0.38	2.3	0.050 U	0.31 U	0.27 U	0.049 U	0.064 U	0.58 U	8.1 U	0.055 U	0.60 U
Hexachlorobutadiene	mg/kg OC	3.9	6.2	0.050 U	0.31 U	0.27 U	0.049 U	0.064 U	0.58 U	8.1 U	0.055 U	0.60 U
Hexachloroethane	µg/kg dw	1,400	14,000	97 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
N-Nitrosodiphenylamine	mg/kg OC	11	11	0.34 U	0.31 U	0.27 U	0.32	0.42 U	0.58 U	8.1 U	8.4 U	0.60 U
Pentachlorophenol	µg/kg dw	360	690	32 U	33 UJ	33 UJ	32 UJ	32 U	33 U	720 U	740 U	33 U
Phenol	µg/kg dw	420	1,200	97 U	20 U	20 U	97 U	98 U	98 U	140 U	150 U	19 U
Polychlorinated biphenyls												
Total PCBs (calc'd)	mg/kg OC	12	65	30	7.3 J	8.7	4.5	1.6 J	66 J	43	15	23 J

Table A-3-4. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS50 through SS60, cont.

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS50	LDW- SS51	LDW- SS52	LDW- SS54	LDW- SS55	LDW- SS56	LDW- SS57	LDW- SS58	LDW- SS60
Pesticides												
Total DDTs (calc'd)	µg/kg dw	6.9	69	15 U	na	na	2.0 U	2.0 U	na	na	12 U	na
Aldrin	µg/kg dw	10	nv	0.97 U	na	na	0.99 U	0.98 U	na	na	0.98 U	na
Dieldrin	µg/kg dw	10	nv	1.9 U	na	na	2.0 U	2.0 U	na	na	2.0 U	na
gamma-BHC	µg/kg dw	10	nv	0.97 U	na	na	0.99 U	0.98 U	na	na	0.98 U	na
Total chlordanes (calc'd)	µg/kg dw	10	nv	2.0 U	na	na	na	2.0 U	na	na	na	na
Heptachlor	µg/kg dw	10	nv	3.8 U	na	na	0.99 U	0.98 U	na	na	1.7 U	na

dw – dry weight

na – not analyzed

nv – no value

OC – organic-carbon normalized

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Concentration in **bold** indicates SQS/SL exceedance.

Concentration in **bold underline** indicates CSL/ML exceedance.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PCBs, and total DDTs are presented in Appendix B.

Data qualifiers: U – not detected at reporting limit shown
 J – estimated concentration
 UJ – not detected at estimated reporting limit shown

Table A-3-5. Concentrations of all analytes in Round 1 LDW surface sediment samples compared to SQS/SL and CSL/ML: Locations SS63 through SS84

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS63	LDW- SS64	LDW- SS67	LDW- SS70	LDW- SS72	LDW- SS75	LDW- SS76	LDW- SS79	LDW- SS83	LDW- SS84
Metals and trace elements													
Antimony	mg/kg dw	150	200	0.3 UJ	0.3 UJ	0.2 UJ	0.3 UJ	0.4 UJ	0.3 UJ	0.4 UJ	0.3 UJ	0.4 UJ	0.3 UJ
Arsenic	mg/kg dw	57	93	10.2	21.2	2.4	14.8	15.5	8.3	14.5	10.7	17.9	12.3
Cadmium	mg/kg dw	5.1	6.7	0.3 U	0.5	0.3 U	0.7	0.6	0.3 U	0.4 UJ	0.3	0.6	2.0 J
Chromium	mg/kg dw	260	270	24.7	27.0	12.4	38.3	35	24.9	36 J	27.7	37	122 J
Copper	mg/kg dw	390	390	48.3	107	16.9	84.2	85.5	41.8	75.3	49.7	109	117
Lead	mg/kg dw	450	530	28	50	11	84	50	44	41	19	55	615
Mercury	mg/kg dw	0.41	0.59	0.08	0.15	0.06	0.14	0.3	0.12	0.2	0.20	0.2	2.46
Nickel	mg/kg dw	140	370	21	20	10	28	22	12	26	19	23	39
Silver	mg/kg dw	6.1	6.1	0.4 U	0.5 U	0.4 U	0.5 U	0.6 U	1.3	0.6 U	0.5 U	0.6 U	1.7
Zinc	mg/kg dw	410	960	93.0	195	41.0	277	152	79	134	86	382	417
PAHs													
2-Methylnaphthalene	mg/kg OC	38	64	4.1 U	5.9 U	3.1 U	5.9 U	3.9 U	1.1 U	0.92 U	4.1 U	4.7 U	7.0 U
Acenaphthene	mg/kg OC	16	57	4.1 U	5.9 U	3.1 U	5.9 U	3.9 U	1.1 U	0.92 U	4.1 U	4.7 U	7.0 U
Acenaphthylene	mg/kg OC	66	66	4.1 U	5.9 U	3.1 U	5.9 U	3.9 U	1.1 U	0.92 U	4.1 U	4.7 U	7.0 U
Anthracene	mg/kg OC	220	1,200	2.6 J	7.1	3.1 U	5.9 U	7.9	1.5	0.92 U	4.1 U	12	7.0 U
Benzo(a)anthracene	mg/kg OC	110	270	5.9	19	1.9	9.8	16	4.6	3.1	0.54	31	9.7
Benzo(a)pyrene	mg/kg OC	99	210	4.6	17	1.6	7.9	13	5.0	3.7	0.45	24	12
Benzo(g,h,i)perylene	mg/kg OC	31	78	4.1 U	8.3	3.1 U	5.9 U	2.3 J	2.3	1.3	4.1 U	8.2	5.6 J
Total benzofluoranthenes (calc'd)	mg/kg OC	230	450	16	45	7.6	29	41	14	8.8	4.5 J	76	27
Chrysene	mg/kg OC	110	460	11	31	3.7	18	24	13	6.0	4.1	68	17
Dibenzo(a,h)anthracene	mg/kg OC	12	33	4.1 U	5.9 U	3.1 U	5.9 U	3.9 U	1.1 U	0.92 U	4.1 U	4.6 J	7.0 U
Dibenzofuran	mg/kg OC	15	58	4.1 U	5.9 U	3.1 U	5.9 U	3.9 U	1.1 U	0.92 U	4.1 U	4.7 U	7.0 U
Fluoranthene	mg/kg OC	160	1,200	20	49	5.3	36	43	13	6.0	6.9	72	27
Fluorene	mg/kg OC	23	79	4.1 U	5.9 U	3.1 U	5.9 U	2.3 J	1.1 U	0.92 U	4.1 U	2.8 J	7.0 U
Indeno(1,2,3-cd)pyrene	mg/kg OC	34	88	0.63	7.7	1.2	5.9 U	0.67	2.3	1.5	0.45 U	9.7	5.3 J
Naphthalene	mg/kg OC	99	170	4.1 U	5.9 U	3.1 U	5.9 U	3.9 U	1.1 U	0.92 U	4.1 U	4.7 U	7.0 U

Table A-3-5. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS63 through SS84, cont.

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS63	LDW- SS64	LDW- SS67	LDW- SS70	LDW- SS72	LDW- SS75	LDW- SS76	LDW- SS79	LDW- SS83	LDW- SS84
Phenanthrene	mg/kg OC	100	480	7.9	12	3.1 U	6.6	9.4	6.3	2.1	4.3	19	8.0
Pyrene	mg/kg OC	1,000	1,400	13	37	4.5	28	36	10	5.5	7.6	68	24
Total HPAH (calc'd)	mg/kg OC	960	5,300	71	210	26	130	180 J	64	36	24 J	360 J	130 J
Total LPAH (calc'd)	mg/kg OC	370	780	10 J	20	3.1 U	6.6	20 J	8.0	2.1	4.3	34 J	8.0
Phthalates													
Bis(2-ethylhexyl)phthalate	mg/kg OC	47	78	6.3	14	3.5	56	16	4.2	2.7	7.6	22	100
Butyl benzyl phthalate	mg/kg OC	4.9	64	0.27 U	0.39 U	1.1 U	5.9 U	0.26 U	1.1 U	0.46	0.45 U	0.35	7.0 U
Diethyl phthalate	mg/kg OC	61	110	0.42	0.39 U	1.9 U	5.9 U	0.26 U	1.1 U	0.65 U	0.45 U	0.31 U	7.0 U
Dimethyl phthalate	mg/kg OC	53	53	0.27 U	0.39 U	1.1 U	5.9 U	0.26 U	1.1 U	0.30 U	0.45 U	0.31 U	7.0 U
Di-n-butyl phthalate	mg/kg OC	220	1,700	4.1 U	5.9 U	3.1 U	5.9 U	3.9 U	1.1 U	0.92 U	4.1 U	4.7 U	9.2
Di-n-octyl phthalate	mg/kg OC	58	4,500	4.1 U	5.9 U	3.1 U	33	3.9 U	1.1 U	0.92 U	4.1 U	4.7 U	7.0 U
Other SVOCs													
1,2,4-Trichlorobenzene	mg/kg OC	0.81	1.8	0.27 U	0.39 U	0.53 UJ	5.9 U	0.26 U	1.1 U	0.30 U	0.45 U	0.31 U	7.0 U
1,2-Dichlorobenzene	mg/kg OC	2.3	2.3	0.27 U	0.39 U	1.1 U	5.9 U	0.26 U	1.1 U	0.30 U	0.45 U	0.31 U	7.0 U
1,3-Dichlorobenzene	µg/kg dw	170	nv	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
1,4-Dichlorobenzene	mg/kg OC	3.1	9	0.27 U	0.39 U	1.1 U	5.9 U	0.26 U	1.1 U	0.30 U	0.45 U	0.31 U	7.0 U
2,4-Dimethylphenol	µg/kg dw	29	29	6.5 U	6.6 U	6.6 U	180 U	6.5 U	20 U	6.6 U	6.5 U	6.5 U	290 U
2-Methylphenol	µg/kg dw	63	63	6.5 U	6.6 U	6.6 U	180 U	6.5 U	20 U	6.6 U	6.5 U	6.5 U	290 U
4-Methylphenol	µg/kg dw	670	670	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
Benzoic acid	µg/kg dw	650	650	65 U	66 U	66 U	1,800 U	65 U	200 U	66	65 U	65 U	2,900 U
Benzyl alcohol	µg/kg dw	57	73	33 U	33 U	19 U	180 U	33 U	20 U	20 U	32 U	33 U	290 U
Hexachlorobenzene	mg/kg OC	0.38	2.3	0.041 U	0.059 U	0.15 U	0.032 U	0.039 U	1.1 U	0.045 U	0.068 U	0.31 U	0.41 U
Hexachlorobutadiene	mg/kg OC	3.9	6.2	0.041 U	0.059 U	0.15 U	0.032 U	0.039 U	1.1 U	0.045 U	0.068 U	0.31 U	0.41 U
Hexachloroethane	µg/kg dw	1,400	14,000	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
N-Nitrosodiphenylamine	mg/kg OC	11	11	0.27 U	0.39 U	1.1 U	5.9 U	0.26 U	1.1 U	0.33	0.45 U	0.31 U	7.0 U
Pentachlorophenol	µg/kg dw	360	690	33 U	33 U	33 UJ	890 U	33 U	98 U	33 UJ	32 U	33 U	1,400 U
Phenol	µg/kg dw	420	1,200	98 U	100 U	19 U	180 U	99 U	20 U	20 U	59 U	97 U	290 U
Polychlorinated biphenyls													
Total PCBs (calc'd)	mg/kg OC	12	65	4.0	7.5	5.8	3.1	3.2 J	30	5.4	4.7	4.7 J	560

Table A-3-5. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS63 through SS84, cont.

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS63	LDW- SS64	LDW- SS67	LDW- SS70	LDW- SS72	LDW- SS75	LDW- SS76	LDW- SS79	LDW- SS83	LDW- SS84
Pesticides													
Total DDTs (calc'd)	µg/kg dw	6.9	69	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	6.3 U	na	800 U
Aldrin	µg/kg dw	10	nv	0.97 U	0.99 U	0.96 U	0.98 U	0.99 U	na	0.98 U	0.99 U	na	17 U
Dieldrin	µg/kg dw	10	nv	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	34 U
gamma-BHC	µg/kg dw	10	nv	0.97 U	0.99 U	0.96 U	0.98 U	0.99 U	na	0.98 U	0.99 U	na	17 U
Total chlordanes (calc'd)	µg/kg dw	10	nv	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	na	2.0 U	2.0 U	na	330 U
Heptachlor	µg/kg dw	10	nv	0.97 U	0.99 U	0.96 U	0.98 U	0.99 U	na	0.98 U	0.99 U	na	70 U

dw – dry weight

na – not analyzed

nv – no value

OC – organic-carbon normalized

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Concentration in **bold** indicates SQS/SL exceedance.

Concentration in **bold underline** indicates CSL/ML exceedance.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PCBs, and total DDTs are presented in Appendix B.

Data qualifiers: U – not detected at reporting limit shown
 J – estimated concentration
 UJ – not detected at estimated reporting limit shown

Table A-3-6. Concentrations of all analytes in Round 1 LDW surface sediment samples compared to SQS/SL and CSL/ML: Locations SS87 through SS101

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS87	LDW- SS88	LDW- SS89	LDW- SS92	LDW- SS94	LDW- SS96	LDW- SS97	LDW- SS99	LDW- SS101
Metals and trace elements												
Antimony	mg/kg dw	150	200	0.4 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.4 J	0.4 UJ	0.3 UJ	0.3 UJ	0.3 UJ
Arsenic	mg/kg dw	57	93	13.9	11.6	4.2	9.8	26.5	12.7	8.0	6.8	4.9
Cadmium	mg/kg dw	5.1	6.7	0.4 U	1.0	0.3 U	0.3 U	0.3 U	0.4 U	0.3 U	0.3 U	0.2 U
Chromium	mg/kg dw	260	270	31	57.1	14.4	23.4	21.2	31	25.8	20.0	12
Copper	mg/kg dw	390	390	72.6	48.7	18.6	35.0	71.9	53.6	29.4	30.9	17.2
Lead	mg/kg dw	450	530	36	74	10	24	37	26	26	27	31
Mercury	mg/kg dw	0.41	0.59	0.17	0.62	0.06 U	0.09	0.09	0.1	0.06 U	0.09	0.06 U
Nickel	mg/kg dw	140	370	21	19	10	15	16	21	14	13	9
Silver	mg/kg dw	6.1	6.1	0.6 U	0.9	0.4 U	0.4 U	0.5 U	0.6 U	0.4 U	0.5 U	0.4 U
Zinc	mg/kg dw	410	960	143	127	39.1	91.7	218	100	58.9	66	53.5
PAHs												
2-Methylnaphthalene	mg/kg OC	38	64	0.92 U	1.1 U	1.9 U	4.6 U	0.98 U	0.91 U	1.5 U	7.9 U	5.5 U
Acenaphthene	mg/kg OC	16	57	0.92 U	1.2	1.9 U	4.6 U	0.98 U	0.91 U	1.5 U	7.9 U	5.5 U
Acenaphthylene	mg/kg OC	66	66	0.92 U	1.1 U	1.9 U	4.6 U	0.98 U	0.91 U	1.5 U	7.9 U	5.5 U
Anthracene	mg/kg OC	220	1,200	1.2	2.7	1.9 U	4.3 J	1.3	0.91 U	1.5 U	7.9 U	5.5 U
Benzo(a)anthracene	mg/kg OC	110	270	3.6	7.4	5.3	28	4.6	1.7	3.0	0.81 J	1.1
Benzo(a)pyrene	mg/kg OC	99	210	2.7	7.4	5.0	25	3.4	1.9	3.3	0.73 J	1.1
Benzo(g,h,i)perylene	mg/kg OC	31	78	0.92 U	5.0 J	1.9 U	6.1	0.98 U	0.91 U	1.5 U	7.9 U	5.5 U
Total benzofluoranthenes (calc'd)	mg/kg OC	230	450	7.8	13 J	11	48	8.1	4.9	8.6	8.1	4.5 J
Chrysene	mg/kg OC	110	460	5.5	14	9.7	43	5.9	2.8	4.7	13	5.1 J
Dibenzo(a,h)anthracene	mg/kg OC	12	33	0.92 U	5.6 U	1.9 U	4.6 U	0.98 U	0.91 U	1.5 U	7.9 U	5.5 U
Dibenzofuran	mg/kg OC	15	58	0.92 U	1.1 U	1.9 U	4.6 U	0.98 U	0.91 U	1.5 U	7.9 U	5.5 U
Fluoranthene	mg/kg OC	160	1,200	8.3	45	13	61	9.8	3.8	6.8	23	9.1
Fluorene	mg/kg OC	23	79	0.92 U	1.4	1.9 U	4.6 U	0.98 U	0.91 U	1.5 U	7.9 U	5.5 U
Indeno(1,2,3-cd)pyrene	mg/kg OC	34	88	0.92	1.2	2.1	7.1	0.98	0.59	0.74	0.52 J	1.1
Naphthalene	mg/kg OC	99	170	0.92 U	1.1 U	1.9 U	4.6 U	0.98 U	0.91 U	1.5 U	7.9 U	5.5 U

Table A-3-6. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS87 through SS101, cont.

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS87	LDW- SS88	LDW- SS89	LDW- SS92	LDW- SS94	LDW- SS96	LDW- SS97	LDW- SS99	LDW- SS101
Phenanthrene	mg/kg OC	100	480	4.5	11	3.6	11	3.9	1.4	3.1	11	3.8 J
Pyrene	mg/kg OC	1,000	1,400	7.3	30	13	50 J	9.3	3.4	5.4	16	6.0
Total HPAH (calc'd)	mg/kg OC	960	5,300	36	120 J	59	270 J	42	19	33	62 J	28 J
Total LPAH (calc'd)	mg/kg OC	370	780	5.7	17	3.6	16 J	5.1	1.4	3.1	11	3.8 J
Phthalates												
Bis(2-ethylhexyl)phthalate	mg/kg OC	47	78	4.4	1.5	3.0	5.0	2.2	3.2	4.2	7.9 U	4.8 J
Butyl benzyl phthalate	mg/kg OC	4.9	64	2.1	0.38 U	0.65 U	0.50 U	0.32 U	0.30 U	0.49 U	0.52 UJ	0.61 U
Diethyl phthalate	mg/kg OC	61	110	0.42 U	0.38 U	0.65 U	0.50 U	0.68 U	0.55 U	0.89	0.52 UJ	0.61
Dimethyl phthalate	mg/kg OC	53	53	0.30 U	0.38 U	0.65 U	0.50 U	0.32 U	0.30 U	0.49 U	0.52 UJ	0.61 U
Di-n-butyl phthalate	mg/kg OC	220	1,700	0.92 U	1.1 U	1.9 U	4.6 U	0.98 U	0.91 U	1.5 U	7.9 U	5.5 U
Di-n-octyl phthalate	mg/kg OC	58	4,500	0.92 U	1.1 U	1.9 U	4.6 U	0.98 U	0.91 U	1.5 U	7.9 U	3.3 J
Other SVOCs												
1,2,4-Trichlorobenzene	mg/kg OC	0.81	1.8	0.30 U	0.38 U	0.65 U	0.50 U	0.32 U	0.30 U	0.49 U	0.52 UJ	0.61 U
1,2-Dichlorobenzene	mg/kg OC	2.3	2.3	0.30 U	0.38 U	0.65 U	0.50 U	0.32 U	0.30 U	0.49 U	0.52 UJ	0.61 U
1,3-Dichlorobenzene	µg/kg dw	170	nv	20 U	20 U	19 U	58 U	20 U	20 U	20 U	98 U	60 U
1,4-Dichlorobenzene	mg/kg OC	3.1	9	0.30 U	0.38 U	0.65 U	0.50 U	0.32 U	0.30 U	0.49 U	0.52 UJ	0.61 U
2,4-Dimethylphenol	µg/kg dw	29	29	6.6 U	6.6 U	6.6 U	6.4 U	6.6 U	6.6 U	6.6 U	6.5 UJ	6.6 U
2-Methylphenol	µg/kg dw	63	63	6.6 U	6.6 U	6.6 U	6.4 U	6.6 U	6.6 U	6.6 U	6.5 UJ	6.6 U
4-Methylphenol	µg/kg dw	670	670	20 U	20 U	19 U	58 U	20 U	24	20 U	98 U	60 U
Benzoic acid	µg/kg dw	650	650	66 U	66 U	66 U	64 U	66 U	66 U	66 U	65 UJ	110
Benzyl alcohol	µg/kg dw	57	73	20 U	20 U	19 U	32 U	20 U	20 U	20 U	32 UJ	33 U
Hexachlorobenzene	mg/kg OC	0.38	2.3	0.044 U	0.38 U	0.65 U	0.076 U	0.32 U	0.045 U	0.24 UJ	0.079 U	0.30 UJ
Hexachlorobutadiene	mg/kg OC	3.9	6.2	0.044 U	0.38 U	0.65 U	0.076 U	0.32 U	0.045 U	0.49 U	0.079 U	0.61 U
Hexachloroethane	µg/kg dw	1,400	14,000	20 U	20 U	19 U	58 U	20 U	20 U	20 U	98 U	60 U
N-Nitrosodiphenylamine	mg/kg OC	11	11	0.30 U	0.38 U	0.65 U	0.50 U	0.32 U	0.30 U	0.49 U	0.52 UJ	0.61 U
Pentachlorophenol	µg/kg dw	360	690	33 UJ	33 U	33 U	32 U	33 UJ	33 UJ	33 U	32 UJ	33 U
Phenol	µg/kg dw	420	1,200	20 U	26	19 U	58 U	20 U	20 U	20 U	98 U	60 U
Polychlorinated biphenyls												
Total PCBs (calc'd)	mg/kg OC	12	65	3.3	38	180	76	3.5	1.1	6.0	1.6 U	1.8 U

Table A-3-6. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS87 through SS101, cont.

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS87	LDW- SS88	LDW- SS89	LDW- SS92	LDW- SS94	LDW- SS96	LDW- SS97	LDW- SS99	LDW- SS101
Pesticides												
Total DDTs (calc'd)	µg/kg dw	6.9	69	2.0 U	na	na	2.0 U	na	2.0 U	na	2.0 U	na
Aldrin	µg/kg dw	10	nv	0.97 U	na	na	0.97 U	na	0.98 U	na	0.98 U	na
Dieldrin	µg/kg dw	10	nv	2.0 U	na	na	2.0 U	na	2.0 U	na	2.0 U	na
gamma-BHC	µg/kg dw	10	nv	0.97 U	na	na	0.97 U	na	0.98 U	na	0.98 U	na
Total chlordanes (calc'd)	µg/kg dw	10	nv	2.0 U	na	na	2.0 U	na	2.0 U	na	2.0 U	na
Heptachlor	µg/kg dw	10	nv	0.97 U	na	na	1.1 U	na	0.98 U	na	0.98 U	na

dw – dry weight

na – not analyzed

nv – no value

OC – organic-carbon normalized

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Concentration in **bold** indicates SQS/SL exceedance.

Concentration in **bold underline** indicates CSL/ML exceedance.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PCBs, and total DDTs are presented in Appendix B.

Data qualifiers: U – not detected at reporting limit shown
 J – estimated concentration
 UJ – not detected at estimated reporting limit shown

Table A-3-7. Concentrations of all analytes in Round 1 LDW surface sediment samples compared to SQS/SL and CSL/ML: Locations SS102 through SS116

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS102	LDW- SS104	LDW- SS109	LDW- SS110	LDW- SS111	LDW- SS112	LDW- SS113b	LDW- SS114	LDW- SS115	LDW- SS116
Metals and trace elements													
Antimony	mg/kg dw	150	200	0.3 UJ	0.3 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.3 U	0.3 UJ	0.3 UJ
Arsenic	mg/kg dw	57	93	6.6	11.5	17.4	24.7	31.7	481	8.3	1,100	44.4	9.6
Cadmium	mg/kg dw	5.1	6.7	0.3 U	0.3 U	3.6	2	1.3	0.7	0.4 UJ	1.6 J	1.1	0.3 UJ
Chromium	mg/kg dw	260	270	17.9	17.8	83	181	455	62.4	26 J	72.8 J	55	26.2 J
Copper	mg/kg dw	390	390	39.8	34.0	225	124	186	77.7	41.5	58.5	99.7	38.5
Lead	mg/kg dw	450	530	28	22	288	870	635	82	21	110	98	30
Mercury	mg/kg dw	0.41	0.59	0.10	0.08 U	0.2	0.16	0.17	0.08 U	0.10	0.12	0.07	0.07
Nickel	mg/kg dw	140	370	12	13	70	131	387	25	18	26	35	20
Silver	mg/kg dw	6.1	6.1	0.4 U	0.5 U	2.1	2	3	0.5	0.6 U	0.8	1	0.5 U
Zinc	mg/kg dw	410	960	115	77	1,690	385	460	206	86	230	343	92.8
PAHs													
2-Methylnaphthalene	mg/kg OC	38	64	7.2 U	4.3 U	6.8 U	2.6 U	11	5.4 U	6.9 U	8.5 U	10 U	7.4 U
Acenaphthene	mg/kg OC	16	57	7.2 U	4.3 U	6.8 U	2.6 U	14	5.4 U	6.9 U	9.2	7.8 J	7.4 U
Acenaphthylene	mg/kg OC	66	66	7.2 U	4.3 U	6.8 U	2.6 U	8.6 U	5.4 U	6.9 U	8.5 U	10 U	7.4 U
Anthracene	mg/kg OC	220	1,200	7.2 U	4.3 U	6.8 U	1.8 J	28	11	6.9 U	16	20	3.8 J
Benzo(a)anthracene	mg/kg OC	110	270	0.65	2.2 J	12	7.1	56	51	7.7	72	78	23
Benzo(a)pyrene	mg/kg OC	99	210	0.80	2.2 J	12	8.0	60	60	9.2	85	89	29
Benzo(g,h,i)perylene	mg/kg OC	31	78	7.2 U	4.3 U	4.1 J	2.5 J	20	20	3.8 J	30	26	9.0
Total benzofluoranthenes (calc'd)	mg/kg OC	230	450	20	4.9 J	26	16	110	140	21	160	190	69
Chrysene	mg/kg OC	110	460	8.8	4.4	21	12	73	88	15	120	130	49
Dibenzo(a,h)anthracene	mg/kg OC	12	33	7.2 U	4.3 U	6.8 U	2.6 U	8.6 U	5.4 U	6.9 U	5.6 J	13	7.4 U
Dibenzofuran	mg/kg OC	15	58	7.2 U	4.3 U	6.8 U	2.6 U	8.6 U	5.4 U	6.9 U	8.5 U	10 U	7.4 U
Fluoranthene	mg/kg OC	160	1,200	14	8.1	44	21	130	190	23	200	270	75
Fluorene	mg/kg OC	23	79	7.2 U	4.3 U	6.8 U	2.6 U	28	5.4 U	6.9 U	8.5	9.4 J	7.4 U
Indeno(1,2,3-cd)pyrene	mg/kg OC	34	88	0.61	0.49 U	4.8 J	2.7	20	23	0.46	37	31	11
Naphthalene	mg/kg OC	99	170	7.2 U	4.3 U	6.8 U	2.6 U	16	5.4 U	6.9 U	8.5 U	10 U	7.4 U

Table A-3-7. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS102 through SS116, cont.

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS102	LDW- SS104	LDW- SS109	LDW- SS110	LDW- SS111	LDW- SS112	LDW- SS113b	LDW- SS114	LDW- SS115	LDW- SS116
Phenanthrene	mg/kg OC	100	480	4.7 J	3.3 J	17	9.3	140	66	7.0	100	130	21
Pyrene	mg/kg OC	1,000	1,400	13	5.1	24	19	150	110	20	160	170	58 J
Total HPAH (calc'd)	mg/kg OC	960	5,300	58	27 J	150 J	88 J	620	680	100 J	880 J	990	320 J
Total LPAH (calc'd)	mg/kg OC	370	780	4.7 J	3.3 J	17	11 J	220	77	7.0	140	160 J	25 J
Phthalates													
Bis(2-ethylhexyl)phthalate	mg/kg OC	47	78	9.5	2.7 J	8.5	7.5	25	18	14	78	17	18
Butyl benzyl phthalate	mg/kg OC	4.9	64	0.47 U	0.49 U	6.8 U	0.31	8.6 U	12	0.46 U	8.5 U	10 U	4.7 J
Diethyl phthalate	mg/kg OC	61	110	0.47 U	0.49 U	6.8 U	0.28 U	8.6 U	6.0	0.46 U	8.5 U	10 U	0.54 U
Dimethyl phthalate	mg/kg OC	53	53	0.47 U	0.49 U	6.8 U	0.28 U	8.6 U	5.4 U	0.46 U	8.5 U	10 U	0.64
Di-n-butyl phthalate	mg/kg OC	220	1,700	7.2 U	4.3 U	12	2.6 U	8.6 U	5.4 U	6.9 U	5.4 J	10 U	7.4 U
Di-n-octyl phthalate	mg/kg OC	58	4,500	7.2 U	4.3 U	6.8 U	2.6 U	8.6 U	5.4 U	6.9 U	8.5 U	10 U	7.4 U
Other SVOCs													
1,2,4-Trichlorobenzene	mg/kg OC	0.81	1.8	0.47 U	0.49 U	6.8 U	0.28 U	8.6 U	5.4 U	0.46 U	8.5 U	10 U	0.49 U
1,2-Dichlorobenzene	mg/kg OC	2.3	2.3	0.47 U	0.49 U	6.8 U	0.28 U	8.6 U	5.4 U	0.46 U	8.5 U	10 U	0.49 U
1,3-Dichlorobenzene	µg/kg dw	170	nv	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
1,4-Dichlorobenzene	mg/kg OC	3.1	9	0.47 U	0.49 U	6.8 U	0.28 U	8.6 U	5.4 U	0.46 U	8.5 U	10 U	0.49 U
2,4-Dimethylphenol	µg/kg dw	29	29	6.4 U	6.6 U	200 U	6.4 U	200 U	98 U	6.5 U	130 U	200 U	6.6 U
2-Methylphenol	µg/kg dw	63	63	6.4 U	6.6 U	200 U	6.4 U	200 U	98 U	6.5 U	130 U	200 U	6.6 U
4-Methylphenol	µg/kg dw	670	670	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
Benzoic acid	µg/kg dw	650	650	64 U	66 U	2,000 U	64 U	2,000 U	980 U	65 U	1,300 U	2,000 U	66 U
Benzyl alcohol	µg/kg dw	57	73	32 U	33 U	200 U	32 U	200 U	98 U	32 U	130 U	200 U	33 U
Hexachlorobenzene	mg/kg OC	0.38	2.3	0.23 UJ	0.072 U	6.8 U	0.28 U	8.6 U	5.4 U	0.069 U	8.5 U	0.051 U	0.073 U
Hexachlorobutadiene	mg/kg OC	3.9	6.2	0.47 U	0.072 U	6.8 U	0.28 U	8.6 U	5.4 U	0.069 U	8.5 U	0.051 U	0.073 U
Hexachloroethane	µg/kg dw	1,400	14,000	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
N-Nitrosodiphenylamine	mg/kg OC	11	11	0.47 U	0.49 U	6.8 U	0.28 U	8.6 U	5.4 U	0.46 U	8.5 U	10 U	0.49 U
Pentachlorophenol	µg/kg dw	360	690	32 U	33 U	990 U	32 U	1,000 U	490 U	32 U	640 U	980 U	33 UJ
Phenol	µg/kg dw	420	1,200	98 U	58 U	200 U	59 U	200 U	98 U	98 U	130 U	200 U	99 U
Polychlorinated biphenyls													
Total PCBs (calc'd)	mg/kg OC	12	65	5.4	5.6	3,700	580	140 J	26	1.3 J	54	11	8.8 J

Table A-3-7. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS102 through SS116, cont.

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS102	LDW- SS104	LDW- SS109	LDW- SS110	LDW- SS111	LDW- SS112	LDW- SS113b	LDW- SS114	LDW- SS115	LDW- SS116
Pesticides													
Total DDTs (calc'd)	µg/kg dw	6.9	69	na	1.9 U	na	na	na	na	4.7 U	na	20 U	2.0 U
Aldrin	µg/kg dw	10	nv	na	0.97 U	na	na	na	na	0.98 U	na	0.98 U	0.98 U
Dieldrin	µg/kg dw	10	nv	na	1.9 U	na	na	na	na	2.0 U	na	2.0 U	2.0 U
gamma-BHC	µg/kg dw	10	nv	na	0.97 U	na	na	na	na	0.98 U	na	0.98 U	0.98 U
Total chlordanes (calc'd)	µg/kg dw	10	nv	na	1.9 U	na	na	na	na	2.0 U	na	15 U	2.0 U
Heptachlor	µg/kg dw	10	nv	na	0.97 U	na	na	na	na	0.98 U	na	0.98 U	0.98 U

dw – dry weight

na – not analyzed

nv – no value

OC – organic-carbon normalized

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Concentration in **bold** indicates SQS/SL exceedance.

Concentration in **bold underline** indicates CSL/ML exceedance.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PCBs, and total DDTs are presented in Appendix B.

Data qualifiers: U – not detected at reporting limit shown
 J – estimated concentration
 UJ – not detected at estimated reporting limit shown

Table A-3-8. Concentrations of all analytes in Round 1 LDW surface sediment samples compared to SQS/SL and CSL/ML: Locations SS117 through SS127

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS117	LDW- SS118	LDW- SS119	LDW- SS120	LDW- SS121	LDW- SS123	LDW- SS125	LDW- SS126	LDW- SS127
Metals and trace elements												
Antimony	mg/kg dw	150	200	0.4 UJ	0.4 UJ	0.3 U	0.3 UJ	0.3 UJ	0.3 UJ	0.4 UJ	0.4 UJ	0.6 UJ
Arsenic	mg/kg dw	57	93	14.4	13.0	10.9	15.6	23.1	7.4	8.6	7.3	13.2
Cadmium	mg/kg dw	5.1	6.7	0.4 UJ	0.4 UJ	0.6	1.4	0.8 U	0.3	0.4 UJ	0.4 UJ	0.6 UJ
Chromium	mg/kg dw	260	270	26.7 J	29 J	37.6	64.9	61	19.9	27 J	24 J	36 J
Copper	mg/kg dw	390	390	37.0	47.4	46.8	290	190	27.8	39.0	34.9	72.0
Lead	mg/kg dw	450	530	19	28	71	386	533	18	18	17	37
Mercury	mg/kg dw	0.41	0.59	0.1 U	0.12	0.16	0.20	0.27	0.08	0.09	0.1 U	0.2
Nickel	mg/kg dw	140	370	20	20	19	25	30	14	21	19	25
Silver	mg/kg dw	6.1	6.1	0.5 U	0.6 U	0.7	0.9	1 U	0.4 U	0.6 U	0.6 U	0.9 U
Zinc	mg/kg dw	410	960	86	103	115	328	342	59.8	91	82	141
PAHs												
2-Methylnaphthalene	mg/kg OC	38	64	1.4 U	5.4 U	6.4 U	5.0 U	11 U	1.1 U	6.4 U	7.1 U	0.60 U
Acenaphthene	mg/kg OC	16	57	1.4 U	5.4 U	6.4 U	5.0 U	11 U	1.1 U	6.4 U	7.1 U	0.72
Acenaphthylene	mg/kg OC	66	66	1.4 U	5.4 U	6.4 U	5.0 U	11 U	1.1 U	6.4 U	7.1 U	0.60 U
Anthracene	mg/kg OC	220	1,200	1.4 U	5.4 U	6.4 U	5.0 U	11 U	1.1 U	6.4 U	7.1 U	1.8
Benzo(a)anthracene	mg/kg OC	110	270	2.7	7.1	11	11	11 U	0.67	6.5	7.8	12
Benzo(a)pyrene	mg/kg OC	99	210	3.5	7.6	12	15	5.4 J	0.56	7.2	7.8	13
Benzo(g,h,i)perylene	mg/kg OC	31	78	1.8	3.9 J	6.4 U	5.2	11 U	1.1 U	6.4 U	7.1 U	5.1
Total benzofluoranthenes (calc'd)	mg/kg OC	230	450	10	18	26	30	5.9 J	2.6 J	19	22	34
Chrysene	mg/kg OC	110	460	3.9	15	23	23	11	1.6 J	19	21	21
Dibenzo(a,h)anthracene	mg/kg OC	12	33	1.4 U	5.4 U	6.4 U	5.0 U	11 U	1.1 U	6.4 U	7.1 U	0.84
Dibenzofuran	mg/kg OC	15	58	1.4 U	5.4 U	6.4 U	5.0 U	11 U	1.1 U	6.4 U	7.1 U	0.60 U
Fluoranthene	mg/kg OC	160	1,200	8.8	27	34	41	9.1 J	3.5	22	30	33
Fluorene	mg/kg OC	23	79	1.4U	5.4 U	6.4 U	5.0 U	11 U	1.1 U	6.4 U	7.1 U	0.96
Indeno(1,2,3-cd)pyrene	mg/kg OC	34	88	1.7	2.5	4.2	6.7	11 U	0.61	0.65	0.65	6.0
Naphthalene	mg/kg OC	99	170	1.4 U	5.4 U	6.4 U	5.0 U	11 U	1.1 U	6.4 U	7.1 U	0.60 U

Table A-3-8. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS117 through SS127, cont.

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS117	LDW- SS118	LDW- SS119	LDW- SS120	LDW- SS121	LDW- SS123	LDW- SS125	LDW- SS126	LDW- SS127
Phenanthrene	mg/kg OC	100	480	2.8	7.6	11	11	11 U	1.7 J	4.8 J	5.5 J	16
Pyrene	mg/kg OC	1,000	1,400	9.5	20	25	28	6.5 J	4.1	16	23	27
Total HPAH (calc'd)	mg/kg OC	960	5,300	42	100 J	140	160	38 J	14 J	90	110	150
Total LPAH (calc'd)	mg/kg OC	370	780	2.8	7.6	11	11	11 U	1.7 J	4.8 J	5.5 J	19
Phthalates												
Bis(2-ethylhexyl)phthalate	mg/kg OC	47	78	9.5	13	19	15	11 U	1.9 J	6.3 J	6.5 J	4.2
Butyl benzyl phthalate	mg/kg OC	4.9	64	3.5	1.4	9.3	12	17	0.42	0.42 U	4.3 J	0.60
Diethyl phthalate	mg/kg OC	61	110	0.75 U	0.47	7.3	5.7	11 U	0.35 U	0.42 U	0.47 U	0.60 U
Dimethyl phthalate	mg/kg OC	53	53	0.45 U	0.40	2.5	2.1	11 U	1.0	0.42 U	0.47 U	0.60 U
Di-n-butyl phthalate	mg/kg OC	220	1,700	1.8 UJ	5.4 U	6.4 U	5.0 U	6.5 J	1.1 U	6.4 U	7.1 U	0.60 U
Di-n-octyl phthalate	mg/kg OC	58	4,500	1.4 U	5.4 U	6.4 U	5.0 U	11 U	1.1 U	6.4 U	7.1 U	0.60 U
Other SVOCs												
1,2,4-Trichlorobenzene	mg/kg OC	0.81	1.8	0.45 U	0.36 U	0.44 U	1.1 U	11 U	0.35 U	0.42 U	0.47 U	0.60 U
1,2-Dichlorobenzene	mg/kg OC	2.3	2.3	0.45 U	0.36 U	0.44 U	1.1 U	11 U	0.35 U	0.42 U	0.47 U	0.60 U
1,3-Dichlorobenzene	µg/kg dw	170	nv	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U
1,4-Dichlorobenzene	mg/kg OC	3.1	9	0.45 U	0.36 U	0.44 U	1.1 U	11 U	0.35 U	0.42 U	0.47 U	0.60 U
2,4-Dimethylphenol	µg/kg dw	29	29	6.6 U	6.6 U	6.6 U	22 U	200 U	6.3 U	6.5 U	6.6 U	20 U
2-Methylphenol	µg/kg dw	63	63	6.6 U	6.6 U	6.6 U	22 U	200 U	6.3 U	6.5 U	6.6 U	20 U
4-Methylphenol	µg/kg dw	670	670	20 U	99 U	96 U	97 U	200 U	23 J	98 U	100 U	20 U
Benzoic acid	µg/kg dw	650	650	100 J	84	130	250	2,000 U	63 U	65 U	66 U	200 U
Benzyl alcohol	µg/kg dw	57	73	20 U	33 U	33 U	97 U	200 U	20 U	33 U	33 U	20 U
Hexachlorobenzene	mg/kg OC	0.38	2.3	0.22 UJ	0.36 U	0.44 U	1.1 U	11 U	0.35 U	0.063 U	0.070 U	0.030 U
Hexachlorobutadiene	mg/kg OC	3.9	6.2	0.45 U	0.36 U	0.44 U	1.1 U	11 U	0.35 U	0.063 U	0.070 U	0.030 U
Hexachloroethane	µg/kg dw	1,400	14,000	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U
N-Nitrosodiphenylamine	mg/kg OC	11	11	0.45 U	0.36 U	0.44 U	1.1 U	11 U	0.35 U	0.42 U	0.47 U	0.60 U
Pentachlorophenol	µg/kg dw	360	690	66 UJ	33 U	33 U	110 U	990 U	32 U	33 U	33 U	99 U
Phenol	µg/kg dw	420	1,200	20 U	99 U	96 U	97 U	200 U	20 U	98 U	100 U	20 U
Polychlorinated biphenyls												
Total PCBs (calc'd)	mg/kg OC	12	65	5.4 J	1.3	59 J	32 J	57 J	8.3	1.2 U	1.4 U	1.7

Table A-3-8. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS117 through SS127, cont.

ANALYTE	UNIT	SQS/ SL	CSL/ ML	LDW- SS117	LDW- SS118	LDW- SS119	LDW- SS120	LDW- SS121	LDW- SS123	LDW- SS125	LDW- SS126	LDW- SS127
Pesticides												
Total DDTs (calc'd)	µg/kg dw	6.9	69	na	na	na	na	na	na	1.9 U	2.0 U	5.4 U
Aldrin	µg/kg dw	10	nv	na	na	na	na	na	na	0.97 U	0.99 U	0.99 U
Dieldrin	µg/kg dw	10	nv	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U
gamma-BHC	µg/kg dw	10	nv	na	na	na	na	na	na	0.97 U	0.99 U	0.99 U
Total chlordanes (calc'd)	µg/kg dw	10	nv	na	na	na	na	na	na	1.9 U	2.0 U	2.0 U
Heptachlor	µg/kg dw	10	nv	na	na	na	na	na	na	0.97 U	0.99 U	0.99 U

dw – dry weight

na – not analyzed

nv – no value

OC – organic-carbon normalized

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Concentration in **bold** indicates SQS/SL exceedance.

Concentration in **bold underline** indicates CSL/ML exceedance.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PCBs, and total DDTs are presented in Appendix B.

Data qualifiers: U – not detected at reporting limit shown
 J – estimated concentration
 UJ – not detected at estimated reporting limit shown

Table A-3-9. Concentrations of all analytes in Round 1 LDW surface sediment samples compared to SQS/SL and CSL/ML (Locations SS128 through SS143), and dry weight concentrations of all analytes in Round 1 LDW surface sediment samples with TOC < 0.5% compared to dry weight chemical standards (Locations LDW-SS18 and LDW-SS134)^a

ANALYTE	UNIT	SQS/SL AND CSL/ML COMPARISON ^b							SQS/SL, CSL/ML, AND AET COMPARISON				
		SQS/SL	CSL/ML	LDW-SS128	LDW-SS129	LDW-SS130	LDW-SS142	LDW-SS143	UNIT	SQS/SL/LOWEST AET	CSL/ML/2ND-LOWEST AET	LDW-SS18 ^c	LDW-SS134
Metals and trace elements													
Antimony	mg/kg dw	150	200	0.5 UJ	0.3 UJ	0.5 UJ	0.4 UJ	0.4 UJ	mg/kg dw	150	200	na	0.3 U
Arsenic	mg/kg dw	57	93	26.2	10.6	15.0	10.5	8.8	mg/kg dw	57	93	na	3.5
Cadmium	mg/kg dw	5.1	6.7	0.5 U	0.3 UJ	0.5 UJ	0.4 U	0.3 U	mg/kg dw	5.1	6.7	na	0.3 U
Chromium	mg/kg dw	260	270	33	19.6 J	33 J	24	22.1	mg/kg dw	260	270	na	15.7
Copper	mg/kg dw	390	390	69.8	36.6	60.8	33.5	34.4	mg/kg dw	390	390	na	25.0
Lead	mg/kg dw	450	530	33	19	29	17	19	mg/kg dw	450	530	na	4
Mercury	mg/kg dw	0.41	0.59	0.3	0.08 U	0.1	0.1	0.07	mg/kg dw	0.41	0.59	na	0.07 U
Nickel	mg/kg dw	140	370	23	13	22	17	20	mg/kg dw	140	370	na	8
Silver	mg/kg dw	6.1	6.1	0.8 U	0.5 U	0.7 U	0.6 U	0.5 U	mg/kg dw	6.1	6.1	na	0.4 U
Zinc	mg/kg dw	410	960	129	68	115	88	83	mg/kg dw	410	960	na	38.2
PAHs													
2-Methylnaphthalene	mg/kg OC	38	64	2.8 U	0.80 U	0.70 U	5.1 U	17 U	µg/kg dw	670	670	na	19 U
Acenaphthene	mg/kg OC	16	57	2.8 U	1.4	0.70 U	8.2	17 U	µg/kg dw	500	500	na	19 U
Acenaphthylene	mg/kg OC	66	66	2.8 U	0.80 U	0.70 U	5.1 U	17 U	µg/kg dw	1,300	1,300	na	19 U
Anthracene	mg/kg OC	220	1,200	1.6 J	2.6	1.0	5.1 U	17 U	µg/kg dw	960	960	na	19 U
Benzo(a)anthracene	mg/kg OC	110	270	8.5	20	7.7	0.72	3.0	µg/kg dw	1,300	1,600	11	19 U
Benzo(a)pyrene	mg/kg OC	99	210	11	23	9.1	0.82	3.2	µg/kg dw	1,600	1,600	9.0	19 U
Benzo(g,h,i)perylene	mg/kg OC	31	78	3.0	12	3.0	5.1 U	17 U	µg/kg dw	670	720	na	19 U
Total benzofluoranthenes (calc'd)	mg/kg OC	230	450	34	57	23	15	2.9	µg/kg dw	3,200	3,600	na	19 U
Chrysene	mg/kg OC	110	460	15	36	14	6.7	14 J	µg/kg dw	1,400	2,800	na	19 U
Dibenzo(a,h)anthracene	mg/kg OC	12	33	2.8 U	4.4	0.70 U	5.1 U	17 U	µg/kg dw	230	230	na	19 U
Dibenzofuran	mg/kg OC	15	58	2.8 U	0.80 U	0.70 U	5.1 U	17 U	µg/kg dw	540	540	na	19 U
Fluoranthene	mg/kg OC	160	1,200	30	60	24	14	26	µg/kg dw	1,700	2,500	na	19 U

Table A-3-9. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS128 through SS143, cont.

ANALYTE	UNIT	SQS/SL AND CSL/ML COMPARISON ^b							SQS/SL, CSL/ML, AND AET COMPARISON				
		SQS/SL	CSL/ML	LDW-SS128	LDW-SS129	LDW-SS130	LDW-SS142	LDW-SS143	UNIT	SQS/SL/LOWEST AET	CSL/ML/2ND-LOWEST AET	LDW-SS18 ^c	LDW-SS134
Fluorene	mg/kg OC	23	79	2.8 U	1.7	0.70 U	5.1 U	17 U	µg/kg dw	540	540	na	19 U
Indeno(1,2,3-cd)pyrene	mg/kg OC	34	88	6.1	14	3.5	0.62	2.6	µg/kg dw	600	690	na	19 U
Naphthalene	mg/kg OC	99	170	2.8 U	0.80 U	0.70 U	5.1 U	17 U	µg/kg dw	2,100	2,100	na	19 U
Phenanthrene	mg/kg OC	100	480	12	31	9.8	6.2	9.2 J	µg/kg dw	1,500	1,500	na	19 U
Pyrene	mg/kg OC	1,000	1,400	25	44	18	12	19	µg/kg dw	2,600	3,300	na	19 U
Total HPAH (calc'd)	mg/kg OC	960	5,300	130	270	100	49	70 J	µg/kg dw	12,000	17,000	42	19 U
Total LPAH (calc'd)	mg/kg OC	370	780	14 J	37	11	14	9.2 J	µg/kg dw	5,200	5,200	na	19 U
Phthalates													
Bis(2-ethylhexyl)phthalate	mg/kg OC	47	78	10	6.8	2.5	12	17 U	µg/kg dw	1,300	1,900	na	19 U
Butyl benzyl phthalate	mg/kg OC	4.9	64	1.0	0.25 U	0.70 U	0.34 U	0.93 U	µg/kg dw	63	900	6.4 U	19 U
Diethyl phthalate	mg/kg OC	61	110	0.39 U	0.33	0.70 U	0.34 U	0.93 U	µg/kg dw	200	200	6.4 U	19 U
Dimethyl phthalate	mg/kg OC	53	53	0.36	0.25 U	0.70 U	0.34 U	0.93 U	µg/kg dw	71	160	6.4 U	19 U
Di-n-butyl phthalate	mg/kg OC	220	1,700	2.8 U	0.80 U	0.70 U	5.1 U	17 U	µg/kg dw	1,400	1,400	na	19 U
Di-n-octyl phthalate	mg/kg OC	58	4,500	2.8 U	0.80 U	0.70 U	5.1 U	17 U	µg/kg dw	6,200	6,200	na	19 U
Other SVOCs													
1,2,4-Trichlorobenzene	mg/kg OC	0.81	1.8	0.22 U	0.25 U	0.70 U	0.34 U	0.93 U	µg/kg dw	31	51	6.4 U	19 U
1,2-Dichlorobenzene	mg/kg OC	2.3	2.3	0.22 U	0.25 U	0.70 U	0.34 U	0.93 U	µg/kg dw	35	50	6.4 U	19 U
1,3-Dichlorobenzene	µg/kg dw	170	nv	100 U	20 U	20 U	99 U	120 U	µg/kg dw	170	nv	na	19 U
1,4-Dichlorobenzene	mg/kg OC	3.1	9	0.22 U	0.25 U	0.70 U	0.34 U	0.93 U	µg/kg dw	110	110	6.4 U	19 U
2,4-Dimethylphenol	µg/kg dw	29	29	8.0 U	6.4 U	20 U	6.6 U	6.5 U	µg/kg dw	29	29	6.4 U	19 U
2-Methylphenol	µg/kg dw	63	63	8.0 U	6.4 U	20 U	6.6 U	6.5 U	µg/kg dw	63	63	6.4 U	19 U
4-Methylphenol	µg/kg dw	670	670	100 U	20 U	20 U	99 U	120 U	µg/kg dw	670	670	na	19 U
Benzoic acid	µg/kg dw	650	650	220	64 U	200 U	66 U	65 U	µg/kg dw	650	650	64 U	190 U
Benzyl alcohol	µg/kg dw	57	73	40 U	20 U	20 U	33 U	33 U	µg/kg dw	57	73	32 U	19 U
Hexachlorobenzene	mg/kg OC	0.38	2.3	0.028 U	0.038 U	0.034 U	0.34 U	0.93 U	µg/kg dw	22	70	6.4 U	0.97 U
Hexachlorobutadiene	mg/kg OC	3.9	6.2	0.028 U	0.038 U	0.034 U	0.34 U	0.93 U	µg/kg dw	11	120	6.4 U	0.97 U
Hexachloroethane	µg/kg dw	1,400	14,000	100 U	20 U	20 U	99 U	120 U	µg/kg dw	1,400	14,000	6.4 U	19 U
N-Nitrosodiphenylamine	mg/kg OC	11	11	0.22 U	0.25 U	0.70 U	0.34 U	0.93 U	µg/kg dw	28	40	na	19 U
Pentachlorophenol	µg/kg dw	360	690	40 UJ	32 U	98 U	33 U	33 U	µg/kg dw	360	690	32 U	96 U

Table A-3-9. Concentrations of all analytes compared to SQS/SL and CSL/ML: Locations SS128 through SS143, cont.

ANALYTE	UNIT	SQS/SL AND CSL/ML COMPARISON ^b							SQS/SL, CSL/ML, AND AET COMPARISON				
		SQS/SL	CSL/ML	LDW-SS128	LDW-SS129	LDW-SS130	LDW-SS142	LDW-SS143	UNIT	SQS/SL/LOWEST AET	CSL/ML/2ND-LOWEST AET	LDW-SS18 ^c	LDW-SS134
Phenol	µg/kg dw	420	1,200	100 U	20 U	20 U	99 U	120 U	µg/kg dw	420	1,200	na	19 U
Polychlorinated biphenyls													
Total PCBs (calc'd)	mg/kg OC	12	65	0.55 U	0.76 U	0.91	8.3 J	390	µg/kg dw	130	1,000	na	19 U
Pesticides													
Total DDTs (calc'd)	µg/kg dw	6.9	69	2.0 U	1.9 U	na	na	na	µg/kg dw	6.9	69	na	1.9 U
Aldrin	µg/kg dw	10	nv	1.0 U	0.96 U	na	na	na	µg/kg dw	10	nv	na	0.97 U
Dieldrin	µg/kg dw	10	nv	2.0 U	1.9 U	na	na	na	µg/kg dw	10	nv	na	1.9 U
gamma-BHC	µg/kg dw	10	nv	1.0 U	0.96 U	na	na	na	µg/kg dw	10	nv	na	0.97 U
Total chlordanes (calc'd)	µg/kg dw	10	nv	2.0 U	1.9 U	na	na	na	µg/kg dw	10	nv	na	1.9 U
Heptachlor	µg/kg dw	10	nv	1.0 U	0.96 U	na	na	na	µg/kg dw	10	nv	na	0.97 U

- ^a Locations LDW-SS134 and LDW-SS18 (analyzed by King County) had TOC contents of <0.5%, so concentrations were not OC-normalized. Therefore, for analytes with OC-normalized SQS or CSL values, the dry weight chemical concentrations at this location were compared to the dry weight lowest apparent effects threshold (AET) and second lowest AET values, which are functionally equivalent to the OC-normalized SQS and CSL.
- ^b Sample LDW-B9a-S, which was collected as part of the benthic invertebrate sampling event, was analyzed for 20 SVOCs using the SIM method at ARI as part of Round 1. None of the SVOC concentrations in this sample exceeded their respective SQS/SL values
- ^c Only data for SVOCs using the SIM method are presented for LDW-SS18; King County conducted other analyses on this sample. Results for LDW-SS-18 will be provided separately

dw – dry weight

na – not analyzed

nv – no value

OC – organic-carbon normalized

Concentration in *italics* indicates that laboratory replicate was run for sample. Value reported was based on averaging rules in Appendix B.

Concentration in **bold** indicates SQS/SL exceedance.

Concentration in **bold underline** indicates CSL/ML exceedance.

Methods for calculating total benzofluoranthenes, total chlordanes, total LPAHs, total HPAHs, total PCBs, and total DDTs are presented in Appendix B.

- Data qualifiers:
- U – not detected at reporting limit shown
 - J – estimated concentration
 - UJ – not detected at estimated reporting limit shown