

Table 2-7
Bay Protection and Toxic Cleanup Program Preliminary Results
Organic Compounds
(concentrations reported in parts per billion)

(table continues)

Table 2-7 (continued)

Parameter	Limit	ERL	ERM	STATION/SAMPLING DATE													
				93165 NTC Leg 18 5/4/93	93166 NTC Leg 18 5/4/93	93166 NTC Leg 18 5/4/93	93166 NTC Leg 28 3/16/94	93167 NTC Leg 18 5/4/93	90102 NTC/Bulg Leg 7 11/11/92	90104 WBasin Leg 12 17/26/93	90104 WBasin Leg 29 3/29/94	90056 SD Bay Leg 6 10/27/92	90049 SD Bay Leg 6 10/27/92	90002 E Basin Leg 6 3/24/93	93221 Dwrtvn Leg 22 8/3/93	93222 Dwrtvn Leg 22 8/3/93	90023 NAS North Island Leg 7 11/11/92
Chlorinated Organic Pesticides																	
Aldrin	0.5	NA	NA	NP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NP
alpha-BHC	0.2	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	NP	NP
beta-BHC	1	NA	NA	NP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NP
gamma-BHC (Indane)	0.2	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
delta-BHC	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
alpha-Chlordane	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	5.88	ND	NP	NP
gamma-Chlordane	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	2.19	0.926	ND	NP
cis-chlordane	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	41.3	5.63	4.11	ND
trans-chlordane	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	0.61	ND	NP	NP
Chlonyrifos	1	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	0.535	ND	NP	NP
Dacthal	0.2	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
Dieldrin	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	3.83	1.06	0.676	ND
Endosulfan I	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
Endosulfan II	1	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
Endosulfan sulfate	2	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
Endrin	2	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
Heptachlor	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
Heptachlor epoxide	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
Hexachlorobenzene	0.2	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
Methoxychlor	1.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
Mirex	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
cis-nonachlor	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
trans-nonachlor	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
Oxadiazon	2	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
Oxyfluorodane	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
p,p'-dichlorobenzophenone	3	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
Toxaphene	10	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
NIST PCB Congeners																	
2,4'-dichlorobiphenyl PCB 8	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	ND	ND	ND	NP
2,2',5-trichlorobiphenyl PCB 18	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	1.49	ND	ND	NP
2,4,4'-trichlorobiphenyl PCB 28	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	4.3	3.35	1.16	NP
2,2',3,5-tetrachlorobiphenyl PCB 44	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	19.2	3.51	2.86	NP
2,2',5,5'-tetrachlorobiphenyl PCB 52	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	36.8	6.27	3.99	ND
2,3,4,4'-tetrachlorobiphenyl PCB 66	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	0.697	ND	ND	NP
2,2',4,5-pentachlorobiphenyl PCB 101	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	0.752	ND	ND	NP
2,3,3',4,4'-pentachlorobiphenyl PCB 105	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	0.693	ND	ND	NP
2,3,4,4',5-pentachlorobiphenyl PCB 118	0.5	NA	NA	NP	ND	ND	ND	ND	NP	NP	NP	NP	NP	0.5	ND	ND	NP

(table continues)

Table 2-7 (continued)

Parameter	ERL	ERL Limit	Date	NTC	Leg 18	Leg 18 5/4/93	93165 NTC	93166 NTC	93166 NTC	93166 NTC	93167 NTC	90102 NTC	90104 WBasin	90104 WBasin	90056 SD Bay	90002 E Basin	90002 E Basin	93221 Dwtnw	93222 Dwtnw	90023 NAS		
2,2',3,3',4,4'-hexachlorobiphenyl PCB 128	0.5	NA	NP	0.672	2.13	1.81	1.44	NP	0.8	1.2	ND	0.502	0.698	0.8	ND	NP	NP	6.47	5.43	1.3	NP	
2,2',3,3',4,4'-hexachlorobiphenyl PCB 138	0.5	NA	NA	NP	4.05	15.6	11.8	NP	3.3	5.6	3.55	3.91	4.19	3.8	0.9	NP	NP	15.2	26.2	30	NP	
2,2',4,4',5,5'-hexachlorobiphenyl PCB 153	0.5	NA	NA	NP	3.17	14.5	14.5	NP	11.1	5.1	3.37	3.82	4.14	3.4	0.7	NP	NP	12.5	24.7	24.4	6	
2,2',3,3',4,4',5-heptachlorobiphenyl PCB 170	0.5	NA	NA	NP	0.807	2.17	2.51	NP	1	1.3	0.681	0.63	0.693	0.8	ND	NP	NP	2.64	7.03	6.11	1.7	
2,2',3,3',4,4',5,5'-heptachlorobiphenyl PCB 180	0.5	NA	NA	NP	1.55	5	6.02	4.27	NP	2	2.4	1.38	1.37	1.54	1.7	ND	NP	NP	5.92	14	3.5	NP
2,2',3,3',4,4',5,5'-heptachlorobiphenyl PCB 187	0.5	NA	NA	NP	1.22	3.84	4.18	3.42	NP	1.4	1.9	1.28	1.21	1.39	1.2	ND	NP	NP	3.78	8.75	8.27	2.2
2,2',3,3',4,4',5,5'-octachlorobiphenyl PCB 195	0.5	NA	NA	NP	ND	0.559	0.6	ND	NP	ND	ND	ND	ND	ND	ND	NP	NP	ND	ND	1.1	NP	
2,2',3,3',4,4',5,5'-nonachlorobiphenyl PCB 206	0.5	NA	NA	NP	ND	1.41	1.64	1.25	NP	0.7	ND	ND	0.529	ND	ND	NP	NP	ND	1.29	2.5	2.82	0.8
2,2',3,3',4,4',5,5',6,6'-decachlorobiphenyl PCB 209	0.5	NA	NA	NP	ND	1.85	1.88	1.49	NP	0.5	0.8	ND	0.669	0.599	0.5	ND	NP	NP	1.02	2.1	2.47	0.9

Sources:
SEDCHEMDDAT; CHEM2433.XLS; ESTUARY.XLS (SWRCB 1995)

Note:

* shading -- indicates reported concentration above ERL

Acronyms/abbreviations:

- BHC - benzene hexachloride
- DDO - dichlorodiphenyldichloroethane
- DDE - dichlorodiphenyldichloroethane
- DDMS - 1-chloro-2,2-bis(p-chlorophenyl)ethane
- DDMU - 1-chloro-2,2-bis(2-chlorophenyl)ethane
- DDT - dichlorodiphenyltrichloroethane
- ERL - effects-range low
- ERML - effects-range median
- NAS - Naval Air Station
- ND - not detected
- NIST - National Institute of Standards and Technology
- NP - not performed; analysis for parameter NP
- NTC - Naval Training Center
- PCB - polychlorinated biphenyl

Table 2-8
Bay Protection and Toxic Cleanup Program Preliminary Results
Sediment and Intertidal Water Tests

Test Medium and Species	Endpoint	Percent Concentration	STATION/SAMPLING DATE																	
			93165 NTC Leg 18 5/4/93	93166 NTC Leg 18 5/4/93	93166 NTC Leg 28 5/16/94	93166 NTC Leg 28 5/16/94	93167 NTC Leg 28 5/16/94	90102 NTC Bltg 11/11/92	90104 W Basin Lcg 12 3/26/93	90104 W Basin Lcg 18 3/26/93	90104 W Basin Lcg 29 3/29/94	90104 W Basin Lcg 29 3/29/94	90049 SD Bay Leg 6 10/2/92	90056 SD Bay Leg 6 10/2/92	90002 E Basin Leg 6 10/2/92	90002 E Basin Leg 15 3/24/93	93221 Dwtnw Leg 22 10/2/92	93222 Dwtnw Leg 22 8/3/93	90023 NAS North Island 11/11/92	90026 PBravo Leg 7 11/11/92
Sediment			NA	66	20	52	63	57	71	14	13	72	86	87	85	85	15	83	88	32
<i>Rhepoxynius eigenmanni</i>	Mean percent survival	NA	NP	92	88	100	NP	NP	NP	NP	NP	NP	83	84	68	84	100	NP	NP	85
<i>Neanthes arenaceodentata</i>	Mean percent survival	NA	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
<i>Neanthes arenaceodentata</i>	Weight change	NA	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Intertidal Water			NA	100	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
<i>Halictus rubicundus</i>	Mean percent normal development	100	36.1	0	NP	NP	NP	6.3	2.2	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	96.5
<i>Strongylocentrotus purpuratus</i>	Mean percent normal development	100	96.8	0	NP	NP	NP	50.1	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	94.2
<i>Strongylocentrotus purpuratus</i>	Mean percent normal development	50	25	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
<i>Strongylocentrotus purpuratus</i>	Mean percent fertilized	100	25	0	NP	NP	NP	73.5	12.5	98.3	NP	NP	NP	12.3	46.9	18.9	0	1	12.3	84
<i>Strongylocentrotus purpuratus</i>	Mean percent fertilized	50	95.3	63.7	NP	NP	NP	71.6	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	77
	Mean percent fertilized	25	96.6	95.2	NP	NP	NP	71.6	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP

Sources: TOXICITY.DAT; TOX2433.XLS; ESTUARY.XLS (SWRCB 1995)

Acronyms/abbreviations:

- NA – not applicable
- NAS – Naval Air Station
- NP – not performed, analysis NP
- NS – not statistically significant from the control
- NTC – Naval Training Center
- S – statistically significant from the control at the 0.05 level

Table 2-9
Sediment Sample Analytical Results for Metals
(concentrations reported as dry weight in milligrams per kilogram)

Station	Sample ID	Sample Depth (feet)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
	Effects-Range Low	NP	2	8.20	NP	NP	1.20	NP	81.00	NP	34.00	NP	46.70	
	Effects-Range Median	NP	25	70.00	NP	NP	9.60	NP	370.00	NP	270.00	NP	218.00	
S1S1	092N1BT	4-6	11,900	0.59 J	2.10	41.70	0.21 J	0.06 U	1,190	16.80	5.90 J	8.70	14,200	3.00
S1S1	092N1MD	1-4	36,600	1.10 J	6.30	164.00	0.61 I	0.55 I	3,310	53.50	16.10 I	33.00	41,900	23.30
S1S1	092N1UP	0-1	55,600	2.20 J	14.00	172.00	1.00 J	3.00 I	5,410	125.00	20.60	157.00	60,700	229.00
S1S2	092N2BT	4-7	3,810	0.44 U	1.60 J	23.30 J	0.09 U	0.05 U	715 J	7.90	2.30 J	3.30 J	6,650	1.30
S1S2	092N2MD	1-4	26,800	0.69 J	4.60	100.00	0.48 J	0.16 U	2,310	33.50	10.90 J	17.90	28,900	6.80
S1S2	092N2UP	0-1	47,500	1.30 J	176.00	0.90 J	1.00 J	3,880	76.80	18.80	35.100	52,100	42,30	
S1S3	092N3BT	4-7	14,400	0.59 UJ	2.30 U	104.00	0.20 J	0.06 U	1,070 J	22.50 J	9.10 J	13.60 J	18,400	4.90 J
S1S3	092N3MD	1-4	19,200	0.58 UJ	3.80	74.30	0.33 J	0.06 U	1,300 J	25.90 J	9.20 J	15.70 J	23,200	5.40 J
S1S3	092N3UP	0-1	35,000	0.99 UJ	10.00	172.00	0.80 J	1.00 J	2,570 J	34.20 J	17.10 J	25.70 J	46,000	116.00 J
S2S1	092C1BT	6-7	45,100	0.86 J	13.00	178.00	0.34 U	4.120	59.90	17.50	31.50	54,600	12.60	
S2S1	092C1MD	1-6	6,370	0.13 UJ	1.70	37.90	0.07 U	0.04 U	7,590	10.70	3.80 J	5.20	8,370	2.00
S2S1	092C1UP	0-1	12,700	0.57 J	4.20	53.10	0.19 U	0.34 U	7,850	29.60	6.30 J	14.80 J	16,200	28.10
S2S2	092C2BT	4-5.7	4,110	0.33 UJ	0.79 J	20.60	0.08 U	0.04 U	19,000	6.80	3.90 J	6.40	5,850	1.10
S2S2	092C2MD	1-4.5	25,400	1.10 J	6.10	133.00	0.57 J	0.28 U	3,250	40.20	13.50 J	22.40	33,900	9.00
S2S2	092C2UP	0-1	26,800	1.60 J	126.00	0.54 J	1.10 J	2,460	78.90	13.40	36,6700	36,400	39.50	
S2S3	092C3BT	4-7	6,310	0.71 J	2.20	40.10	0.12 U	0.06 U	5,12 J	9.60	4.30 J	4.90 J	9,290	2.20
S2S3	092C3MD	1-4	50,600	1.20 J	10.70	182.00	0.95 J	0.47 J	7,340	67.90	21.80	21.60	57,500	16.90
S2S3	092C3UP	0-1	28,700	1.60 J	10.40	161.00	0.77 J	2.00	4,180	107.00	15.40	113.00	41,700	79.10
S3S1	092H1BT	4-7	5,830	0.43 UJ	2.50	23.10 J	0.12 U	0.05 U	937	10.70	3.30 J	4.60	9,510	1.40
S3S1	092H1MD	1-4	19,700	1.00 J	2.40	109.00	0.22 J	0.05 U	1,740	27.10	9.80	15.60	24,200	4.00
S3S1	092H1UP	0-1	24,000	1.10 UJ	4.10	131.00	0.43 J	0.05 U	4,140 J	33.40 J	12.20	26.00 J	29,700	6.60 J
S3S2	092H2BT	5.5-6.7	6,020	0.58 UJ	2.20 U	35.70 J	0.10 U	0.07 U	2,560 J	9.60 J	3.20 J	4.70 J	8,090	1.70 J
S3S2	092H2MD	1-5.5	13,400	0.85 UJ	3.80	54.10	0.19 U	0.16 J	3,280 J	22.40 J	6.20 J	17.00 J	15,800	10.00 J
S3S2	092H2UP	0-1	8,360	0.66 UJ	2.50 U	45.70	0.14 U	0.06 U	2,110 J	16.00 J	5.10 J	17.90 J	11,900	8.90 J
S3S3	092H3BT	4-5.5	21,350	0.58 UJ	2.80 U	102.00	0.41 J	0.07 U	1,340 J	27.40 J	9.70 J	13.20 J	24,600	4.00 J
S3S3	092H3MD	1-4	8,330	0.46 UJ	1.50 U	65.50	0.11 U	0.06 U	705 J	18.70 J	5.20 J	7.60 J	11,100	1.60 UJ
S3S3	092H3UP	0-1	14,300	0.51 UJ	2.20 U	66.00	0.17 U	0.04 U	1,950 J	22.30 J	6.70 J	21.60 J	18,400	6.70 J

(Table continues)

Table 2-9 (continued)

Station	Sample ID	Sample Depth (feet)	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Effects-Range Low		NP	2	0.15	20.90	NP	NP	1.00	NP	NP	NP	150.00	
Effects-Range Median		NP	25	0.71	51.6	NP	NP	3.70	NP	NP	NP	410.00	
S1S1	092N1BT	4-6	3,610	92.50	0.03 U	5.50 J	4,040	0.42 U	0.13 U	3,160	0.44 U	36.60	30.90
S1S1	092N1MD	1-4	11,000	268.00	0.13	15.50	12,200	0.74 U	0.28 U	8,930	0.77 U	105.00	103.00
S1S1	092N1UP	0-1	17,400	362.00	0.83	31.80	17,000	0.91 U	0.20	23,900	0.95 U	142.00	102.00
S1S2	092N2BT	4-7	1,390	38.70	0.03 U	2.30 J	1,570	0.38 U	0.12 U	1,170	0.40 U	19.30	11.20
S1S2	092N2MD	1-4	7,100	178.00	0.06 J	10.60	8,020	0.57 U	0.18 U	5,620	0.60 U	77.10	56.40
S1S2	092N2UP	0-1	13,900	323.00	0.32	20.20	15,000	0.71 U	0.70 U	14,300	0.74 U	130.00	152.00
S1S3	092N3BT	4-7	5,060	126.00	0.04 U	7.30 J	5,780	0.47 U	0.15 U	2,750 J	0.49 U	48.90	40.50 J
S1S3	092N3MD	1-4	5,610	142.00	0.03 U	8.00 J	6,360	0.45 U	0.14 U	4,130 J	0.54 J	59.90	44.10 J
S1S3	092N3UP	0-1	13,700	303.00	0.24	21.30	14,400	1.60 U	0.30	16,300 J	0.91 U	116.00	239.00 J
S2S1	092C1BT	6-7	14,000	333.00	0.09 J	18.80	15,200	0.46 U	0.15 U	9,090	0.92 J	132.00	113.00
S2S1	092C1MD	1-6	2,470	63.60	0.03 J	2.70 J	2,630	0.54 U	0.09 U	2,800	0.31 U	22.90	18.70
S2S1	092C1UP	0-1	4,950	106.00	0.23	6.70 J	4,840	0.49 U	0.44 U	6,340	0.52 U	39.70	109.00
S2S2	092C2BT	4.5-7	1,450	42.40	0.05 U	2.20 J	1,640	0.29 U	0.13 U	1,470	0.31 U	19.20	11.00
S2S2	092C2MD	1-4.5	9,370	245.00	0.24	12.20	10,600	0.62 U	0.20 U	7,250	0.65 U	84.30	73.60
S2S2	092C2UP	0-1	10,500	230.00	0.40	15.50	10,600	0.57 U	0.20	11,200	0.59 U	84.70	152.00
S2S3	092C3BT	4-7	2,450	67.50	0.06 U	3.00 J	2,560	0.43 U	0.14 U	2,930	0.45 U	25.00	18.80
S2S3	092C3MD	1-4	14,700	376.00	0.11 J	22.00	15,500	0.73 U	0.23 U	12,600	1.80 J	135.00	123.00
S2S3	092C3UP	0-1	12,900	294.00	0.58	19.50	13,500	0.63 U	0.50	14,200	0.66 U	105.00	225.00
S3S1	092H1BT	4-7	1,680	55.80	0.04 U	3.50 J	1,740	0.38 U	0.12 U	1,500	0.39 U	32.90	12.10
S3S1	092H1MD	1-4	6,400	163.00	0.05 J	7.60	6,510	0.53 U	0.10 U	2,990	0.31 U	65.50	43.90
S3S1	092H1UP	0-1	8,240	183.00	0.06 J	10.20	8,120	0.75 U	0.29	7,620	0.54 J	61.80	61.80
S3S2	092H2BT	5.5-6.7	2,350	59.50	0.04 J	2.70 J	2,240	0.51 U	0.16 U	3,410 J	0.54 U	21.70	15.60 J
S3S2	092H2MD	1-5.5	4,710	117.00	0.20	6.50 J	4,650	0.68 U	0.14 U	5,130 J	0.46 U	35.10	54.00 J
S3S2	092H2UP	0-1	3,430	80.50	0.10	4.80 J	3,440	0.41 U	0.13 U	4,350 J	0.42 U	31.70	4310 J
S3S3	092H3BT	4-5.5	6,860	147.00	0.05 U	9.50	7,460	0.71 U	0.16 U	3,200 J	0.54 U	45.70	49.50 J
S3S3	092H3MD	1-4	2,970	76.90	0.04 U	6.30 J	3,300	0.41 U	0.13 U	2,110 J	0.43 U	32.40	21.30 J
S3S3	092H3UP	0-1	4,660	107.00	0.08 U	7.10	4,420	0.66 U	0.10 U	5,160 J	0.32 U	53.30	45.40 J

Source:

BNL 1996b

Notes:
b shading indicates reported concentration above ERLAcronyms/abbreviations:
ERL – effects-range low
ERM – effects-range median
NP – not publishedReview Qualifiers:
J – estimated value
U – compound or element was analyzed for but not detected above the sample quantitation limit and the quantitation limit is an estimated value

R - data are not usable; before data validation, these values were nondetects
 J - estimated value
 Review Qualifiers:

Sample ID	Station	Sample Depth (feet)	Sulfide
092N1UP	S1S1	0 to 1	370.00 J
092N1MD		1 to 4	16.00 R
092N1BT		4 to 6	10.30 R
092N1D		1 to 4	16.00 R
092N2UP	S1S2	0 to 1	19.40 R
092N2MD		1 to 4	13.10 R
092N2BT		4 to 7	11.00 R
092N3UP	S1S3	0 to 1	26.20 J
092N3MD		1 to 4	12.60 R
092N3BT		4 to 5	11.90 R
092C1UP	S2S1	0 to 1	16.70 J
092C1MD		1 to 6	15.80 J
092C1BT		6 to 7	15.80 R
092C2UP	S2S2	0 to 1	22.20 J
092C2MD		1 to 4.5	12.00 R
092C2BT		4.5 to 7	10.50 R
092C3UP	S2S3	0 to 1	24.90 J
092C3MD		1 to 4	23.00 J
092C3BT		4 to 7	15.80 J
092H1UP	S3S1	0 to 1	13.40 R
092H1MD		1 to 4	13.60 J
092H1BT		4 to 7	8.90 R
092H2UP	S3S2	0 to 1	31.80 J
092H2MD		1 to 5.5	14.20 R
092H2BT		5.5 to 6.7	10.70 R
092H3UP	S3S3	0 to 1	11.40 R
092H3MD		1 to 4	12.20 R
092H3BT		4 to 5.5	11.10 R

(reported as dry weight in milligrams per kilogram)

Results of Sulfide Analyses

Table 2-10

Section 2 Summary of Previous Investigations and Identification of Discharges

Table 2-11
Sediment Sample Analytical Results for PAHs
(concentrations reported in micrograms per kilogram)

Station	Sample ID	Sample Depth (feet)	Acenaphthene	Acenaphthylene	Anthracene	Fluorene	2-methyl Naphthalene	Naphthalene	Phenanthrene	Total PAHs	Benz(a) anthracene	Benz(a) pyrene	Benz(e) pyrene
Effects-Range Low		16	44	85.3	19	.70	160	240	552	261	430	NP	NP
Effects-Range Median		500	640	1,100	540	670	2,100	1,500	3,160	1,600	1,600	NP	NP
S1S1	092N1BT	4-6	2U	2U	2U	0.8uJ	0.8uJ	0.7	0.7	2U	1J	2U	
S1S1	092N1MD	1-4	3U	3U	2J	1uJ	1uJ	4	6	6	13J	10	
S1S1	092N1UP	0-1	4U	5U	14J	4	6J	33	51	60	150J	130	
S1S2	092N2BT	4-7	2U	2U	2U	0.5uJ	0.7uJ	2U	—	0.7	0.6J	0.5	
S1S2	092N2MD	1-4	2U	2U	2U	0.8uJ	0.8uJ	0.8	0.8	0.9	2J	1	
S1S2	092N2UP	0-1	4U	1J	2J	4U	3uJ	7	10	7	21J	13	
S1S3	092N3BT	4-5	2U	2U	2U	2U	2U	2U	2U	—	1J	1J	
S1S3	092N3MD	1-4	2U	2U	2U	2U	2U	1J	1	1J	3	3J	
S1S3	092N3UP	0-1	4U	2J	5J	4U	4U	2uJ	15J	22	16	35	25J
S2S1	092C1BT	6-7	3U	3U	3U	0.7uJ	0.8J	1J	1	3UJ	2J	2J	
S2S1	092C1MD	1-6	2U	2U	2U	2UJ	2U	1uJ	2	2	1	2J	1
S2S1	092C1UP	0-1	3U	3U	3U	1uJ	1uJ	1uJ	5	8	13	34	25
S2S2	092C2BT	4.5-7	2U	2U	2U	2U	2U	0.6uJ	2U	—	2U	0.6J	2U
S2S2	092C2MD	1-4.5	4U	4U	4U	4U	4U	2uJ	3	3	4J	3	
S2S2	092C2UP	0-1	4U	4U	2J	4U	2uJ	2uJ	6	8	23J	11	
S2S3	092C3BT	4-7	2U	2U	2U	0.6uJ	0.7uJ	2U	—	2U	1J	2U	
S2S3	092C3MD	1-4	4U	4U	1J	4U	1uJ	2uJ	2	3	6J	3	
S2S3	092C3UP	0-1	4U	3	4J	4U	3uJ	4uJ	9	16	12	32J	18
S3S1	092H1BT	4-7	2U	2U	2U	0.9uJ	1uJ	2U	—	2U	1J	0.6	
S3S1	092H1MD	1-4	2U	2U	2U	1uJ	1uJ	0.6	0.6	2U	2U	2U	
S3S1	092H1UP	0-1	3U	3U	5J	3U	3U	6J	11	18	30	23J	
S3S2	092H2BT	5.5-6.7	2U	2U	2U	2U	2U	2U	—	2U	2U	2U	
S3S2	092H2MD	1-5.5	3U	1J	3U	3U	1uJ	2uJ	8J	9	11	29	26J
S3S2	092H2UP	0-1	2U	2U	2J	2U	2U	2U	4J	6	10	12	7J
S3S3	092H3BT	4-5.5	2U	2U	2U	2U	2U	2U	—	2U	2U	2U	
S3S3	092H3MD	1-4	2U	2U	2U	2U	2U	2U	—	2U	2U	2U	
S3S3	092H3UP	0-1	2U	1J	2U	2U	2U	2J	3	4	6	5J	

(table continues)

Table 2-11 (continued)

Station	Sample ID	Sample Depth (feet)	Benz(a)fluoranthene	Benz(a)fluoranthene	Benz(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Indeno(1,2,3-c,d)pyrene	Perylene	Pyrene	Total HPAIs ^b	Total PAHs
Effects-Range Low			NP	NP	NP	384	63.4	600	NP	NP	1,700	4,022
Effects-Range Median			NP	NP	NP	2,800	260	5,100	NP	NP	9,600	44,792
S1S1	092N1BT	4-6	1	0.6J	2J	0.9J	2UJ	1	1J	2U	1	8.5
S1S1	092N1MD	1-4	15	11J	15J	6J	2J	12	10J	3	37	136
S1S1	092N1UP	0-1	190	150J	130J	76J	40J	110	100J	41	170	1,176
S1S2	092N2BT	4-7	1	0.7J	0.9J	0.5J	2UJ	0.7	0.6J	2U	0.8	6.5
S1S2	092N2MD	1-4	2	1J	3J	0.9J	2UJ	2	2J	2U	2	15.8
S1S2	092N2UP	0-1	40	4UJ	22J	10J	5J	18	16	4	19	158
S1S3	092N3BT	4-5	2J	3	2J	1J	2U	1J	2U	2U	2J	15
S1S3	092N3MD	1-4	6	2U	5	2J	2U	3J	2U	5J	28	29
S1S3	092N3UP	0-1	64	34	34	23	10	38J	25	5	40J	319
S2S1	092C1BT	6-7	2J	2J	4J	1J	3UJ	2J	2J	1J	3J	18
S2S1	092C1MD	1-6	3	2J	3J	2J	1J	1	2J	2U	1	17
S2S1	092C1UP	0-1	83	3U	35	19	14	17	31	8	17	263
S2S2	092C2BT	4-5.7	1	1J	2J	2UJ	1J	0.5	2J	2U	0.7	8.8
S2S2	092C2MD	1-4.5	5	2J	9J	3J	2J	8	6J	2	9	53
S2S2	092C2UP	0-1	29	16J	32J	12J	9J	15	24J	7	18	186
S2S3	092C3BT	4-7	2U	2U	3J	2UJ	2U	0.9	1J	2U	1	3.9
S2S3	092C3MD	1-4	6	3J	11J	4J	3J	5	10J	4	8	5.8
S2S3	092C3UP	0-1	76	3UJ	44J	16J	10J	26	32J	4	29	277
S3S1	092H1BT	4-7	0.9	0.6J	1J	0.7J	2UJ	0.5	1J	2U	0.7	6.4
S3S1	092H1MD	1-4	2U	2U	2U	2U	2U	0.5	1J	2U	2U	3.1
S3S1	092H1UP	0-1	43	22	23	27	8	20J	22	7	22J	276
S3S2	092H2BT	5.5-6.7	2U	2U	2U	2U	2U	1J	2U	2U	1J	2
S3S2	092H2MD	1-5.5	26	24	28	13	4	22J	19	4	26J	202
S3S2	092H2UP	0-1	21	13	11	11	5	10J	9	2J	11J	113
S3S3	092H3BT	4-5.5	2U	2U	2U	2U	2U	2U	2U	2U	2U	—
S3S3	092H3MD	1-4	2U	2U	2U	2U	2U	2U	2U	2U	2U	—
S3S3	092H3UP	0-1	8	5	8	1J	5J	4	1J	6J	55	64

Source:
BNI 1988b

Notes:

^a dash indicates dichlorodiphenyltrichloroethanes were not detected above the sample quantitation limit in this sample^b total HPAI is the summation of fluoranthene, pyrene, benzo(a)anthracene, chrysene, total benzofluoranthenes (the sum of b, j, and k isomers), benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, and benzo(g,h,i)perylene; this summation method is similar to that used by the state of Washington

Acronyms/Abbreviations:

HPAI – high-molecular-weight polynuclear aromatic hydrocarbon

LPAH – low-molecular-weight polynuclear aromatic hydrocarbon

NP – not published

PAH – polynuclear aromatic hydrocarbon

Review Qualifiers:

J – estimated value

U – the compound or analyte was analyzed for but not detected above the sample quantitation limit

U – data deemed unusable and results adjusted to not detected based on field and rinse blanks

UJ – analyzed for but not detected above the sample quantitation limit and the quantitation limit is an estimated value

Table 2-12
Sediment Sample Analytical Results for PCBs
(concentrations reported in micrograms per kilogram)

Station	Sample ID	Sample Depth (feet)	PCB 8	PCB 18	PCB 28	PCB 44	PCB 52	PCB 66	PCB 77	PCB 101	PCB 105	PCB 118	PCB 126
Effects-Range Low			NP										
Effects-Range Median			NP										
S1S1	092N1BT	4-6	0.13 U	0.17 UJ									
S1S1	092N1MD	1-4	0.17 UJ	0.27 J	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ					
S1S1	092N1UP	0-1	2.9 U	2.9 U	3.1	2.9 U	6.5	9.5	2.9 U	13	5.7	8.9	2.9 U
S1S2	092N2BT	4-7	0.11 U										
S1S2	092N2MD	1-4	0.12 U										
S1S2	092N2UP	0-1	0.23 UJ	0.47 J	0.3 J	0.23 UJ	0.23 UJ	0.23 UJ					
S1S3	092N3BT	4-5	0.13 UJ										
S1S3	092N3MD	1-4	0.13 UJ										
S1S3	092N3UP	0-1	0.32 J	1.1 J	0.25 J	0.22 UJ	1.9 J	0.96 I	0.22 UJ	2 J	1.1 J	1.6 J	0.25 J
S2S1	092C1BT	6-7	0.16 UJ										
S2S1	092C1MD	1-6	0.13 U										
S2S1	092C1UP	0-1	0.16 UJ	0.16 UJ	0.16 J	0.16 UJ	0.34 J	0.16 UJ	0.16 UJ	0.16 UJ	0.55 J	0.91	0.16 UJ
S2S2	092C2BT	4-5	0.12 U										
S2S2	092C2MD	1-4.5	0.19 U										
S2S2	092C2UP	0-1	0.19 U	0.26	0.24	0.19	0.62	0.19 U	0.19 U	0.87	0.52	0.93	0.19 U
S2S3	092C3BT	4-7	0.13 U										
S2S3	092C3MD	1-4	0.19 U										
S2S3	092C3UP	0-1	0.13 U	0.30	0.64	0.28	0.70	0.13 U	0.13 U	1.4	0.73	1.1	0.13 U
S3S1	092H1BT	4-7	0.11 U										
S3S1	092H1MD	1-4	0.12 U										
S3S1	092H1UP	0-1	0.13 UJ	0.16 J	0.26 J	0.33 J							
S3S2	092H2BT	5-6.7	0.12 U										
S3S2	092H2MD	1-5.5	0.14 UJ	0.58 J	0.14 UJ	0.14 UJ	0.14 UJ	0.14 UJ	1.2 J	0.97 J	1.5 J	0.13 J	0.13 J
S3S2	092H2UP	0-1	0.14 UJ	0.45 J	0.38 J	0.71 J	0.14 UJ	0.14 UJ					
S3S3	092H3BT	4-5.5	0.12 UJ	0.12 U									
S3S3	092H3MD	1-4	0.12 UJ	0.12 U									
S3S3	092H3UP	0-1	0.13 UJ	0.14 J	0.13 U	0.13 U	0.13 U						

(table continues)

Table 2-12 (continued)

Station	Sample ID	Sample Depth (feet)	PCBs										Total PCBs ^a
			PCB 128	PCB 138	PCB 153	PCB 170	PCB 180	PCB 187	PCB 195	PCB 206	PCB 209		
Effects-Range Low		NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
S1S1	092NBFT	4-6	0.13 U	—									
S1S1	092NIMD	1-4	0.17 UJ	0.61 J	0.28 J	0.17 UJ	0.20 J	0.17 UJ	1.36				
S1S1	092NUP	0-1	2.9 U	22	10	3.5	6.4	3.8	2.9 U	2.9 U	2.9 U	2.9 U	92.40
S1S2	092NBFT	4-7	0.11 U	—									
S1S2	092NAMD	1-4	0.12 U	—									
S1S2	092NUP	0-1	0.23 UJ	1.3 J	0.49 J	0.23 UJ	0.35 J	0.26 J	0.23 UJ	0.23 UJ	0.23 UJ	0.23 UJ	3.17
S1S3	092NBFT	4-5	0.13 U	0.17 J	0.13 U	0.17							
S1S3	092NAMD	1-4	0.13 UJ	0.20 J	0.13 U	0.20							
S1S3	092NUP	0-1	0.22 UJ	3.9 J	0.22 UJ	0.63 J	1.2 J	0.22 UJ	0.43 J	0.53 J	0.53 J	16.17	
S2S1	092CGBT	6-7	0.16 UJ	—									
S2S1	092CMD	1-6	0.13 U	—									
S2S1	092CUP	0-1	0.16 UJ	0.16 UJ	1.1 J	0.32 J	0.62 J	0.47 J	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	5.07
S2S2	092CGBT	4-5	0.12 U	—									
S2S2	092CMD	1-4.5	0.19 U	—									
S2S2	092CUP	0-1	0.19 U	0.19 U	1.3	0.36	0.72	0.59	0.19 U	0.19 U	0.22	0.34	6.97
S2S3	092CGBT	4-7	0.13 U	—									
S2S3	092CMD	1-4	0.19 U	—									
S2S3	092CUP	0-1	0.13 U	0.13 U	1.3	0.34	0.66	0.58	0.13 U	0.20	0.24	0.47	
S3S1	092HIBT	4-7	0.11 U	—									
S3S1	092HMMD	1-4	0.12 U	—									
S3S1	092HUP	0-1	0.13 UJ	0.8 J	0.13 U	0.14 J	0.22 J	0.13 UJ	2.35				
S3S2	092HBFT	5.5-6.7	0.12 UJ	—									
S3S2	092HMD	1-5	0.14 UJ	2.2 J	0.14 UJ	0.46 J	0.88 J	0.14 UJ	0.18 UJ	0.19 J	0.25 J	0.25 J	8.36
S3S2	092HUP	0-1	0.14 UJ	1.1 J	0.14 UJ	0.22	0.36 J	0.3 J	0.14 UJ	0.14 UJ	0.14 UJ	0.14 UJ	3.52
S3S3	092HBFT	4-5.5	0.12 U	—									
S3S3	092HMD	1-4	0.12 U	—									
S3S3	092HUP	0-1	0.13 U	0.53 J	0.13 U	0.14 J	0.13 U	0.81					

Source:
BNI 1996b

Notes:

^a Total PCBs – the summation of detected concentrations of polychlorinated biphenyls^b shading indicates reported concentration above ERL

Acronyms/Abbreviations:

ERL – effects-range low

NP – not published

PCB – polychlorinated biphenyl

Review Qualifiers:

J – estimated value

U – the compound or analyte was analyzed for but not detected above the sample quantitation limit

UJ – analyzed for but not detected above the sample quantitation limit and the quantitation limit is an estimated value

Table 2-13
Sediment Sample Analytical Results for Pesticides
(concentrations reported in micrograms per kilogram)

Station	Sample ID	Sample Depth (feet)	4,4'-DDD	0,0'-DDD	4,4'-DDE	0,0'-DDE	4,4'-DDT	0,0'-DDT	Total DDTs	alpha-HCH	Dieldrin	Heptachloroperoxide	Hexachlorobenzene	Aldrin	Heptachlor
Effects Range-Low		NP	NP	2.2	NP	NP	NP	NP	1.58	NP	NP	NP	NP	NP	NP
Effects Range-Median		NP	NP	27.00	NP	NP	NP	NP	46.10	NP	NP	NP	NP	NP	NP
S1S1	092N1BT	4-6	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U						
S1S1	092N1MD	1-4	31.00 E	11.00	—	—	—	—	—	0.31	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
S1S1	092N1UP	0-1	970.00 E	290.00	—	—	—	—	34.00	3.40	4.30	2.90 U	3.20	2.90 U	—
S1S2	092N2BT	4-7	0.18	0.11 U	0.18	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U				
S1S2	092N2MD	1-4	0.12 U	—	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U					
S1S2	092N2UP	0-1	4.20	2.60	2.10	0.23 U	0.23 U	0.23 U	—	0.30	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
S1S3	092N3BT	4-5	1.10	0.58	0.42	0.13 U	0.13 U	0.13 U	0.12 J	0.10 J	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
S1S3	092N3MD	1-4	0.62	0.40	0.42	0.13 U	0.13 U	0.13 U	1.44	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
S1S3	092N3UP	0-1	35.00 J	19.00 J	—	0.63 J	0.24 J	0.22 UJ	67.87	2.30 J	0.36 J	0.22 UJ	0.40 J	0.22 UJ	0.22 UJ
S2S1	092C1BT	6-7	0.16 UJ	—	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ					
S2S1	092C1MD	1-6	0.13 U	—	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U					
S2S1	092C1UP	0-1	1.20	1.50	1.30	0.16 U	0.16 U	0.16 U	1.50 J	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
S2S2	092C2BT	4.5-7	0.12 U	—	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U						
S2S2	092C2MD	1-4.5	0.19 U	—	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U					
S2S2	092C2UP	0-1	1.50	0.65	0.19 U	18.00 J	0.19 U	0.19 U	—	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
S2S3	092C3BT	4-7	0.13 U	—	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U						
S2S3	092C3MD	1-4	0.19 U	—	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U					
S2S3	092C3UP	0-1	3.40	3.80	—	0.30	0.26 J	0.13 U	11.76	0.26	0.29	1.20	0.25	0.13 U	0.13 U
S3S1	092H1BT	4-7	0.11 U	—	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U					
S3S1	092H1MD	1-4	0.12 U	—	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U						
S3S1	092H1UP	0-1	0.17 J	0.47 J	0.54 J	0.13 U	0.13 U	0.13 U	1.18	0.13 UJ	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
S3S2	092H2BT	5.5-6.7	0.12 U	—	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U						
S3S2	092H2MD	1-5.5	0.31	2.00	0.85	0.14 U	0.14 U	0.14 U	0.14 U	—	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
S3S2	092H2UP	0-1	0.29	0.99	0.47	0.14 U	0.14 U	0.14 U	0.15	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
S3S3	092H3BT	4-5.5	0.12 U	—	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U						
S3S3	092H3MD	1-4	0.12 U	—	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U					
S3S3	092H3UP	0-1	0.13	0.29	0.31	0.13 U	0.13 U	0.13 U	0.6	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U

Source:
BNI 1996b

Notes:
 a dash indicates DDTs were not detected above the sample quantitation limit in this sample
 b shading indicates reported concentration above ERL
 c outline indicates reported concentration above ERM

Acronyms/Abbreviations:
 DDD – dichlorodiphenyltrichloroethane
 DDE – dichlorodiphenylchloroethane
 DDT – dichlorodiphenylchloroethane
 ERL – effects-range low
 ERM – effects-range median
 NP – not published

Laboratory Flag:
 E – compound concentration exceeded the calibration range of the gas chromatography/mass spectroscopy instrument

Review Qualifiers:
 J – estimated value
 U – the compound or analyte was analyzed for but not detected above the sample quantitation limit

(table continues)

Analyte	Stratum 1 ^a			Stratum 2			Stratum 3			Metals (mg/kg)		
	Baseline ^b	(S1S1)	(S2S1)	(S1S1)	(S2S1)	Baseline ^b	Baseline ^b	(S1S1)	(S2S1)	Baseline ^b	(S1S1)	Control ^c
Arsenic	0.300	0.260	0.250	0.12 U	0.12 U	0.04 U	0.05 U	0.23 J	0.23 J	0.04 J	0.04 J	Beryllium
Cadmium	0.02 J	0.04 J	0.04 J	0.00 U	0.00 U	0.00 U	0.00 U	0.02 J	0.02 J	0.02 J	0.02 J	Chromium
Chromium	0.38 J	0.40 J	0.40 J	0.04 J	0.04 J	0.02 J	0.02 J	0.20 J	0.20 J	0.40 J	0.40 J	Cobalt
Copper	0.21 J	0.24 J	0.24 J	0.23 J	0.23 J	0.14 U	0.23 U	2.10	2.10	2.00	2.00	Lead
Manganese	1.40	1.30	1.30	0.20 J	0.20 U	0.02 UJ	0.02 UJ	0.02 J	0.02 J	0.10 J	0.10 J	Mercury
Nickel	0.42 J	0.37 J	0.37 J	0.37 J	0.37 J	0.35 J	0.35 J	0.26	0.26	0.31	0.33	Selenium
Silver	0.07 J	0.06 J	0.06 J	0.06 J	0.06 J	0.05 U	0.05 U	0.10 J	0.10 J	0.33	0.33	Tellurium
Zinc	0.50 J	0.57 J	0.57 J	0.57 J	0.57 J	0.22 U	0.22 U	0.20 U	0.20 U	0.22 U	0.22 U	Dibutyltin
Monobutyltin	1.70 UJ	1.70 UJ	1.70 UJ	1.70 UJ	1.70 UJ	1.70 UJ	1.70 UJ	1.70 U	1.70 U	1.70 U	1.70 U	Tributyltin
LPAHs (ng/kg)	1.590	1.220	1.220	1.400	1.400	1.70 U	1.70 U	1.40 J	1.40 J	1.70 U	1.70 U	Dibutyltin
Acenaphthylene	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	Acenaphthene
Anthracene	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	Fluorine
Fluoranthene	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	2-methyl napthalene
Naphthalene	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	Phenanthrene
Phenanthrene	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	Benz(a)anthracene
Benz(a)pyrene	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	8.00 U	Benzo(a)pyrene

Results of Clam Tissue Analyses

Table 2-14

Section 2 Summary of Previous Investigations and Identification of Discharges

Table 2-14 (continued)

Section 2 Summary of Previous Investigations and Identification of Discharges

Analyte	HPAHS ($\mu\text{g}/\text{kg}$) (continued)				
	Stratum 1 ^a	Stratum 2	Stratum 3	Baseline ^b	Control ^c
Benzene	18.00	19.00	24.00	8.00 μj	8.00 μj
Benzene (b) fluoranthene	24.00	22.00	23.00	8.00 μj	8.00 μj
Benzene (k) fluoranthene	13.00	14.00	12.00	8.00 μj	8.00 μj
Benzene (g, h, i) perylene	90.00	100	10.00	8.00 μj	8.00 μj
Chrysene	9.00	8.00	10.00	8.00 μj	8.00 μj
Dibenz(a, h) anthracene	8.00	8.00	8.00	8.00 μj	8.00 μj
Fluoranthene	8.00	8.00	8.00	8.00 μj	8.00 μj
Indeno(1,2,3-c,d)pyrene	8.00	8.00	8.00	8.00 μj	8.00 μj
Pyrene	9.00	8.00	9.00	8.00 μj	8.00 μj
SVOCs ($\mu\text{g}/\text{kg}$)	66.00 μj	66.00 μj	66.00 μj	66.00 μj	66.00 μj
Phenol	66.00 μj	66.00 μj	66.00 μj	66.00 μj	66.00 μj
1,2-dichlorobenzene	66.00 μj	66.00 μj	66.00 μj	66.00 μj	66.00 μj
1,3-dichlorobenzene	66.00 μj	66.00 μj	66.00 μj	66.00 μj	66.00 μj
1,4-dichlorobenzene	66.00 μj	66.00 μj	66.00 μj	66.00 μj	66.00 μj
4,4'-DDT	1.60	1.20	2.80	0.70 μj	0.40 μj
4,4'-DDD	9.60	9.60	2.80	2.30	0.40 μj
4,4'-DDE	9.60	9.60	2.80	0.70 μj	0.40 μj
4,4'-DDT	1.60	1.60	1.20	0.40 μj	0.40 μj
o,p'-DDD	1.60	1.60	1.20	0.40 μj	0.40 μj
o,p'-DDE	1.60	1.60	1.20	0.40 μj	0.40 μj
o,p'-DDT	2.00	2.00	0.92	0.40 μj	0.40 μj
Aldrin	1.20 μj	0.40 μj	0.40 μj	0.40 μj	0.40 μj
Alpha-Chlordane	2.40	0.82	0.82	0.40 μj	0.40 μj
Dieldrin	1.20 μj	0.40 μj	0.40 μj	0.40 μj	0.40 μj
Heptachlor epoxide	1.20 μj	0.40 μj	0.40 μj	0.44 μj	0.40
Hexachlorobenzene	1.20 μj	0.40 μj	0.40 μj	0.40 μj	0.40 μj
Trans-nonacchlor	1.20 μj	0.40 μj	0.40 μj	0.40 μj	0.40 μj
gamma-HCH (lindane)	1.20 μj	0.40 μj	0.40 μj	1.10 μj	0.88
PCBs ($\mu\text{g}/\text{kg}$)	1.20 μj	0.40 μj	0.40 μj	1.60 μj	1.20 μj
PCB 44 (2,2',3,5,5')	1.20 μj	0.40 μj	0.40 μj	0.40 μj	0.40 μj
PCB 66 (2,2',3,4,4')	0.98	1.50	1.70	0.40 μj	0.40 μj
PCB 8 (2,4,4')	1.20 μj	0.40 μj	0.40 μj	1.60 μj	0.54
PCB 44 (2,2',3,5,5')	1.20 μj	0.40 μj	0.40 μj	1.60 μj	0.40 μj
PCB 66 (2,2',3,5,5')	1.20 μj	0.40 μj	0.40 μj	1.60 μj	0.40 μj
PCB 77 (3,3',4,4')	0.98	1.50	1.70	0.40 μj	0.40 μj
PCB 101 (2,2',3,5,5')	1.70	1.60	2.30	0.40 μj	0.40 μj
PCB 105 (2,3,3',4,4')	1.20 μj	0.73 μj	0.71 μj	0.40 μj	0.40 μj

Polychaeate worm survival was 100 percent in sediments from stations in Stratum 1, 2, and 3. Polychaeate growth was based on mean dry weights that ranged from 12.38 milligrams at station S1S3 to 16.68 milligrams at station S3S1. Mean dry weight in the control group was 15.02 milligrams.

Ampipod survival was 100 percent in sediments from stations in Stratum 1, ranging from 76.2 to 85.2 percent. Stratum 3 survival ranged from 86 to 91 percent, and recruitment ranged from 86 to 91 percent. Stratum 2, amphipod survival ranged from 87 to 95 percent, and recruitment ranged from 94 percent with the highest recruitment found in sediments with the highest mortality. In MCRD recruitment dock, recruitment seemed to be unaffected, ranging from 83 to 94 percent with the highest recruitment found in sediments with the highest mortality. Amphipod survival was observed in sediments from station S1S1, which is closest to the MCRD recruitment dock. Recruitment seemed to be unaffected, ranging from 83 to 94 percent with the highest recruitment found in sediments with the highest mortality.

Review Qualifiers:
 J - estimated value
 U - the compound or element was analyzed for but not detected above the sample quantitation limit and the quantitation limit is an estimated value
 UJ - analyzed for but not detected above the sample quantitation limit and the quantitation limit is an estimated value

Acronyms/Abbreviations:
 SVOC - semivolatile organic compound
 PCB - polychlorinated biphenyl
 mg/kg - milligrams per kilogram
 µg/kg - micrograms per kilogram
 LPAH - low-molecular-weight polynuclear aromatic hydrocarbon
 HPAH - high-molecular-weight polynuclear aromatic hydrocarbon
 DDT - dichlorodiphenyltrichloroethane
 DDE - dichlorodiphenyldichloroethane
 DDD - dichlorodiphenyldichloroethane
 BHC - benzene hexachloride
 Calliformia - Tomales Bay, California

Notes:
 a - one bioaccumulation test was conducted in each stratum
 b - these results represent the amount of chemicals in the tissue before the initiation of the bioaccumulation test
 c - these results represent the amount of chemicals in the tissue after exposure to clean sediment from Tomales Bay, California
 d - shading indicates reported concentrations that exceed both the baseline and control concentrations
 e - only those PCB congeners that were detected in at least one sample are presented

PCBs (µg/kg) (continued)	Analyte	Stratum 1 ^a	Stratum 2	Stratum 3	Baseline ^b	Control ^c
PCB 138 (2,2',4,4',5,5')		2.90	2.10	0.40 UJ	0.40 UJ	0.40 UJ
PCB 153 (2,2',4,4',5,5')		2.90	2.10	0.40 UJ	0.40 UJ	0.40 UJ
				60.1		

Table 2-14 (continued)

Section 2 Summary of Previous Investigations and Identification of Discharges

Table 2-15
Summary of Sediment Bioassay Test Results

AMPHIPOD		POLYCHAETE		BIVALVE LARVAE			SEA URCHIN LARVAE	
Station Number	Survival (percent)	Reburial (percent)	Mean Survival (mg, dry wt)	Survival* (percent)	Development* (percent)	IC ₂₅ (percent)	Normal Development* (percent)	IC ₂₅ (percent)
S1S1	46	94.2	100	14.40	78.6	74.9	>100	0.0
S1S2	84	87.2	100	13.61	97.7	99.7	>100	98.1
S1S3	67	83.2	100	12.38	98.2	100.0	>100	97.9
S2S1	89	86.6	100	15.58	99.2	99.4	>100	95.7
S2S2	87	91.0	100	12.89	106.0	99.1	>100	90.5
S2S3	95	91.0	100	14.54	106.0	99.8	>100	90.8
S3S1	89	85.2	100	16.68	96.2	99.8	>100	96.6
S3S2	91	81.4	100	16.24	88.8	99.7	>100	71.9
S3S3	86	76.2	100	14.24	90.0	97.8	>100	97.1
Control	96	94.0	100	15.02	104.3	98.7	>100	14.4
								23.6

Note:

* bivalve and sea urchin results are shown for 100 percent porewater concentration.

Acronyms/Abbreviations:

mg, dry wt – dry weight in milligrams

IC₂₅ – inhibitory concentration for 25 percent of the population

After the box core was aboard the vessel, field observations of the sediment sample were recorded. Notes were taken on the date and time of each core, the weather and sea state, the vessel and sampling equipment used, the coordinates of each core, and other relevant

collect sufficient sample volume for toxicity and bioaccumulation tests.

coarse sands with minimal disturbance. Multiple drops were needed at each station to collect a set of mechanically closing doors. The core was lowered by cable to the channel bottom, and the door-closing mechanism tipped when the cable was slackened and closed a set of mechanically closing doors. The core consisted of a Kynar-coated steel box with O'Hara Box Core (0.1-m^2 surface area) originally developed for dredge material studies conducted by USACE. The box core samples were collected using a Gray 15 centimeters below the channel bottom. The samples were collected using a Gray grab samples of surface sediment at each of the 31 stations from 0 to

collected for porewater chemistry and bioaccumulation tests.

volume of sediment needed for chemical analysis, quality assurance (QA)/quality control (QC), toxicity, and bentthic community analysis. At selected sites, extra sediment was collected for porewater chemistry and bioaccumulation tests.

3.1.4.2 SURFACE SEDIMENT SAMPLE COLLECTION

Surface sediment samples were collected from each of the 31 stations to obtain the vessel positioning during sediment sampling was accomplished by Kinnetic Laboratories, Inc. (KLI), using a Trimble Model 4000 differential GPS. The coordinates of each station are listed in Table 3-2 and the locations are shown on Figure 3-1. Station depths were recorded using a marked lead line and then converted to MLLW datum by tidal corrections.

3.1.4.1 NAVIGATION AND STATION POSITIONING

MLLW - mean lower low water
Acronym/Abbreviation:

Reference Station	Elevation (feet below MLLW)	Grain Size (times, percent)	Total Organic Carbon (percent)	Boat Channel Range	5.9-25.3	23-94.7	0.81-3.13
S3S5	26.0	61.8	0.94	Reference Station Range	11.1-26.1	31.2-61.8	0.50-0.94
S3S4	26.1	53.8	0.89				
S3S3	12.6	37.5	0.50				
S3S2	11.1	31.2	0.71				
S3S1	11.4	35.5	0.59				

Physical Characteristics of the Boat Channel Reference Stations
Table 3-1

Section 3 Investigation Methodology

Section 3 Investigation Methodology

Table 3-2
Sediment Sampling Station Coordinates

Station ID	Elevation of Channel	Fleet Bottom	Fleet	Latitude	Longitude	Penetrated	Recovered	(feet below MLLW)
SIS1	32°44'19.53"	117°12'27.43"	9	7	22.6			
SIS2	32°44'22.08"	117°12'31.19"	9	8	16.6			
SIS3	32°44'24.82"	117°12'27.62"	9	8.9	7.9			
SIS4	32°44'23.32"	117°12'28.59"	9	8	21.9			
SIS5	32°44'20.57"	117°12'34.05"	9	7.8	8.9			
SIS6	32°44'20.48"	117°12'28.76"	9	8.5	25.3			
SIS7	32°44'21.28"	117°12'27.60"	9	8	20.5			
SIS8	32°44'19.18"	117°12'31.38"	9	7.4	23.2			
SIS9	32°44'16.10"	117°12'29.22"	9.5	6.5	15.1			
SIS10	32°44'16.78"	117°12'26.77"	9	8.3	15.2			
Stratum 2, Lower Boat Channel								
S2S1	32°43'47.89"	117°12'49.34"	9.1	8.5	12.1			
S2S2	32°43'58.66"	117°12'44.90"	9	8	14.8			
S2S3	32°44'12.84"	117°12'29.94"	9	8.5	14.4			
S2S4	32°44'13.82"	117°12'27.78"	10	9	15.5			
S2S5	32°44'10.56"	117°12'29.90"	10	9	5.9			
S2S6	32°44'09.98"	117°12'32.43"	9	8.9	15.1			
S2S7	32°44'06.15"	117°12'38.45"	9	8.3	11.7			
S2S8	32°44'08.34"	117°12'33.38"	9	8.2	14.5			
S2S9	32°44'02.94"	117°12'41.76"	9.5	7	9.4			
S2S10	32°43'60.00"	117°12'43.05"	9	8.8	14.8			
S2S11	32°43'57.89"	117°12'42.99"	9	8.3	7.7			
S2S12	32°43'55.2"	117°12'47.45"	9	8.5	N/A			
S2S13	32°43'53.87"	117°12'46.97"	9	8.5	9.5			
S2S14	32°43'55.40"	117°12'48.22"	8.5	8.5	15.5			
S2S15	32°43'48.12"	117°12'51.74"	9	8	15.5			
S2S16	32°43'46.10"	117°12'52.44"	9	8	14.4			
Stratum 3, Reference Area								
S3S1	32°43'35.19"	117°12'49.68"	8	8	11.4			
S3S2	32°43'28.38"	117°12'51.73"	8.5	8.3	11.1			
S3S3	32°43'38.78"	117°12'48.91"	8	7.5	12.6			
S3S4	32°43'24.00"	117°12'51.95"	9.5	9.5	26.1			
S3S5	32°43'23.84"	117°12'51.96"	9	8.5	26.0			

(table continues)

Table 5-1
Results of Total Organic Carbon Analyses and Grain-Size Evaluation of Surface Sediment

Sample ID	Station	Carbon (Percent)	Total	Organic	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
			Clay ^a	Silt ^b	Silt ^b	Fines ^c	Fines ^c	Fine Sand ^d	Fine Sand ^d	Medium Sand ^f	Medium Sand ^f	Coarse Sand ^g	Very Coarse Sand ^h
Stratum 1, Upper Boat Channel													
C001SS03	S1S1	2.85	46.4	41.1	87.5	2.04	1.18	1.38	3.48	3.58	0.6		
C001SS32	S1S1	2.92	48.8	41.7	90.5	2.11	0.55	1.51	3.32	3.32	0.62		
C001SS01	S1S2	2.12	41.9	43.6	85.5	2.72	2.35	1.66	2.3	3.67	0.56		
C001SS34	S1S2	2.16	49.4	41.4	90.8	3.1	2.37	1.41	1.05	0.72	0.82		
C001SS02	S1S3	0.85	14.1	8.91	23.01	15.7	33.5	20.1	3.23	0.85	0.98		
C001SS19	S1S4	2.88	50.8	43.9	94.7	1.72	1.4	1.28	0.98	0.59	0.03		
C001SS20	S1S5	1.79	35.7	42.5	78.2	10.3	6.02	1.65	0.8	0.72	1.41		
C001SS18	S1S6	2.83	52.2	41.3	93.5	0.85	1.04	1.27	2.36	1.84	0.04		
C001SS04	S1S7	3.13	4.6	43	89.0	3.51	3.1	1.51	1.51	0.56	0.02		
C001SS13	S1S8	2.91	48.3	42	90.3	0.27	0.51	0.76	3.89	1.61	0		
C001SS14	S1S9	2.19	45.6	44.5	90.1	3.63	1.84	0.89	0.61	0.65	0.7		
C001SS05	S1S10	2.45	36.9	28.4	65.3	12.9	12	2.99	1.88	2.1	2.82		
Stratum 2, Lower Boat Channel													
C001SS06	S2S1	0.92	21.1	30	51.1	20.9	22	4.33	0.4	0.09	0.05		
C001SS12	S2S2	1.04	34.7	49.8	84.5	6.05	4.53	1.81	1	0.64	0.07		
C001SS08	S2S3	1.86	36.4	38.8	75.2	10.8	6.8	2.09	1.13	0.32	0.04		
C001SS33	S2S3	1.72	38.3	36.2	74.5	8.38	11	2.51	1.12	0.59	0.14		
C001SS07	S2S4	2.71	42.5	42.8	85.3	6.37	2.85	1.34	1.47	0.86	0.02		
C001SS09	S2S5	0.81	17.3	14.7	32.0	34.6	27.9	4.19	0.38	0.19	0.66		
C001SS15	S2S6	1.57	34.9	36.4	71.3	15.1	6.29	2.08	0.99	0.6	0.6		
C001SS16	S2S7	0.83	18.8	16.8	35.6	27.4	26.7	4.18	0.86	0.19	0.13		
C001SS17	S2S8	1.29	29	33.8	62.8	19.5	13.6	2.67	0.64	0.3	0.05		
C001SS10	S2S9	1.62	24.8	22.9	47.7	18.3	19.4	1.34	0.26	0.13	5.74		
C001SS21	S2S10	1.46	35.2	45.9	81.1	9.57	5.42	1.61	0.53	0.71	0.04		

(table continues)

Table 5-1 (continued)

page 5-10

Sample ID	Station	Total Organic Carbon (Percent)	Percent Clay ^a	Percent Silt ^b	Percent Fines ^c	Percent Very Fine Sand ^d	Percent Fine Sand ^e	Percent Medium Sand ^f	Percent Coarse Sand ^g	Percent Very Coarse Sand ^h	Percent Gravel ⁱ
C001SS26	S2S11	1.04	27.1	28.5	55.6	25.6	17.2	1.42	0.27	0.09	0.18
C001SS22	S2S12	1.53	32.5	58	90.5	5.18	0.69	0.51	0.07	4.38	0
C001SS35	S2S12	1.04	31.1	50.2	81.3	5.23	2.65	0.84	0.36	0.19	0.04
C001SS23	S2S13	1.47	32.9	51.3	84.2	11.5	4.56	0.73	0.17	0.16	0.03
C001SS11	S2S14	1.72	32.3	56.5	88.8	3.67	1.75	0.59	0.32	0.6	0
C001SS24	S2S15	1.39	28.6	51.2	79.8	8.08	6.89	2.17	0.35	0.06	0.03
C001SS25	S2S16	1.03	24.1	38.9	63.0	14.6	19.7	3.08	0.41	0.07	0
Stratum 3, Reference Area											
C001SS30	S3S1	0.59	14.2	21.3	35.5	26.6	28.3	6.16	1.14	0.43	0.2
C001SS29	S3S2	0.71	12.7	18.5	31.2	18.8	22.9	13.14	8.57	2.79	0.75
C001SS31	S3S3	0.5	12.7	24.8	37.5	18.1	23.8	14.6	4.85	0.86	0.04
C001SS27	S3S4	0.89	17	36.8	53.8	25.9	14.1	1.19	0.47	0.24	0
C001SS28	S3S5	0.94	23.1	38.7	61.8	24.4	14.6	1.2	0.29	0.1	0.05

Notes:

- ^a clay: 0.0025 to 0.004 mm
- ^b silt: 0.004 to 0.062 mm
- ^c percent clay plus percent silt
- ^d very fine sand: 0.062 to 0.125 mm
- ^e fine sand: 0.125 to 0.250 mm
- ^f medium sand: 0.250 to 0.500 mm
- ^g coarse sand: 0.500 to 1 mm
- ^h very coarse sand: 1 to 2 mm
- ⁱ gravel: > 2 mm

Acronym/Abbreviation:
mm – millimeter

Table 5-2
Results of Total Organic Carbon Analyses and Grain-Size Evaluation of Subsurface Sediment
 (results reported in percent)

Analyte	STRATUM 1, UPPER BOAT CHANNEL							
	S1S1/ C001SC34/ (0.5-3 ft)	S1S1/ C001SC35/ (3-7 ft)	S1S2/ C001SC36/ (0.5-2.5 ft)	S1S2/ C001SC37/ (2.5-7 ft)	S1S3/ C001SC38/ (0.5-2.5 ft)	S1S3/ C001SC39/ (0.5-3.5 ft)	S1S4/ C001SC40/ (3.5-7 ft)	S1S4/ C001SC47/ (0.5-3 ft)
Clay ^a	49.3	2.41	35.1	5.08	37	7.31	19	54.9
Silt ^b	40.8	2.44	23.7	5.69	23.5	7.35	32.9	4.34
Very fine sand ^c	4.18	1.67	4.72	3.64	6.32	22.2	25.2	5.54
Fine sand ^d	2.34	9.84	6.17	11.7	7.66	34.7	31.2	3.61
Medium sand ^e	1.02	39.4	9.76	24.4	10.3	22.8	11.4	1.16
Coarse sand ^f	0.62	32.8	10.4	26.5	8.99	3.9	1.38	0.55
Very coarse sand ^g	0.35	7.47	7.49	20	4.6	0.38	0.21	0.36
Gravel ^h	0.2	2.37	0.74	3.12	0.81	0.85	0	0
Total organic carbon	0.95	0.05	0.5	0.17	0.46	0.3	0.36	0.72
							0.16	0.16
							0.57	0.1

Analyte	STRATUM 1, UPPER BOAT CHANNEL							
	S1S6/ C001SC45/ (0.5-2.4 ft)	S1S7/ C001SC46/ (2.4-7 ft)	S1S7/ C001SC49/ (0.5-4 ft)	S1S7/ C001SC50/ (4-7 ft)	S1S8/ C001SC51/ (0.5-3.8 ft)	S1S8/ C001SC52/ (3.8-6.8 ft)	S1S9/ C001SC53/ (0.5-3.8 ft)	S1S9/ C001SC54/ (3.8-6.5 ft)
Clay	33.3	1.33	25.2	3.76	57	6.44	42.9	3.43
Silt	21.2	1.77	26.5	4.67	38.4	11.1	33.6	7.22
Very fine sand	10.6	1.23	17.3	7.97	2.35	5.01	10.6	11.4
Fine sand	16.7	4.94	16.1	29.7	1.93	11.3	9.08	32.9
Medium sand	9.62	20.3	9.51	28.2	2.18	22.1	3.29	41.1
Coarse sand	6.52	44	4.71	15.3	0.82	21.6	0.54	3.56
Very coarse sand	3.56	20.4	0.75	6.3	0.13	13.3	0.15	0.38
Gravel	1.07	5.79	0	1.78	0.12	9.61	0.05	0.53
Total organic carbon	0.02 J	0.94	0.51	0.03 J	1.18	0.05	0.44	0.07
							0.85	0.06

(table continues)

Table 5-2 (continued)

STRATUM 2, LOWER BOAT CHANNEL									
Analyte	SAMPLING LOCATION/SAMPLE NUMBER/SAMPLE DEPTH								
	S2S1/ C001SC16/ (0.5-4 ft)	S2S1/ C001SC17/ (4-7 ft)	S2S2/ C001SC26/ (0.5-4 ft)	S2S2/ C001SC27/ (4-7 ft)	S2S3/ C001SC57/ (0.5-3.8 ft)	S2S3/ C001SC58/ (3.8-7 ft)	S2S4/ C001SC59/ (0.5-3.5 ft)	S2S4/ C001SC60/ (3.5-7 ft)	S2S5/ C001SC61/ (0.5-3 ft)
Clay	58.1	20.9	43.3	6.72	36.7	6.85	29.4	1.9	60.6
Silt	35.9	32.9	40.3	15.1	39.2	7.06	23.1	1.89	32.1
Very fine sand	2.91	13.9	9.82	7.26	10.8	5.62	17.2	2.49	4.28
Fine sand	2.18	22	5.38	15.8	9.67	33.5	24.4	30	4.07
Medium sand	0.55	7.68	1.92	18.1	2.15	29.8	4.35	32.4	1.15
Coarse sand	0.13	2.52	0.99	19.5	0.37	16.9	1.84	25.4	0.27
Very coarse sand	0.08	0.45	0.32	11.4	0.07	1.1	0.62	4.01	0.11
Gravel	0	0.27	0.22	4.25	0	0	0.14	0.32	1.7
Total organic carbon	0.77	0.43	0.6	0.07 U	0.57	0.13	0.33	0.03 J	0.64

STRATUM 2, LOWER BOAT CHANNEL									
Analyte	SAMPLING LOCATION/SAMPLE NUMBER/SAMPLE DEPTH								
	S2S6/ C001SC63/ (0.5-3 ft)	S2S6/ C001SC64/ (3-7 ft)	S2S7/ C001SC65/ (0.5-3 ft)	S2S7/ C001SC66/ (3-7 ft)	S2S8/ C001SC32/ (0.5-5.5 ft)	S2S8/ C001SC33/ (5.5-7 ft)	S2S9/ C001SC30/ (0.5-3 ft)	S2S9/ C001SC31/ (3-7 ft)	S2S10/ C001SC28/ (0.5-3 ft)
Clay	30.8	2.62	19.9	52	51.7	2.85	23.7	18.7	50.4
Silt	29.7	9.37	27.3	31.1	38.7	2.92	24.9	16.9	38.2
Very fine sand	19.7	5.19	28.1	12	4.9	2.83	31.3	29	6.3
Fine sand	14.3	50.6	12.3	4.22	2.86	13.2	15.3	32.6	2.98
Medium sand	2.64	26.6	3.12	0.62	0.57	36	2.12	2.86	1.01
Coarse sand	0.76	9.31	1.35	0.13	0.16	27.8	0.87	0.49	0.64
Very coarse sand	0.62	1.29	0.52	0.04	0.19	5.26	0.2	0.1	0.07
Gravel	0.17	1.43	0	0	0	5.36	0	0	0
Total organic carbon	0.43	0.03 J	0.69	0.62	1.01	0.41	0.69	0.24	0.46

(table continues)

Table 5-2 (continued)

Analyte	STRATUM 2, LOWER BOAT CHANNEL SAMPLING LOCATION/SAMPLE NUMBER/SAMPLE DEPTH									
	S2S11/ C001SC24/ (0.5-3.5 ft)	S2S11/ C001SC25/ (3.5-7 ft)	S2S12/ C001SC22/ (0.5-3 ft)	S2S12/ C001SC23/ (3-7 ft)	S2S13/ C001SC20/ (0.5-3.5 ft)	S2S13/ C001SC21/ (3.5-7 ft)	S2S14/ C001SC18/ (0.5-4 ft)	S2S14/ C001SC19/ (4-7 ft)	S2S15/ C001SC14/ (0.5-3 ft)	S2S15/ C001SC15/ (3-7 ft)
Clay	10.7	54.6	14	36	10.8	15.8	50	10.2	43.3	6.76
Silt	15.6	39.3	21.3	35.6	19.8	25.7	30.9	13.4	40.3	21.3
Very fine sand	43	4.31	25.1	19.4	36.1	25.9	8.56	10.3	6.95	28.4
Fine sand	27.1	2.31	24.4	7.63	27.7	23.4	5.25	14	7.01	38
Medium sand	2.43	0.29	6.84	1.27	4.28	3.94	3.37	16.7	1.11	3.12
Coarse sand	0.39	0.1	2.19	0.49	0.55	0.39	1.92	18.2	0.36	0.79
Very coarse sand	0.2	0.05	1.26	0.21	0.14	0.12	0.71	7.89	0.15	0.21
Gravel	0.22	0	3.89	0	0.15	0.23	0.12	7.98	0	0.63
Total organic carbon	0.25	0.5	0.56	0.43	0.38	0.45	0.91	0.47	0.73	0.18

Analyte	STRATUM 2, LOWER BOAT CHANNEL SAMPLING LOCATION/SAMPLE NUMBER/SAMPLE DEPTH									
	S2S16/ C001SC11/ (0.5-3 ft)	S2S16/ C001SC12/ (3-7 ft)	S2S16/ C001SC13/ (3-7 ft)	S3S1/ C001SC07/ (0.5-2.5 ft)	S3S1/ C001SC07/ (0.5-2.5 ft)	S3S2/ C001SC08/ (2.5-7 ft)	S3S2/ C001SC08/ (2.5-7 ft)	S3S3/ C001SC09/ (0.5-4 ft)	S3S3/ C001SC09/ (0.5-4 ft)	S3S4/ C001SC10/ (0.5-3 ft)
Clay	20.7	10.8	14.9	16.1	3.15	7.3	12	2.92	2.81	20.3
Silt	19	16.3	27.4	25.5	4.61	14.4	11.5	4.55	3.52	30.3
Very fine sand	20.4	20.1	17.7	21.9	13.5	21.7	14.6	19.5	5.16	34.2
Fine sand	37.4	26.8	19.4	26.2	24.9	30.6	32.5	64.4	11	13.1
Medium sand	2.84	13.2	12.6	4.5	27.2	9.94	22.8	5.57	11.3	0.99
Coarse sand	0.45	7.16	6.76	3.17	21.6	5.62	4.41	0.6	31.7	0.28
Very coarse sand	0.09	3.13	2.1	1.42	3.8	3.07	1.52	0.14	23.8	0.11
Gravel	0.06	1.71	0.47	0.14	0.51	5.27	0.32	0.18	10.7	0.4
Total organic carbon	0.26	0.06	0.07	0.08	0.06	0.24	0.11	0.16	0.04 J	0.38

(table continues)

Table 5-2 (continued)

STRATUM 3, REFERENCE AREA SAMPLING LOCATION/SAMPLE NUMBER/SAMPLE DEPTH			
Analyte	S3S4/ C001SC04/ (3-7 ft)	S3S5/ C001SC01/ (0.5-3 ft)	S3S5/ C001SC02/ (3-8 ft)
Clay	5.18	14.4	3.22
Silt	8.04	25.8	3.17
Very fine sand	11	27.8	15.1
Fine sand	32.8	22.7	69.1
Medium sand	28.2	4.95	6.45
Coarse sand	9.86	2.27	1.23
Very coarse sand	3.17	1	0.51
Gravel	0.4	1.03	0.18
Total organic carbon	0.03 J	0.3	0.02

Notes:

- ^a clay: 0.0025 to 0.004 mm
- ^b silt: 0.004 to 0.062 mm
- ^c very fine sand: 0.062 to 0.125 mm
- ^d fine sand: 0.125 to 0.250 mm
- ^e medium sand: 0.250 to 0.500 mm
- ^f coarse sand: 0.500 to 1 mm
- ^g very coarse sand: 1 to 2 mm
- ^h gravel: > 2 mm

Acronyms/Abbreviations:

ft – foot
mm – millimeter

Review Qualifiers:

J – estimated value
U – compound not detected at or about the sample quantitation limit

Table 5-3
Results of Metals Analyses of Surface Sediment
(results reported in milligrams per kilogram)

Analyte	ERM Values	STRATUM 1, UPPER BOAT CHANNEL												STRATUM 2, LOWER BOAT CHANNEL													
		SAMPLING LOCATION/SAMPLE NUMBER												SAMPLING LOCATION/SAMPLE NUMBER													
		S1S1/ C001SS03	S1S1/ C001SS32	S1S2/ C001SS01	S1S2/ C001SS34	S1S3/ C001SS02	S1S3/ C001SS19	S1S4/ C001SS20	S1S5/ C001SS21	S1S6/ C001SS22	S1S7/ C001SS23	S1S8/ C001SS24	S1S9/ C001SS25	S1S10/ C001SS26	S2S1/ C001SS27	S2S2/ C001SS28	S2S3/ C001SS29	S2S4/ C001SS30									
Aluminum	NP	34,500	28,200	29,860	24,700	8,760	33,900	25,700	29,400	32,700	31,000	16,700	11,200	24,600	23,900	21,600	23,100										
Antimony	2	25	0.1 J	0.12 J	0.14 J	0.09 J	0.04 J	0.16 J	0.14 J	0.12 J	0.09 J	0.13 J	0.1 J	R	0.14 J	0.13 J	0.12 J	0.17 J									
Arsenic	8.2	70	1.7	1.2	1.0	0.9	0.8	1.0	0.8	1.0	0.8	1.0	0.9	5	8	8	8	9									
Barium	NP	130	132	132	131	38.2	251	124	138	114	134	127	102	80	111	96.4	94.9	94.9	102								
Beryllium	NP	0.7	0.8	0.7	0.7	0.2	1.3	0.5	0.8	0.6	0.8	0.7	0.5	0.3	0.6	0.55	0.55	0.55	0.5								
Cadmium	1.2	9.6	0.7	0.6	0.7	0.8	0.4	1.6	0.7	0.8	1.1	0.8	0.5	0.3	0.1	0.29	0.3	0.29	0.2								
Chromium	81	370	322	8.2	76	75	20	14.5	50	36	70	37	63	37	69	61.7	63	61.7	67								
Cobalt	NP	11.5	11.7	10.5	10.3	3.4	20.3	8.3	11.7	9.9	12	10.6	8.9	6	9.6	7.85	8.1	9	10.7								
Copper	34	270	262	16.6	10.6	10.6	10.6	28.1	28.1	28.1	28.1	28.1	17.4	12.6	17.5	17.5	17.5	17.5									
Iron	NP	42,800	39,000	37,800	34,600	12,000	43,200	31,700	40,700	31,500	45,000	39,400	25,300	17,400	34,000	31,400	29,000	32,000									
Lead	46.7	218	172	175	153	143	19.8	39.2	12.9	150	165	145	125	145	168	168	168	168	168								
Manganese	NP	281	266	268	248	77	281	219	279	241	294	270	194	138	247	247	247	247	247								
Mercury	0.15	0.71	0.6	0.6	0.6	0.6	0.1	0.6	0.6	0.6	0.6	0.6	0.5	0.3	0.3	0.3	0.3	0.3	0.3								
Nickel	20.9	19	20	17	17	5	12	20	17	20	18	15	9	15	13	13	13	13	14								
Selenium	NP	4 U	4 U	4 U	4 U	4 U	3	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	
Silver	1	3.7	1.9	1.9	1.9	1.9	0.51	2.1	1.7	2.19	2.03	2.26	2.3	1.61	0.75	1.25	1.25	1.25	1.25								
Thallium	NP	0.8	0.8	0.8	0.7	0.2	1.5	0.5	0.8	0.7	0.8	0.7	0.5	0.4	0.4	0.46	0.46	0.46	0.46	0.4							
Vanadium	NP	94	97	86	84	27	167	66	96	77	100	88	69	46	76	65.3	65.3	65.3	65.3	71							
Zinc	150	410	330	337	337	261	249	98	530	333	333	316	316	209	157	209	209	209	209								

(table continues)

Table 5-3 (continued)

Analyte	ERL Values	STRATUM 2, LOWER BOAT CHANNEL												STRATUM 3, REFERENCE AREAS					
		SAMPLING LOCATION/SAMPLE NUMBER												SAMPLING LOCATION/SAMPLE NUMBER					
		S2S5/ C001SS09	S2S6/ C001SS15	S2S7/ C001SS16	S2S8/ C001SS17	S2S9/ C001SS18	S2S10/ C001SS19	S2S11/ C001SS21	S2S12/ C001SS22	S2S13/ C001SS23	S2S14/ C001SS24	S2S15/ C001SS25	S2S16/ C001SS26	S2S17/ C001SS27	S3S1/ C001SS31	S3S2/ C001SS29	S3S3/ C001SS33	S3S4/ C001SS37	S3S5/ C001SS28
Aluminum	NP	10,500	24,000	13,400	22,500	13,200	23,200	15,500	23,400	20,300	22,800	18,200	12,700	9,510	9,750	9,060	15,000	14,400	
Antimony	2	25	0.12 J	0.06 J	R	0.05 J	0.08 UJ	0.09 UJ	0.1 J	0.11 J	0.11 J	0.12 J	0.09 UJ	0.07 UJ	0.06 J	0.05 J	0.09 J	0.08 J	
Arsenic	8.2	70	5	5	5	8	6	6	6	8	8	7	5	4	3	6	6	6	
Barium	NP	54.2	108	57.8	98.2	62	110	94.7	119	116	105	102	91.3	76.5	53.9	42.6	57.8	70.8	
Beryllium	NP	0.3	0.5	0.3	0.4	0.3	0.6	0.33	0.6	0.6	0.5	0.5	0.4	0.3	0.21	0.2	0.2	0.29	
Cadmium	1.2	9.6	0.2	0.2	0.3	0.2	0.2	0.13	0.2	0.2	0.3	0.3	0.3	0.3	0.08	0.1	0.06	0.21	
Chromium	81	370	31	64	33	57	41	66.3	44	69	69	56	61	49	38	21.3	20.2	28.9	
Cobalt	NP	5	8.8	5	8.1	5.5	9.4	7.04	9.8	9.7	8.2	8.8	7.2	6	3.91	3.75	4.2	5.33	
Copper	34	270	53.5	59	57	61	50	59	40	40	41	41	41	40	36.6	37.6	38.2	36.6	
Iron	NP	15,100	32,000	17,300	30,500	18,700	32,800	24,900	35,500	33,900	30,300	32,000	27,000	20,200	15,200	14,500	16,600	21,900	
Lead	46.7	218	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.7	19.9	18.2	16.1	23.6	
Manganese	NP	118	232	124	224	137	250	204	268	255	229	221	206	163	113	106	119	189	
Mercury	0.15	0.71	0.6	0.6	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	
Nickel	20.9	51.6	7	14	7	12	9	14	9.1	15	15	12	15	11	9	5.6	5.4	8.8	
Selenium	NP	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	2 U	2 U	2 U	2 U	
Silver	1	3.7	0.68	0.68	0.89	0.89	0.86	0.86	0.86	0.79	0.79	0.79	0.79	0.79	0.92	0.31	0.32	0.46	
Thallium	NP	0.2	0.6	0.3	0.5	0.3	0.4	0.41	0.5	0.5	0.4	0.4	0.4	0.3	0.2	0.18	0.22	0.34	
Vanadium	NP	36	71	40	61	46	74	50.4	77	76	64	70	56	45	30.4	27.4	33.6	38.9	
Zinc	150	410	120	120	120	126	126	126	126	126	126	126	126	126	87	86	78	128	

Notes:

a shading indicates value exceeds ERL
b outline indicates value exceeds ERM

Acronyms/Abbreviations:

ERL – effects range low
ERM – effects-range median
NP – not published

Review Qualifiers:

J – estimated value
R – data rejected during data validation process due to low matrix spike recovery
U – compound not detected at or above the sample quantitation limit
UJ – analyzed for but not detected above the sample quantitation limit if the quantitation limit is an estimated value

Table 5.4
Results of Organotin Analyses of Surface Sediment
(results reported in micrograms per kilogram)

Analyte	STRATUM 1, UPPER BOAT CHANNEL												STRATUM 2, LOWER BOAT CHANNEL												
	SAMPLING LOCATION/SAMPLE NUMBER				SAMPLING LOCATION/SAMPLE NUMBER				SAMPLING LOCATION/SAMPLE NUMBER				SAMPLING LOCATION/SAMPLE NUMBER				SAMPLING LOCATION/SAMPLE NUMBER				SAMPLING LOCATION/SAMPLE NUMBER				
	S1S1/ C001SS03	S1S1/ C001SS32	S1S2/ C001SS01	S1S2/ C001SS34	S1S3/ C001SS02	S1S3/ C001SS19	S1S4/ C001SS20	S1S4/ C001SS18	S1S5/ C001SS20	S1S5/ C001SS13	S1S6/ C001SS14	S1S7/ C001SS14	S1S8/ C001SS13	S1S9/ C001SS13	S1S10/ C001SS05	S1S11/ C001SS07	S2S3/ C001SS33	S2S4/ C001SS07	S2S5/ C001SS09						
Dibutyltin	112	45	59	64	39	216	76	195	207	221	120	64	17	38	59	61	66	28							
Tetrabutyltin	31 U	5 U	3 U	3 U	15 U	15 U	15 U	15 U	2 J	15 U	15 U	3 U	3 U	15 U	15 U	15 U	15 U	15 U							
Tributyltin	55	47	23	24	10	101	18	93	195	92	43	27	8	19	25	28	31	31	11						

Analyte	STRATUM 2, LOWER BOAT CHANNEL												STRATUM 3, REFERENCE AREA												
	SAMPLING LOCATION/SAMPLE NUMBER				SAMPLING LOCATION/SAMPLE NUMBER				SAMPLING LOCATION/SAMPLE NUMBER				SAMPLING LOCATION/SAMPLE NUMBER				SAMPLING LOCATION/SAMPLE NUMBER				SAMPLING LOCATION/SAMPLE NUMBER				
	S2S10/ C001SS15	S2S10/ C001SS16	S2S10/ C001SS17	S2S10/ C001SS10	S2S11/ C001SS21	S2S11/ C001SS22	S2S11/ C001SS26	S2S11/ C001SS35	S2S12/ C001SS32	S2S12/ C001SS33	S2S13/ C001SS33	S2S13/ C001SS33	S2S14/ C001SS11	S2S14/ C001SS24	S2S15/ C001SS25	S2S16/ C001SS30	S3S1/ C001SS30	S3S2/ C001SS29	S3S3/ C001SS31	S3S4/ C001SS27	S3S5/ C001SS28				
Dibutyltin	49	35	29	25	47	33	47	51	37	34	42	34	34	42	34	15	14	5	8	10					
Tetrabutyltin	15 U	15 U	15 U	15 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	1 J	1 J	0.8 J				
Tributyltin	27	11	18	12	23	13	24	25	19	19	18	12	12	12	12	12	12	8	10	10	13				

Review Qualifiers:

J - estimated value

U - compound not detected at or above the sample quantitation limit

Table 5-5
Results of Sulfide Analyses of Surface Sediment
(results reported in milligrams per kilogram as dry weight)

Station	Sample ID	Sulfide
Stratum 1, Upper Boat Channel		
S1S1	C001SS03	1,790
S1S1	C001SS32	2.7
S1S2	C001SS01	5.4
S1S2	C001SS34	311
S1S3	C001SS02	795
S1S4	C001SS19	423
S1S5	C001SS20	35.7
S1S6	C001SS18	208
S1S7	C001SS04	2,420
S1S8	C001SS13	1,660 J
S1S9	C001SS14	52.5 J
S1S10	C001SS05	387
Stratum 2, Lower Boat Channel		
S2S1	C001SS06	5.5
S2S2	C001SS12	13.4 J
S2S3	C001SS08	60.7 J
S2S3	C001SS33	1.8 J
S2S4	C001SS07	33.2 J
S2S5	C001SS09	18.7 J
S2S6	C001SS15	19 J
S2S7	C001SS16	61.9 J
S2S8	C001SS17	10 J
S2S9	C001SS10	9.8 J
S2S10	C001SS21	31 J
S2S11	C001SS26	13.4 J
S2S12	C001SS22	8.5 J
S2S12	C001SS35	14 J
S2S13	C001SS23	32 J
S2S14	C001SS11	9.7 J
S2S15	C001SS24	21 J
S2S16	C001SS25	49.9 J
Stratum 3, Reference Area		
S3S1	C001SS30	14.7 J
S3S2	C001SS29	20 J
S3S3	C001SS31	9.7 J

(table continues)

Table 5-6
Results of PCB Analyses of Surface Sediment
(results reported in micrograms per kilogram)

Analyte	MDL	ERL Values	ERM Values	STRATUM 1, UPPER BOAT CHANNEL							
				S1S1/ C01SS03	S1S1/ C01SS32	S1S2/ C01SS01	S1S2/ C001SS34	S1S3/ C01SS02	S1S4/ C01SS19	S1S5/ C01SS20	
PCB-8 (2,4) ^a	0.4	NP	NP	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.6 U	0.6 U	
PCB-18 (2,2,5) ^a	0.2	NP	NP	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	
PCB-28 (2,4,4) ^a	0.09	NP	NP	0.3 J	0.2 J	0.3 J	0.7	0.2 J	0.7	0.5 J	
PCB-44 (2,2',3,5) ^a	0.07	NP	NP	0.4	0.5 J	0.6	0.5 J	0.2 J	0.8	0.7	
PCB-52 (2,2',5,5) ^a	0.07	NP	NP	1.1	0.9	1	0.8	0.2 J	1.4 U	1.3	
PCB-60	0.3	NP	NP	1.7	2.4 J	1.6	2 U	0.5	2.9 U	2.6	
PCB-66 (2,3',4,4) ^a	0.09	NP	NP	3.1	2.3	2.5	2.1	0.9	4.2	3.7	
PCB-77 (3,3',4,4')	0.3	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.9 UJ	0.5 UJ	
PCB-81	0.06	NP	NP	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.1 J	0.5 U	
PCB-87	0.07	NP	NP	1.4	0.9	1.3	1.1 U	0.5 J	1.4	1	
PCB-90	0.2	NP	NP	0.3 J	0.3 J	0.3 J	0.3	0.2 J	0.2 J	0.2 J	
PCB-101 (2,2',4,5,5) ^a	0.2	NP	NP	2.8	2	2.6	2.2	0.9	3.7	3.3	
PCB-105 (2,3,3',4,4) ^a	0.4	NP	NP	1.2	0.8	1	0.4 J	0.4 J	1.5	1.3	
PCB-114	0.1	NP	NP	0.2 J	0.4 J	0.4 J	0.5 U	0.5 U	1 U	0.5 J	
PCB-118 (2,3',4,4',5) ^a	0.07	NP	NP	2.7	1.9	2.2	1.9	0.8	3.3	3.1	
PCB-123	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.7 U	0.6 U	
PCB-126 (3,3',4,4',5)	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	
PCB-128 (2,2',3,3',4,4, ^a)	0.2	NP	NP	0.8	0.6	0.6	0.6	0.2 J	1.2	1	
PCB-138 (2,2',3,4,4',5) ^a	0.3	NP	NP	5.2	4.1	4.2	3.7	1.5	8.9	6.2	
PCB-153 (2,2',4,4',5,5) ^a	0.2	NP	NP	3.8	2.9	3.2	2.7	1.2 J	4.9	5	
PCB-156	0.09	NP	NP	0.4 J	0.3 J	0.4 J	0.3 J	0.5 U	0.5	0.5 J	
PCB-157	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	0.1 J	
PCB-158	0.07	NP	NP	0.4 J	0.3 J	0.3 J	0.3 J	0.1 J	0.6	0.5	
PCB-166	0.1	NP	NP	0.1 J	0.5 U	0.1 J	0.1 J	0.5 UJ	0.2 J	0.2 J	
PCB-167	0.2	NP	NP	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.3 J	

(table continues)

Table 5-6 (continued)

Analyte	MDL	ERL Values	ERM Values	STRATUM 1, UPPER BOAT CHANNEL SAMPLING LOCATION/SAMPLE NUMBER					
				S1S1/ C01SS03	S1S2/ C01SS32	S1S1/ C001SS34	S1S3/ C01SS02	S1S4/ C01SS19	S1S5/ C01SS20
PCB-169	0.09	NP	NP	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
PCB-170 (2,2',3,3',4,4',5) ^a	0.3	NP	NP	1.3	1	1.1	0.8	0.5 U	1.3
PCB-180 (2,2',3,4,4',5,5) ^a	0.3	NP	NP	1.8	1.3	1.8	1.3	0.5	2.2
PCB-183	0.08	NP	NP	0.6	.3 J	0.5	0.4 J	0.2 J	0.6
PCB-184	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U	0.5 U
PCB-187 (2,2',3,4',5,5',6) ^a	0.2	NP	NP	1.8	1.2	1.4	1.2	0.5	2
PCB-189	0.08	NP	NP	0.2 J	0.1 J	0.2 J	0.2 J	0.5 U	0.2 J
PCB-195 (2,2',3,3',4,4',5,6) ^a	0.07	NP	NP	0.5 UJ	0.5 UJ	0.2 J	0.5 UJ	0.5 UJ	0.5 U
PCB-206 (2,2',3,3',4,4',5,5',6) ^a	0.07	NP	NP	0.4 J	0.3 J	0.3 J	0.5 U	0.1 J	0.9
PCB-209 ^a (Decachlorobiphenyl)	0.08	NP	NP	0.7	0.5 J	0.7	0.6	0.1 J	0.8 J
Total PCBs ^b	NA	22.7	180	55.47 ^c	41.67	48	39.74	16.37	73.54
									68.27

(table continues)

Table 5-6 (continued)

Analyte	MDL	ERM Values	STRATUM 1, UPPER BOAT CHANNEL SAMPLING LOCATION/SAMPLE NUMBER						STRATUM 2, LOWER BOAT CHANNEL SAMPLING LOCATION/ SAMPLE NUMBER		
			S1S6/ C01SS18	S1S7/ C01SS04	S1S8/ C001SS13	S1S9/ C001SS14	S1S10/ C001SS05	S2S1/ C001SS06	S2S2/ C001SS12		
PCB-169	0.09	NP	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U
PCB-170 (2,2',3,3',4,4',5) ^a	0.3	NP	1.6 U	0.7 J	1.2	2.2 U	1.6	0.7 U	1.5		
PCB-180 (2,2',3,3',4,4',5,5,5) ^a	0.3	NP	2.5	1.4 J	2.5	3.3	2.5	0.8	2		
PCB-183	0.08	NP	0.8 J	0.4 J	0.5	1	0.8	0.3 J	0.6		
PCB-184	0.08	NP	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
PCB-187 (2,2',3,3',4,4',5,5',6) ^a	0.2	NP	2.2	1 J	2	2.7	2.2	0.9	1.8		
PCB-189	0.08	NP	0.2 J	0.5 UJ	0.3 J	0.3 J	0.5 U	0.5 U	0.5 U		
PCB-195 (2,2',3,3',4,4',5,6) ^a	0.07	NP	0.3 J	0.1 J	0.3 J	0.4 J	0.2 J	0.5 UJ	0.5 UJ		
PCB-206	0.07	NP	0.6	0.3 J	0.7	0.9	0.5 J	0.2 J	0.8		
(2,2',3,3',4,4',5,5',6) ^a	0.08	NP	0.9	0.4 J	0.8	1.4	0.7	0.3 J	1		
PCB-209 ^a (Detachlorobiphenyl)											
Total PCBs	NA	22.7	180	71.1	39	75.2	90.5	82.09	26.97	56.27	

(table continues)

Table 5-6 (continued)

Analyte	MDL	ERL Values	ERM Values	STRATUM 1, UPPER BOAT CHANNEL						STRATUM 2, LOWER BOAT CHANNEL			
				S1S6/ C01SS18	S1S7/ C001SS04	S1S8/ C001SS13	S1S9/ C001SS14	S1S10/ C001SS05	S2S1/ C001SS06	S2S2/ C001SS12			
PCB-8 (2,4) ^a	0.4	NP	NP	0.5 UJ	0.3 J	0.8	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
PCB-18 (2,2',5) ^a	0.2	NP	NP	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
PCB-28 (2,4,4) ^a	0.09	NP	NP	0.4 J	0.3 J	0.7 J	0.5	0.5 U	0.5 U	0.2 J	0.3 J	0.3 J	0.3 J
PCB-44 (2,2',3,5) ^a	0.07	NP	NP	1.1	0.6 J	0.9	1.1	1.4	1.4	0.3 J	0.4 J	0.4 J	0.4 J
PCB-52 (2,2',5,5) ^a	0.07	NP	NP	1.5	0.8 J	1.5	1.9	2.3	2.3	0.4 J	0.8	0.8	0.8
PCB-60	0.3	NP	NP	2.3 U	1.2 UJ	3 J	0.5 U	2.5 U	0.9	1.1			
PCB-66 (2,3',4,4) ^a	0.09	NP	NP	4 J	2.1 J	4.5 J	5.4	5.1	5.1	1.4	2.6	2.6	2.6
PCB-77 (3,3',4,4) ^a	0.3	NP	NP	0.5 U	0.5 UJ	1.2 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-81	0.06	NP	NP	0.5 UJ	0.5 UJ	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-87	0.07	NP	NP	1.9 J	1 J	1.3	2.7 U	2.3	2.3	0.6 U	1.3	1.3	1.3
PCB-90	0.2	NP	NP	0.4 J	0.3 J	0.5 U	0.5 U	0.4 J	0.4 J	0.2 J	0.3 J	0.3 J	0.3 J
PCB-101 (2,2',4,5,5) ^a	0.2	NP	NP	3.6	2 J	3	4.6	4.4	4.4	1.3	2.4	2.4	2.4
PCB-105 (2,3,3',4,4) ^a	0.4	NP	NP	1.5	0.8 J	1.6 J	0.8	1.7	1.7	0.6	1.1	1.1	1.1
PCB-114	0.1	NP	NP	1.1 J	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.2 J	0.3 J	0.3 J
PCB-118 (2,3',4,4',5) ^a	0.07	NP	NP	3.6	1.9 J	3.9	4.7	3.9	3.9	1.3	2.6	2.6	2.6
PCB-123	0.07	NP	NP	0.6 UJ	0.5 UJ	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-126 (3,3',4,4',5)	0.2	NP	NP	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-128 (2,2',3,3',4,4) ^a	0.2	NP	NP	1.1	0.5 J	1	1.3	1.2	1.2	0.4 J	0.8	0.8	0.8
PCB-138 (2,2',3,4',5) ^a	0.3	NP	NP	6.7 J	3.6 J	6.9	9.2	7.7	7.7	2.8	5.5	5.5	5.5
PCB-153 (2,2',4,4',5,5) ^a	0.2	NP	NP	5	2.6 J	5.2	6.6	5.3 J	5.3 J	2.1 J	4.2	4.2	4.2
PCB-156	0.09	NP	NP	0.4 J	0.2 J	0.5 J	0.5	0.5 J	0.5 J	0.1 J	0.4	0.4	0.4
PCB-157	0.07	NP	NP	0.5 J	0.5 UJ	0.5 U	0.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-158	0.07	NP	NP	0.5	0.3 J	0.6	0.7	0.7	0.7	0.2 J	0.4 J	0.4 J	0.4 J
PCB-166	0.1	NP	NP	0.2 J	0.5 UJ	0.2 J	0.1 J	0.2 J	0.2 J	0.5 UJ	0.5 U	0.5 U	0.5 U
PCB-167	0.2	NP	NP	0.3 J	0.5 UJ	0.3 J	0.3 J	0.4 J	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U

(table continues)

Table 5-6 (continued)

Analyte	MDL	ERL Values	STRATUM 2, LOWER BOAT CHANNEL							
			SAMPLING LOCATION/SAMPLE NUMBER							
			S2S3/ C001SS08	S2S3/ C001SS33	S2S4/ C001SS07	S2S5/ C001SS09	S2S6/ C001SS15	S2S7/ C001SS16	S2S8/ C001SS17	
PCB-8 (2,4') ^a	0.4	NP	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
PCB-18 (2,2',5) ^a	0.2	NP	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
PCB-28 (2,4,4') ^a	0.09	NP	0.5 J	0.5	0.5 U	0.2 J	0.5 UJ	0.3 J	0.3 J	0.4 J
PCB-44 (2,2',3,5') ^a	0.07	NP	NP	0.8	0.8	1	0.2 J	0.3 J	0.1 J	0.5 J
PCB-52 (2,2',5,5') ^a	0.07	NP	NP	1.5	1.3	1.8	0.5 U	0.9	0.4 J	0.9
PCB-60	0.3	NP	NP	0.5 U	2.3	4.1	0.8	1.8 J	1 J	1.8 J
PCB-66 (2,3',4,4') ^a	0.09	NP	NP	4.2	3.8	5	1.5	2.9 J	1.4 J	2.8 J
PCB-77 (3,3',4,4')	0.3	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
PCB-81	0.06	NP	NP	3 U	0.5 U	3 U	0.7 U	0.5 U	0.5 U	0.5 U
PCB-87	0.07	NP	NP	1.4	1.4	2	0.4	0.8	0.4 J	0.8
PCB-90	0.2	NP	NP	0.3 J	0.3 J	0.4 J	0.1	0.5 U	0.5 U	0.5 U
PCB-101 (2,2',4,5,5') ^a	0.2	NP	NP	3.7	3.4	4.6	1.2	2.3	0.8	2.1
PCB-105 (2,3,3',4,4') ^a	0.4	NP	NP	0.5 J	1.5	0.6	0.4 J	1.1 J	0.7 J	1.2 J
PCB-114	0.1	NP	NP	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U
PCB-118 (2,3',4,4',5) ^a	0.07	NP	NP	3.7	3.4	0.5 U	1.2	2.8	1.3	2.7
PCB-123	0.07	NP	NP	0.6	0.5 U	0.5 U				
PCB-126 (3,3',4,4',5)	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
PCB-128 (2,2',3,3',4,4') ^a	0.2	NP	NP	0.5 U	1	1.4	0.4 J	0.8	0.4 J	0.8
PCB-138 (2,2',3,4,4',5) ^a	0.3	NP	NP	7.5	6.8	9.5	2.5	5	2.5	4.9
PCB-153 (2,2',4,4',5,5') ^a	0.2	NP	NP	5.4	4.9	6.6	1.9	3.9	2	3.8
PCB-156	0.09	NP	NP	0.6 U	0.5 J	0.7	0.2 J	0.4 J	0.2 J	0.4 J
PCB-157	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U	0.5 U
PCB-158	0.07	NP	NP	0.5	0.5	0.7	0.2 J	0.4 J	0.2 J	0.4 J
PCB-166	0.1	NP	NP	0.2 J	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-167	0.2	NP	NP	0.2 J	0.3 J	0.5	0.5 U	0.3 J	0.5 U	0.2 J

(table continues)



Table 5-6 (continued)

Analyte	MDL	ERL Values	ERM Values	STRATUM 2, LOWER BOAT CHANNEL SAMPLING LOCATION/SAMPLE NUMBER					
				S2S3/ C001SS08	S2S3/ C001SS33	S2S4/ C001SS07	S2S5/ C001SS09	S2S6/ C001SS15	S2S7/ C001SS16
PCB-169	0.09	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
PCB-170 (2,2',3,3',4,4',5) ^a	0.3	NP	NP	1.9	1.7	2.2	0.6	0.9	0.4 J
PCB-180 (2,2',3,4,4',5,5) ^a	0.3	NP	NP	0.5 U	2.6	0.5 U	0.7	1.7	0.8
PCB-183	0.08	NP	NP	0.5 U	0.8	1.1	0.2 J	0.3 J	0.5 U
PCB-184	0.08	NP	NP	0.5 U	0.5 U	0.09 J	0.5 U	0.5 U	0.5 U
PCB-187 (2,2',3,4',5,5',6) ^a	0.2	NP	NP	2.4	2.4	2.7	0.8	1.6	0.8
PCB-189	0.08	NP	NP	0.5 J	0.5 U	0.5 U	0.1 J	0.2 J	0.5 U
PCB-195 (2,2',3,3',4,4',5,6) ^a	0.07	NP	NP	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.3 J
PCB-206 (2,2',3,3',4,4',5,5',6) ^a	0.07	NP	NP	1	0.6	1.1	0.2 J	0.9	0.4 J
PCB-209 ^a (Decachlorobiphenyl)	0.08	NP	NP	1.4	0.9	1.5	0.3 J	0.7	0.5 U
Total PCBs	NA	22.7	180	70.17	72.8	77.13	24.94	52.36	25.35
									52.8

(table continues)

Table 5-6 (continued)

Analyte	MDL	ERL Values	STRATUM 2, LOWER BOAT CHANNEL							
			S2S9/ C001SS10	S2S10/ C001SS21	S2S11/ C001SS26	S2S12/ C001SS22	S2S13/ C001SS35	S2S13/ C001SS23	S2S14/ C001SS11	
pCB-8 (2,4') ^a	0.4	NP	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
PCB-18 (2,2',5) ^a	0.2	NP	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
pCB-28 (2,4,4') ^a	0.09	NP	0.2 J	0.3 J	0.3 J	0.6	0.2 J	0.2 J	0.2 J	0.3 J
PCB-44 (2,2',3,5) ^a	0.07	NP	0.3 J	0.4 J	0.6 U	0.6	0.6	0.3 J	0.3 J	0.7
PCB-52 (2,2',5,5) ^a	0.07	NP	0.5 J	0.6	0.9	1	0.6	0.4 J	0.4 J	1.2
PCB-60	0.3	NP	0.7	0.5 U	1	0.8 U	0.5 U	1.3	1.3	1.6
PCB-66 (2,3',4,4') ^a	0.09	NP	1.6	2.5	2.6	3.7	2.8	1.9	1.9	3.6
PCB-77 (3,3',4,4') ^a	0.3	NP	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
PCB-81	0.06	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-87	0.07	NP	0.6	0.8	1.4	1.1	0.9	0.6	0.6	1.7
PCB-90	0.2	NP	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J
PCB-101 (2,2',4,5,5) ^a	0.2	NP	1.4	2.3	2.6	3	2.3	1.9	1.9	3.2
PCB-105 (2,3,3',4,4') ^a	0.4	NP	0.6	1	1.1	1.4	1.1	0.7	0.7	1.4
PCB-114	0.1	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-118 (2,3,4,4',5) ^a	0.07	NP	1.5	2.3	2.6	3.4	2.5	1.7	1.7	3.4
PCB-123	0.07	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
PCB-126 (3,3',4,4',5)	0.2	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-128 (2,2',3,3',4,4') ^a	0.2	NP	0.5 J	0.8	0.8	1.1	0.9	0.6	0.6	1
PCB-138 (2,2',3,4,4',5) ^a	0.3	NP	3	4.9	4.9	6.9	5.2	3.7	3.7	6.9
PCB-153 (2,2',4,4',5,5) ^a	0.2	NP	2.4	4	3.9	5.7	4.3	3	3	5.2
PCB-156	0.09	NP	0.2	0.3 J	0.3 J	0.5 J	0.4 J	0.3 J	0.3 J	0.5
PCB-157	0.07	NP	0.5 U	0.1 J	0.3 J	0.2 J	0.1 J	0.5 U	0.5 U	0.5 U
PCB-158	0.07	NP	0.2 J	0.4 J	0.4 J	0.5	0.4 J	0.3 J	0.3 J	0.5
PCB-166	0.1	NP	0.5 U	0.5 U	0.1 J	0.1 J	0.5 U	0.5 U	0.1 J	0.1 J
PCB-167	0.2	NP	0.5 U	0.2 J	0.3 J	0.3 J	0.3 J	0.5 U	0.5 U	0.3 J

page 5-40

(table continues)

Table 5-6 (continued)

Analyte	MDL	ERL Values	ERM Values	STRATUM 2, LOWER BOAT CHANNEL					
				S2S9/ C001SS10	S2S10/ C001SS21	S2S11/ C001SS26	S2S12/ C001SS22	S2S13/ C001SS35	S2S14/ C001SS11
PCB-169	0.09	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-170 (2,2',3,3',4,4',5) ^a	0.3	NP	NP	0.8	1	1.1	1.4	1	0.8
PCB-180 (2,2',3,4,4',5,5') ^a	0.3	NP	NP	1	1.8	2	2.7	1.9	1.3
PCB-183	0.08	NP	NP	0.3 J	0.4 J	0.5	0.6	0.5 J	0.2 J
PCB-184	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-187 (2,2',3,4',5,5',6) ^a	0.2	NP	NP	1	1.8	1.6	2.5	1.9	1.3
PCB-189	0.08	NP	NP	0.5 U	0.5 U	0.1 J	0.5 U	0.5 U	0.1 J
PCB-195 (2,2',3,3',4,4',5,6) ^a	0.07	NP	NP	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.2 J
PCB-206 (2,2',3,3',4,4',5,5',6) ^a	0.07	NP	NP	0.3 J	0.9	0.6	1.6	0.9 U	0.4 J
PCB-209 ^a (Decachlorobiphenyl)	0.08	NP	NP	0.4	0.8	0.9	1	0.6	0.3 J
Total PCBs	NA	22.7	180	31.67	51.47	52.87	73.87	52.54	38
									72.07

(table continues)

Table 5-6 (continued)

Analyte	MDL	ERL Values	STRATUM 2, LOWER BOAT CHANNEL SAMPLING LOCATION/ SAMPLE NUMBER		STRATUM 3, REFERENCE AREA SAMPLING LOCATION/SAMPLE NUMBER					
			S2S15/ C001SS24	S2S16/ C001SS25	S3S1/ C001SS30	S3S2/ C001SS29	S3S3/ C001SS31	S3S4/ C001SS27	S3S5/ C001SS28	
PCB-8 (2,4) ^a	0.4	NP	0.6	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ
PCB-18 (2,2',5) ^a	0.2	NP	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ
PCB-28 (2,4,4') ^a	0.09	NP	0.5 J	0.3 J	0.5 U	0.1 J	0.5 U	0.1 J	0.2 J	0.2 J
PCB-44 (2,2',3,5) ^a	0.07	NP	0.5	0.5 J	0.2 J	0.4 J	0.5 U	0.1 J	0.5 U	0.5 U
PCB-52 (2,2',5,5) ^a	0.07	NP	0.8	0.7	0.3 J	0.6	0.3 J	0.5 U	0.5 J	0.5 J
PCB-60	0.3	NP	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U	0.6	0.5 U	0.5 U
PCB-66 (2,3',4,4) ^a	0.09	NP	2.9	2.4	0.9	1.2	0.9	0.8	1.2	1.2
PCB-77 (3,3,4,4) ^a	0.3	NP	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-81	0.06	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-87	0.07	NP	0.9	0.7	0.8	0.7	0.5 J	0.3 J	1	1
PCB-90	0.2	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U
PCB-101 (2,2',4,5,5) ^a	0.2	NP	NP	2.7	2.2	1	1.4	0.8	0.5	1.2
PCB-105 (2,3,3',4,4) ^a	0.4	NP	NP	1.2	1	0.4 J	0.6	0.4 J	0.3 J	0.5 J
PCB-114	0.1	NP	NP	0.2 J	0.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-118 (2,3',4,4',5) ^a	0.07	NP	NP	2.5	2.2	0.9	1.2	1	0.7	1.2
PCB-123	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-126 (3,3',4,4',5)	0.2	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-128 (2,2',3,3',4,4) ^a	0.2	NP	NP	0.9	0.8	.3 J	.3 J	.3 J	0.3 J	0.4 J
PCB-138 (2,2',3,4,4',5) ^a	0.3	NP	NP	5.2	4.4	1.8	2.2	2	1.7	2.5
PCB-153 (2,2',4,4',5,5) ^a	0.2	NP	NP	4.4	3.7	1.5	1.7	1.6	1.3	2.1
PCB-156	0.09	NP	NP	0.4 J	.4 J	.1 J	.2 J	.1 J	0.1 J	0.2 J
PCB-157	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-158	0.07	NP	NP	0.4 J	0.4 J	0.1 J	0.2 J	0.1 J	0.2 J	0.2 J
PCB-166	0.1	NP	NP	0.5 U	0.1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-167	0.2	NP	NP	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

page 5-42

(table continues)



Table 5-6 (continued)

Analyte	MDL	ERL Values	ERM Values	STRATUM 2, LOWER BOAT CHANNEL SAMPLING LOCATION/ SAMPLE NUMBER				STRATUM 3, REFERENCE AREA SAMPLING LOCATION/SAMPLE NUMBER			
				S2S15/ C001SS24	S2S16/ C001SS25	S3S1/ C001SS30	S3S2/ C001SS29	S3S3/ C001SS31	S3S4/ C001SS27	S3S5/ C001SS28	
PCB-169	0.09	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-170 (2,2',3,3',4,4',5) ^a	0.3	NP	NP	1.2	0.9	0.5	0.5	0.5 J	0.4 J	0.4 J	0.7
PCB-180 (2,2',3,4,4',5,5') ^a	0.3	NP	NP	2	1.9	0.7	0.8	0.7	0.7	0.7	0.9
PCB-183	0.08	NP	NP	0.4 J	0.4 J	0.2 J	0.2 J	0.2 J	0.5 U	0.5 U	0.3 J
PCB-184	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-187 (2,2',3,4',5,5',6) ^a	0.2	NP	NP	1.8	1.8	0.7	0.7	0.7	0.7	0.7	1
PCB-189	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-195 (2,2',3,3',4,4',5,6) ^a	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-206 (2,2',3,3',4,4',5,5',6) ^a	0.07	NP	NP	0.7	1.4	0.2 J	0.2 J	0.2 J	0.2 J	0.2 J	0.5 U
PCB-209 ^a (Decachlorobiphenyl)	0.08	NP	NP	0.7	0.5 U	0.3 J	0.3 J	0.3 J	0.5 UJ	0.5 UJ	0.5
Total PCBs	NA	22.7	180	57.47	59.15	20.16	25.07	20.83	16.42	26.61	

Notes:

^a the 18 NOAA congeners are shown in boldface^b total PCBs are equal to 2 times the sum of the congeners; nondetects were included at one-half the MDL^c shaded cell indicates concentration exceeds ERL

Acronyms/Abbreviations:

ERL – effects-range low

ERM – effects-range median

MDL – method detection limit

NOAA – National Oceanic and Atmospheric Administration

NP – not published

PCB – polychlorinated biphenyl

Review Qualifiers:

J – estimated value

U – compound not detected at or above the sample quantitation limit

UU – analyzed for but not detected above the sample quantitation limit and the quantitation limit is an estimated value

Table 5-7
Results of Pesticide Analyses of Surface Sediment
 (results reported in micrograms per kilogram)

Analyte	MDL	ERM Values	STRATUM 1, UPPER BOAT CHANNEL												STRATUM 2, LOWER BOAT CHANNEL											
			S1S1/ C001SS03	S1S1/ C001SS32	S1S2/ C001SS01	S1S2/ C001SS34	S1S3/ C001SS02	S1S3/ C001SS19	S1S4/ C001SS20	S1S5/ C001SS18	S1S6/ C001SS04	S1S7/ C001SS13	S1S8/ C001SS14	S1S9/ C001SS05	S1S10/ C001SS06	S1S11/ C001SS12	S1S12/ C001SS08	S1S13/ C001SS33								
4,4'-DDD	0.2	NP	50 J	64	27	24	17	120 J	34 J	120 J	76	29	52	170	3	6	3	26								
4,4'-DDE	0.4	2.2	27	11 J	12 J	16	16	16	16	2 J	2 J	2 J	2 J	13												
4,4'-DDT	0.2	NP	4 J	7	3	3	2 J	14	100	8	21	4	6	26	4	1 J	1 J	2 U								
Total DDT's ^c	NA	1.58	46.1	55	45	45	45	45	45	45	56	56	56	56	31	31	31	31	79 J							
alpha-Chlordane	0.4	NP	NP	3 J	3	2	2 J	0.9 J	4 U	3	9	4	3 J	4 J	6	2 U	0.7 J	2 U	2 J							
gamma-Chlordane	0.2	NP	NP	4 J	5	4	4	1 J	21	6	17	7	5	9	9	0.5 J	1 J	0.7 J	5							
Total chlordane ^c	NA	0.5	6	7	8	8	8	6	19	21	9	26	14	14	14	0.7 J	0.7 J	0.7 J	0.7 J	7						
Aldrin	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
alpha-BHC	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
beta-BHC	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
delta-BHC	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Dieldrin	0.4	0.02	8	9 UJ	2 U	4 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	14 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Endosulfan I	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Endosulfan II	0.2	NP	NP	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Endosulfan sulfate	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Endrin	0.4	0.02	45	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Endrin aldehyde	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Endrin ketone	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
gamma-BHC (indane)	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Hepachlor	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Hepachlor epoxide	0.4	NP	NP	3 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	
Methoxychlor	1	NP	NP	4 U	4 U	4 U	4 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	
Toxaphene	5	NP	NP	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U												

(table continues)

Table 5-7 (continued)

Analyte	MDL	ERL	ERM	STRATUM 2, LOWER BOAT CHANNEL													
				SAMPLING LOCATIONS/SAMPLE NUMBER				S2S10/ C001SS10				S2S11/ C001SS11				S2S14/ C001SS14	S2S15/ C001SS15
				S2S4/ C001SS07	S2S5/ C001SS09	S2S6/ C001SS15	S2S7/ C001SS16	S2S8/ C001SS17	S2S9/ C001SS17	S2S10/ C001SS21	S2S11/ C001SS22	S2S12/ C001SS26	S2S13/ C001SS32	S2S14/ C001SS35	S2S15/ C001SS35	S2S16/ C001SS36	S2S17/ C001SS36
4,4'-DDD	0.2	NP	NP	42	8	9	20	9	3	6	11	5	4	5	4	4	
4,4'-DDE	0.4	2.2	27	9	13	13	13	13	13	13	13	13	13	13	13	13	
4,4'-DDT	0.2	NP	NP	27	3	7	11	2	11	40	4	3	11	6	2	2	
Total DDTs ^c	NA	1.58	46.1	88	15	44	44	16	51	15	14	19	14	1	1	1	
alpha-Chlordane	0.4	NP	NP	3	0.7 J	0.9 J	2 J	1 J	0.5 J	0.4 J	0.8 J	0.9 J	2 J	0.7 J	2 U	2 U	
gamma-Chlordane	0.2	NP	NP	5	1 J	2 J	5	2 J	0.8 J	1 U	0.9 J	1 U	2 J	1 J	1 J	0.8 J	
Total chlordane ^c	NA	0.5	6	8	1 J	2 J	5	2 J	0.8 J	1 U	0.9 J	1 U	2 J	1 J	1 J	0.8 J	
Aldrin	0.2	NP	NP	1 J	2 U	1.6 J	1 J	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	
alpha-BHC	0.2	NP	NP	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	20 UJ	20 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	
beta-BHC	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	20 U	20 U	2 U	2 U	0.5 J	2 U	2 U	
delta-BHC	0.4	NP	NP	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	20 UJ	20 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	
Dieldrin	0.4	0.02	8	2 U	2 U	2 U	2 U	2 U	2 U	20 U	20 U	2 U	2 U	2 U	2 U	2 U	
Endosulfan I	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	20 U	20 U	2 U	2 U	2 U	2 U	2 U	
Endosulfan II	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	20 U	20 U	2 U	2 U	2 U	2 U	2 U	
Endosulfan sulfate	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	20 U	20 U	2 U	2 U	2 U	2 U	2 U	
Ergardin	0.4	0.02	45	2 U	2 U	2 U	2 U	2 U	2 U	20 U	20 U	2 U	2 U	2 U	2 U	2 U	
Ergardin aldehyde	0.2	NP	NP	9	3	4 J	7 J	5 J	3	6 J	5 J	7 J	5 J	5 J	5 J	5 J	
Ergardin ketone	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	20 U	20 U	2 U	2 U	2 U	2 U	2 U	
Gamma-BHC (lindane)	0.2	NP	NP	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	20 UJ	20 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	
Hepachlor	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	20 U	20 U	2 U	2 U	2 U	2 U	2 U	
Hepachlor epoxide	0.4	NP	NP	0.9 J	2 U	2 U	2 U	2 U	2 U	20 U	20 U	2 U	2 U	2 U	2 U	2 U	
Methoxychlor	1	NP	NP	4 UJ	4 U	4 U	4 U	4 U	4 U	40 U	40 U	4 U	4 U	4 U	4 U	4 U	
Toxaphene	5	NP	NP	30 U	30 UJ	30 U	30 U	30 U	30 U	300 U	300 U	30 U	30 U	30 U	30 U	30 U	

(Table continues)

Table 5-7 (continued)

Analyte	MDL	ERL Values	STRATUM 3, REFERENCE AREA					
			S3S1/ C01SS30	S3S2/ C01SS39	S3S3/ C01SS31	S3S4/ C01SS27	S3S5/ C01SS28	S3S6/ C01SS29
4,4'-DDD	0.2	NP	20 U	20 U	20 U	0.2 J	20 U	
4,4'-DDE	0.4	2.2	27	1 J	0.9 J	1 J	1 J	2 J
4,4'-DDT	0.2	NP	20 U	20 U	20 U	20 U	20 U	2 J
Total DDTs ^c	NA	1.58	46.1	1.2	1.1	1.2	1.3	
alpha-Chlordane	0.4	NP	20 U	20 U	20 U	20 U	20 U	20 U
gamma-Chlordane	0.2	NP	20 U	20 U	20 U	20 U	20 U	0.5 J
Total chlordane ^c	NA	0.5	6	0.3	0.3	0.3	0.3	0.7 J
Aldrin	0.2	NP	NP	20 U	20 U	20 U	20 U	
alpha-BHC	0.2	NP	NP	20 U	20 U	20 U	20 U	
beta-BHC	0.4	NP	NP	20 U	20 U	20 U	20 U	
delta-BHC	0.4	NP	NP	20 U	20 U	20 U	20 U	
Dieldrin	0.4	0.02	8	20 U				
Endosulfan I	0.2	NP	NP	20 U				
Endosulfan II	0.2	NP	NP	20 U				
Endosulfan sulfate	0.4	NP	NP	20 U				
Endrin	0.4	0.02	45	20 U				
Endrin aldehyde	0.2	NP	NP	2 J	20 U	2 J	2 U	3 J
Endrin ketone	0.4	NP	NP	20 U				
gamma-BHC (lindane)	0.2	NP	NP	20 U				
Hepachlor	0.2	NP	NP	20 U				
Hepachlor epoxide	0.4	NP	NP	20 U				
Methoxychlor	1	NP	NP	40 U	40 U	40 U	4 U	40 U
Toxaphene	5	NP	NP	300 U	300 U	300 U	30 U	300 U

Notes:

- ^a shaded cells indicate value exceeds ERL
- ^b outline indicates value exceeds ERM
- ^c non-detects are included in summations at one-half the method detection limit

Acronyms/Abbreviations:

- BHC – benzene hexachloride
- DDD – dichlorodiphenyltrichloroethane
- DDE – dichlorodiphenyldichloroethene
- DDT – dichlorodiphenyltrichloroethane
- ERL – effects-range low
- ERM – effects-range median
- MDL – method detection limit
- NA – not applicable
- NP – not published

Review Qualifiers:

- J – estimated value
- U – compound not detected at or above the sample quantitation limit
- UJ – analyzed for but not detected above the sample quantitation limit and the quantitation limit is an estimated value

Table 5-8
Results of PAH Analyses of Surface Sediment
(results reported in micrograms per kilogram)

Analyte	MDL	ERL	ERM	Stratum 1, Upper Boat Channel								Stratum 2, Lower Boat Channel						
				SISU/ C001SS03	SISU/ C001SS32	SISU/ C001SS01	SISU/ C001SS34	SISU/ C001SS19	SISU/ C001SS02	SISU/ C001SS18	SISU/ C001SS04	SISU/ C001SS13	SISU/ C001SS14	SISU/ C001SS05	SISU/ C001SS06	SISU/ C001SS12	SISU/ C001SS08	
Acenaphthene	2	16	500	100 U	100 U	100 U	100 U	50 U	3 J	4 J	3 J	100 U	4 J	10 U	100 U	100 U	100 U	
Acenaphthylene	2	44	640	20 J	20 J	100 U	20 J	50 U	11	24	13	100 U	54	16	10 J	100 U	100 U	
Anthracene	1	85.3	1,100	40 J	40 J	20 J	40 J	8 J	27	56	30	30 J	50	23	51	10 J	30 J	
Fluorene	2	19	540	100 U	100 U	100 U	100 U	50 U	3 J	7 J	2 J	100 U	10 J	2 J	100 U	100 U	100 U	
Naphthalene	1	160	2,100	50 U	50 U	50 U	50 U	50 U	25 U	4 J	3 J	50 U	3 J	2 J	50 U	50 U	50 U	
Phenanthrene	2	240	1,500	70 J	70 J	100 U	53 J	20 J	70	72	54	70 J	140	38	150	20 J	110	
Total PAHs ^b	NA	552	3,160	130	132.5	132.5	132.5	115.5	24.5	31.5	166	105	103.5	371	82	204.5	42.5	143.5
Benz(a)anthracene	2	261	1,600	130	100	100	100	30 J	110	160	96	110	110	75	140	53	100 J	
Benz(a)pyrene	2	430	1,600	280	290	210	240	51	200	300	200	230	230	130	210	110	120	
Benz(b)fluoranthene	2	NP	NP	350	380	230	240	67	330	450	250	300	900	180	250	110	150	
Benz(e,h,i)perylene	1	NP	NP	220	130	170	51	130	110	170	110	110	210	74	130	120	130	
Benz(k)fluoranthene	2	NP	NP	290	320	200	250	56	200	220	180	250	550	120	220	110	140	
Chrysene	3	384	2,800	190	220	150	170	40 J	140	210	130	170	170	110	190	93	120	
Dibenz(a,b)anthracene	1	63.4	260	50 J	56	40 J	30 J	10 J	57	67	41	40 J	40 J	25	30 J	9 J	30 J	
Fluoranthene	2	600	5,100	270	290	170	230	68	260	270	210	260	490	160	76	130	320	
Indeno(1,2,3-d)pyrene	1	NP	NP	320	310	300	230	64	210	220	190	240	370	130	210	100	190	
Pyrene	3	240	2,600	1700	1700	170	240	170	260	270	220	260	300	150	390	89	140	
Total EPAHs ^b	NA	1,700	9,600	2,400	2,516	1,700	2,516	507	1,897	2,277	1,627	2,070	2,070	1,154	2,350	824	1,180	
Total PAHs ^b	NA	4,022	44,792	2,532.5	2,678.5	1,724.5	2,015.5	538.5	2,015	2,443	1,732	2,175.5	2,175.5	1,236	2,354.5	866.5	1,233.5	

(table continues)

Table 5-8 (continued)

Analyte	MDL	ERL	ERM	STRATUM 2, LOWER BOAT CHANNEL												
				S2S4/ C001SS07	S2S5/ C001SS09	S2S6/ C001SS15	S2S7/ C001SS16	S2S8/ C001SS17	S2S9/ C001SS10	S2S10/ C001SS21	S2S11/ C001SS26	S2S12/ C001SS35	S2S13/ C001SS22	S2S14/ C001SS11	S2S15/ C001SS23	
Acenaphthene	2	16	500	100 U	50 U	10 U	10 U	10 U	100 U	10 U	10 U	10 U	10 U	10 U	10 U	
Acenaphthylene	2	44	640	100 U	50 U	6 U	2 J	4 J	100 U	8 J	13	9 J	10 J	6 J	100 U	
Anthracene	1	85.3	1,100	30 J	10 J	11	5	9	10 J	15	13	20	22	16	30 J	
Fluorene	2	19	540	100 U	50 U	10 U	10 U	10 U	100 U	10 U	10 U	2 J	10 U	2 J	100 U	
Naphthalene	1	160	2,100	50 U	25 U	2 J	5 U	1 J	50 U	2 J	1 J	2 J	3 J	2 J	50 U	
Phenanthrene	2	240	1,500	60 J	40 J	18	9 J	3 J	100 U	22	19	24	27	22	30 J	
Total PAHs ^b	NA	552	5,160	93.5	53.5	39	18.5	47	14.5	49	48	58	64	49	63.5	
Benz(a)anthracene	2	261	1,600	90 J	40 J	39	19	34	40 J	52	57	71	75	60	80 J	
Benz(a)pyrene	2	430	1,600	170	68	72	35	57	80 J	100	100	120	130	110	160	
Benz(b)fluoranthene	2	NP	NP	210	93	96	52	80	100 J	130	130	160	170	130	170	
Benz(g,h,i)perylene	1	NP	NP	140	60	53	26	41	60	68	68	78	83	67	120	
Benz(k)fluoranthene	2	NP	NP	200	85	64	32	53	80 J	85	66	100	110	90	160	
Chrysene	3	384	2,800	160	60	57	26	49	60 J	74	69	99	110	96	140	
Dibenz(a,b)anthracene	1	63.4	260	30 J	10 J	15	8	14	10 J	21	24	23	27	23	20 J	
Fluoranthene	2	600	5,100	270	120	81	42	99	70 J	95	75	100	110	85	140	
Indeno(1,2,3-c,d)pyrene	1	NP	NP	200	88	90	45	71	94	120	230	140	150	120	150	
Pyrene	3	240	2,600	120	89	45	93	80 J	100	90	120	95	100	160	130	
Total PAHs ^b	NA	1,700	9,600	744	656	330	591	674	845	909	1,011	1,085	876	1,300	1,163	
Total PAHs ^b	NA	4,022	44,792	1,823.5	797.5	695	348.5	638	688.5	894	957	1,069	1,149	925	1,363.5	1,225

(table continues)

Table 5-3 (continued)

Analyte	MDL	ERL Values	STRATUM 3, REFERENCE AREA					
			S3S1/ C001SS30	S3S2/ C001SS30	S3S3/ C001SS31	S3S4/ C001SS31	S3S5/ C001SS27	S3S6/ C001SS28
Acenaphthene	2	16	500	10 U				
Acenaphthylene	2	44	640	4 J	5 J	5 J	9 J	4 J
Anthracene	1	85.3	1,100	9	10	12	22	21
Fluorene	2	19	540	10 U	3 J	3 J	3 J	3 J
Naphthalene	1	160	2,100	5 U	1 J	5 U	2 J	1 J
Phenanthrene	2	240	1,500	12	12	15	32	24
Total I-PAHs ^b	NA	552	3,160	27.5	32	36.5	69	54
Benz(a)anthracene	2	261	1,600	42	40	48	85	98
Benz(a)pyrene	2	430	1,600	54	55	61	110	130
Benz(b)fluoranthene	2	NP	73	78	78	78	130	140
Benz(g,h,i)perylene	1	NP	NP	26	25	30	47	55
Benz(k)fluoranthene	2	NP	NP	39	40	43	79	80
Carycene	3	384	2,800	49	54	59	110	110
Dibenz(4,1)anthracene	1	63.4	260	12	12	14	16 J	25
Fluoranthene	2	600	5,100	49	45	42	130	110
Indeno(1,2,3-c,d)pyrene	1	NP	NP	100	100	120	180 J	210
Pyrene	3	240	2,600	54	49	48	140	120
Total I-PAHs ^b	NA	1,700	9,600	498	498	543	1,027	1,078
Total PAHs ^b	NA	4,022	44,792	525.5	530	579.5	1,096	1,132

Notes:

^a shaded cells indicate value exceeds ERL^b nondetects are included in summations at one-half the MDL

Acronyms/Abbreviations:

ERL – effects-range low

ERM – effects-range median

I-PAH – high-molecular-weight polynuclear aromatic hydrocarbon

L-PAH – low-molecular-weight polynuclear aromatic hydrocarbon

MDL – method detection limit

NA – not applicable

NP – not published

PAH – polynuclear aromatic hydrocarbon

Review Qualifiers:

J – estimated value

U – compound not detected at or above the sample quantitation limit

Table 5-9
Results of Metals Analyses of Subsurface Sediment
 (results reported in milligrams per kilogram)

Analyte	ERM Values	STRATUM 1, UPPER BOAT CHANNEL																
		SAMPLING LOCATIONS/SAMPLE NUMBER/DEPTH																
S1S1/ C001SC34/ (0.5-3 ft)	S1S1/ C001SC35/ (3-7 ft)	S1S1/ C001SC36/ (0.5-2.5 ft)	S1S1/ C001SC37/ (2.5-7 ft)	S1S1/ C001SC38/ (0.5-2.5 ft)	S1S1/ C001SC39/ (0.5-3.5 ft)	S1S1/ C001SC40/ (3.5-7 ft)	S1S1/ C001SC41/ (0.5-3 ft)	S1S1/ C001SC42/ (3-7 ft)	S1S1/ C001SC43/ (0.5-2.3 ft)	S1S1/ C001SC44/ (2.3-7 ft)	S1S1/ C001SC45/ (0.5-2.4 ft)	S1S1/ C001SC46/ (2.4-7 ft)	S1S1/ C001SC47/ (0.5-4 ft)	S1S1/ C001SC48/ (4-7 ft)				
Aluminum	NP	32,300	4,700	26,900	3,890	32,600	5,640	15,400	34,200	3,450	18,900	15,100	23,400	2,100	22,600	7,760	41,660	
Antimony	2	25	0.08 J	0.04 UJ	0.04 UJ	0.04 UJ	0.04 J	0.04 UJ	0.06 J	0.04 UJ	0.06 J	0.04 UJ	0.04 UJ	0.04 UJ	0.04 UJ	0.04 UJ	0.26 J	
Arsenic	8.2	70	7	0.6	5	1	5	2	3	5	1	5	3	4	0.3	4	2	6
Barium	NP	177	31.9	114	22	118	41.6	67.6	127	30.3	87.6	89.9	131	12.9	119	54.7	159	
Beryllium	NP	0.9	0.04	0.53	0.13	0.34	0.13	0.32	0.54	0.08	0.43	0.33	0.53	0.04 U	0.47	0.04 U	0.74	
Cadmium	1.2	9.6	0.95	0.04 U	0.13	0.04 U	0.16	0.25	0.15	0.93	0.05	0.26	0.04 U	0.52	0.05	0.45	1.12	
Chromium	81	370	67.5	8.9	32.8	11.4	34.7	16.5	23.3	55.9	9.5	30.2	33.2	55.1	4.8	36.9	12.8	
Cobalt	NP	12.5	2.08	7.64	2.25	8.09	2.8	4.89	8.14	2.84	6.46	7.48	8.33	1.09	7.43	4	9.95	
Copper	34	270	1.8	4.1	18.5	4.6	19.8	9.2	12.1	28.4	5.2	22.4	16.7	2.1	23	7.2	43.300	
Iron	NP	41,700	5,810	31,500	5,760	35,400	8,300	17,200	37,500	5,170	21,700	25,800	33,000	2,970	28,100	131,100	5,777	
Lead	46.7	218	6.2	1.4	9.48	1.61	10.1	17.1	8.9	41.5	2.19	32.4	3.91	0.72	35.3	1.38	274	
Manganese	NP	304	43	220	40	235	54	108	260	39	130	181	261	18	199	116	274	
Mercury	0.15	0.71	0.2	0.2 U	0.07	0.2 U	0.08	0.06	0.06	0.2 U	0.03	0.2 U	0.04	0.2 U	0.02	0.2 U	0.2 U	
Nickel	20.9	51.6	18	3.4	10.6	4	11	3.9	7	12.2	3.3	9.9	9.1	13.2	1.5	10.5	3.8	
Selenium	NP	3	0.8	1	0.6	2	0.6	1	0.07	0.9	0.04 U	1	2	2 U	2	2 U	0.7	
Silver	1	3.7	0.22	0.03	0.1	0.02	0.11	0.21	0.07	0.9	0.17	0.04 U	0.13	0.41	0.04 U	0.04 U	1.25	
Thallium	NP	0.7	0.08	0.48	0.09	0.51	0.13	0.27	0.48	0.1	0.37	0.41	0.48	0.04	0.44	0.17	0.62	
Vanadium	NP	101	16.4	65.3	24.5	69.7	24.2	43.5	67.5	19.3	56.9	73.3	66.9	10.7	61.5	29.2	81.6	
Zinc	150	410	139	13	58	14	63	33	40	103	17	79	53	128	6	85	25	

(table continues)

Table 5-9 (continued)

Analyte	ERM Values	STRATUM 1, UPPER BOAT CHANNEL						STRATUM 2, LOWER BOAT CHANNEL						SAMPLING LOCATION/SAMPLE NUMBER/DEPTH				
		SAMPLING LOCATION/SAMPLE NUMBER/DEPTH			SAMPLING LOCATION/SAMPLE NUMBER/DEPTH			SAMPLING LOCATION/SAMPLE NUMBER/DEPTH			SAMPLING LOCATION/SAMPLE NUMBER/DEPTH			SAMPLING LOCATION/SAMPLE NUMBER/DEPTH				
		S1S9/ C001SC52/ (3.8-6.8 ft)	S1S9/ C001SC53/ (0.5-3.3 ft)	S1S9/ C001SC54/ (3.8-6.5 ft)	S1S10/ C001SC55/ (0.5-3 ft)	S1S10/ C001SC56/ (3-7 ft)	S2S1/ (0.5-4 ft)	S2S1/ (4-7 ft)	S2S1/ (0.5-4 ft)	S2S1/ (4-7 ft)	S2S2/ C001SC17/ (0.5-3 ft)	S2S2/ C001SC27/ (0.5-3 ft)	S2S3/ C001SC57/ (4-7 ft)	S2S3/ C001SC67/ (0.5-3 ft)	S2S4/ C001SC59/ (0.5-3 ft)	S2S4/ C001SC69/ (0.5-3 ft)	S2S5/ C001SC61/ (3-7 ft)	S2S5/ C001SC63/ (0.5-3 ft)
Aluminum	NP	6,560	30,000	9,660	44,100	14,000	35,200	16,400	28,200	7,990	35,100	5,340	21,200	3,630	48,500	50,400	20,900	
Antimony	2	25	0.04 UJ	0.11 J	0.04 UJ	0.04 J	0.04 UJ	0.04 UJ	0.04 UJ	R	0.11 J	0.04 UJ	0.08 J	0.04 UJ	0.1 J	0.1 J	0.07 J	
Arsenic	8.2	70	1	4	2	7	2	7	5	R	1	4	2	4	0.8	6	4	
Barium	NP	34	116	45	151	63	145	123	151	56.9	134	48	101	22	116	127	115	
Beryllium	NP	0.14	0.59	0.14	0.8	0.23	0.8	0.42	0.7	0.16	0.59	0.17	0.43	0.07	0.79	0.79	0.54	
Cadmium	1.2	9.6	0.04 U	0.23	0.04 U	0.47	0.04 U	0.3	0.12	0.3	0.04 U	0.19	0.04 U	0.21	0.04 U	0.21	0.18	
Chromium	81	370	7.8	32.5	11.1	52.8	17.9	52	30.7	47	14.4	35.7	12.6	29.5	8.7	38	32.8	
Cobalt	NP	2.54	8.22	3.57	12.2	4.87	12.7	8.59	12	5.53	9.17	4.09	6.82	1.86	9.51	10.5	8.65	
Copper	34	270	4.4	17.6	5.4	32.6	8.8	29.9	18.1	27.8	20.9	19.6	6.7	15.5	2.8	17.6	18.1	
Iron	NP	8,620	33,900	13,000	44,500	19,300	43,400	24,800	37,000	10,200	37,700	8,910	25,300	6,940	47,900	49,600	27,800	
Lead	46.7	218	1.86	13.3	1.39	26.5	2.21	13.8	5.96	13.5	2.79	10.3	2.54	8.93	1.85	10.6	8.99	
Manganese	NP	45	217	89	284	126	314	212	281	81	253	60	176	44	337	347	269	
Mercury	0.15	0.71	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.04	0.03	0.09	0.2 U	0.07	0.2 U	0.07	0.07	
Nickel	20.9	51.6	3	10.1	3.6	16.8	5.8	16	9.6	15	4.8	11.6	4.1	8.5	3	14	13.8	
Selenium	NP	2 U	2 U	2 U	4 U	2 U	4 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Silver	1	3.7	0.04 U	0.26	0.01 U	0.3	0.02 U	0.18	0.06	0.27	0.1	0.13	0.04 U	0.16	0.04 U	0.08 U	0.1 U	
Thallium	NP	0.09	0.5	0.14	0.63	0.22	0.7	0.47	0.7	0.18	0.55	0.16	0.37	0.07	0.59	0.55	0.46	
Vanadium	NP	19.4	59.4	27.1	97.6	43.3	98	66.1	89	31.5	66.9	30.2	52.9	16.1	64.8	70.1	61.6	
Zinc	150	410	13	58	19	104	34.5	90	54	89	24	60	22	49	10	64	54	

(table continues)

Table 5-9 (continued)

STRATUM 2, LOWER BOAT CHANNEL																	
Analyte	ERL Values	SAMPLING LOCATION/SAMPLE NUMBER/DEPTH															
		S2S6/ C001SC64/ (3-7 ft)	S2S7/ C001SC65/ (0.5-3 ft)	S2S8/ C001SC66/ (3-7 ft)	S2S9/ C001SC32/ (0.5-5.5 ft)	S2S8/ C001SC33/ (5.5-7 ft)	S2S9/ C001SC30/ (0.5-3 ft)	S2S9/ C001SC31/ (3-7 ft)	S2S10/ C001SC28/ (0.5-3 ft)	S2S10/ C001SC29/ (3-7 ft)	S2S11/ C001SC24/ (0.5-3.5 ft)	S2S11/ C001SC25/ (3.5-7 ft)	S2S12/ C001SC22/ (0.5-3.5 ft)	S2S12/ C001SC23/ (3-7 ft)	S2S13/ C001SC21/ (0.5-3.5 ft)	S2S13/ C001SC18/ (0.5-4 ft)	
Aluminum	NP	20,900	17,300	37,700	26,200	2,680	15,900	9,580	28,400	10,900	13,800	23,100	8,560	27,600	12,200	33,600	
Antimony	2	25	0.04 UJ	0.16 J	0.09 J	R	R	0.04 J	R	R	R	R	R	R	R	0.03 J	
Arsenic	8.2	70	3	4	5	7	0.9	5	3	7	3	6	3	4	6	6	
Barium	NP	4,050	112	151	142	17.1	90.1	65.4	145	68.2	113	100	88.7	148	99.4	127	131
Beryllium	NP	0.11	0.38	0.66	0.69	0.06	0.35	0.23	0.7	0.24	0.2	0.7	0.18	0.51	0.2	0.27	0.58
Cadmium	1.2	9.6	0.04 U	0.75	0.34	0.28	0.04 U	0.78	0.21	0.2	0.06	0.25	0.2	0.05	0.16	0.36	0.38
Chromium	81	370	9.5	47.7	45.6	44	5.3	46.6	21.6	45	17.4	30.5	16	15	36	31.1	34.6
Cobalt	NP	4.3	6.5	9.86	12.7	2.67	5.92	4.37	12	5.02	6.63	31.1	5.1	9.91	5.96	7.77	10.1
Copper	34	270	4.4	31.2	22.6	26.9	4.7	33.1	11.1	27.1	9.4	14.8	19	8.5	20.8	17.3	15.5
Iron	NP	7,150	23,500	40,700	35,600	4,550	21,400	13,700	36,200	15,000	18,600	30,900	12,200	34,600	17,700	22,100	39,700
Lead	46.7	218	1.61	32.9	12.9	12.1	1.15	32.5	6.4	12.4	3.15	7	10.6	2.72	9.83	10.5	15.6
Manganese	NP	62	162	272	306	39	150	115	273	120	167	301	112	272	153	194	278
Mercury	0.15	0.71	0.2 U	0.1	0.1	0.2 U	0.09	0.09	0.1	0.03	0.03	0.08	0.02	0.04	0.01	0.07	0.02
Nickel	20.9	51.6	4.3	10.4	12.7	14	2.2	9.4	4.9	14	5.6	6.9	11	4.9	10.9	6.5	7.6
Selenium	NP	2.0	2.0	2.0	4 U	2 U	2 U	2 U	4 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U
Silver	1	3.7	0.04 U	0.29	0.4	0.24	0.02	0.13	0.36	0.19	0.03	0.22	0.1	0.08	0.11	0.43	0.16
Thallium	NP	0.12	0.44	0.63	0.6	0.06	0.42	0.25	0.7	0.26	0.37	0.6	0.27	0.64	0.35	0.42	0.63
Vanadium	NP	20.7	49	74.5	90	15.6	47.5	34.7	91	37.5	42.8	66	33.5	73.1	51.2	77.8	75
Zinc	150	410	16	100	72	76	9	102	36	83	31	52	62	29	65	58	52

(table continues)

Table 5-9 (continued)

Analyte	ERL Values	STRATUM 2, LOWER BOAT CHANNEL						STRATUM 3, REFERENCE AREA					
		SAMPLING LOCATION/SAMPLE NUMBER/DEPTH			SAMPLING LOCATION/SAMPLE NUMBER/DEPTH			SAMPLING LOCATION/SAMPLE NUMBER/DEPTH			SAMPLING LOCATION/SAMPLE NUMBER/DEPTH		
		S2S14/ C001SC19/ (4-7 ft)	S2S15/ C001SC14/ (0.5-3 ft)	S2S16/ C001SC11/ (3-7 ft)	S2S17/ C001SC12/ (3-7 ft)	S3S1/ C001SC07/ (3 ft)	S3S1/ C001SC08/ (0.5-2.5 ft)	S3S2/ C001SC05/ (0.5-4 ft)	S3S3/ C001SC09/ (0.5-4 ft)	S3S4/ C001SC10/ (4-7 ft)	S3S4/ C001SC03/ (0.5-3 ft)	S3S5/ C001SC04/ (3-7 ft)	S3S5/ C001SC01/ (0.5-3 ft)
Aluminum	NP	10,900	26,100	7,640	8,710	8,050	8,040	14,900	4,750	5,220	6,540	3,780	11,100
Antimony	2	25	R	0.04 UJ	0.04 UJ	0.04 UJ	0.04 UJ	0.04 UJ	0.04 UJ	0.04 UJ	0.04 UJ	0.04 UJ	0.04 UJ
Arsenic	8.2	70	5	7	2	3	4	2	3	2	1	4	0.4
Bartium	NP	NP	75.9	148	51.3	64.8	55.5	62	97	49.4	45.6	38.8	74.6
Beryllium	NP	0.25	0.7	0.16	0.31	0.25	0.22	0.35	0.15	0.16	0.22	0.12	0.12
Cadmium	1.2	9.6	0.07	0.3	0.04	0.18	0.04 U	0.02	0.04 U	0.21	0.04 U	0.09	0.38
Chromium	81	370	18.3	48	13	22.2	16.6	17.6	24.9	12.8	16.1	11	8.1
Cobalt	NP	6.88	12.2	3.4	5.19	6.33	7.57	6.68	3.62	3.49	3.97	2.85	5.35
Copper	34	270	10.2	31.3	6.1	16.1	10	9.9	14.4	6.8	13.9	8.1	5
Iron	NP	14,500	36,200	11,100	13,700	13,800	16,400	22,200	9,580	8,930	10,900	6,690	3,050
Lead	46.7	218	4.04	13	1.88	9.51	2.51	2.53	4.33	1.32	7.38	2.56	3.83
Manganese	NP	NP	120	284	95	109	102	112	156	57	76	52	26
Mercury	0.15	0.71	0.04	0.1	0.2 U	0.07	0.2 U	0.02	0.2 U	0.2 U	0.2 U	0.04	0.2 U
Nickel	20.9	51.6	6.4	15	4.1	5.6	6.4	7	3.8	4.4	5.1	3.5	3.1
Selenium	NP	NP	2 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Silver	1	3.7	0.05	0.31	0.016	0.31	0.07	0.013	0.04 U	0.21	0.07	0.02	0.31
Thallium	NP	NP	0.3	0.6	0.22	0.31	0.22	0.25	0.34	0.14 U	0.23	0.18	0.15 U
Vanadium	NP	40.4	91	27.5	40.9	45	55.9	56.7	40.1	25.7	42.9	26.3	22.4
Zinc	150	410	35	91	25	50	28	29	40	19	46	26	21

Note: * shading indicates value exceeds ERL.

Acronyms/Abbreviations:

ERL – effects-range low
 ERM – effects-range median
 ft – foot
 NP – not published

Review Qualifiers:

J – estimated value
 R – data deemed unusable during validation process
 U – compound not detected at or above the sample quantitation limit and the quantitation limit is an estimated value
 UJ – analyzed for but not detected above the sample's quantitation limit and the quantitation limit is an estimated value

Table 5-10
Results of Organotin Analyses of Subsurface Sediment
 (results reported in micrograms per kilogram)

		STRATUM 1, UPPER BOAT CHANNEL								
		SAMPLING LOCATION/SAMPLE NUMBER/DEPTH								
Analyte		S1S1/ C001SC34/ (0.5-3 ft)	S1S1/ C001SC35/ (3-7 ft)	S1S2/ C001SC36/ (0.5-2.5 ft)	S1S2/ C001SC38/ (0.5-2.5 ft)	S1S3/ C001SC37/ (2.5-7 ft)	S1S3/ C001SC39/ (0.5-3.5 ft)	S1S3/ C001SC40/ (3.5-7 ft)	S1S4/ C001SC47/ (0.5-3 ft)	S1S4/ C001SC48/ (3-7 ft)
Dibutyltin	4	0.9 J	1 U	0.6 J	1 U	5	1 U	1	1 U	
Tributyltin	3 U	3 U	5 U	3 U	3 U	3 U	3 U	3 U	3 U	
Tributyltin	2	0.6 J	1 U	1 U	1 U	0.9 J	0.5 J	1	1 U	

		STRATUM 1, UPPER BOAT CHANNEL								
		SAMPLING LOCATION/SAMPLE NUMBER/DEPTH								
Analyte		S1S5/ C001SC43/ (0.5-2.3 ft)	S1S5/ C001SC44/ (2.3-7 ft)	S1S6/ C001SC45/ (0.5-2.4 ft)	S1S6/ C001SC46/ (2.4-7 ft)	S1S7/ C001SC49/ (0.5-4 ft)	S1S7/ C001SC50/ (4-7 ft)	S1S8/ C001SC51/ (0.5-3.8 ft)	S1S8/ C001SC52/ (3.8-6.8 ft)	S1S9/ C001SC53/ (0.5-3.8 ft)
Dibutyltin	1	2	1	1 U	2	1 U	4	1 U	2	
Tributyltin	1	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	
Tributyltin	1 U	1 U	1	1 U	1	1 U	3	1 U	0.7 J	

		STRATUM 2, LOWER BOAT CHANNEL								
		SAMPLING LOCATION/SAMPLE NUMBER/DEPTH								
Analyte		S1S9/ C001SC54/ (3.8-6.5 ft)	S1S10/ C001SC55/ (0.5-3 ft)	S2S1/ C001SC56/ (3-7 ft)	S2S1/ C001SC16/ (0.5-4 ft)	S2S1/ C001SC17/ (4-7 ft)	S2S2/ C001SC26/ (0.5-4 ft)	S2S2/ C001SC27/ (4-7 ft)	S2S3/ C001SC57/ (0.5-3.8 ft)	S2S3/ C001SC58/ (3.8-7 ft)
Dibutyltin	1 U	1	1 U	1	1 U	2	0.5 J	1 U	1 U	
Tributyltin	3 U	3 U	3 U	1 J	3 U	3 U	3 U	3 U	3 U	
Tributyltin	1 U	0.9 J	1 U	1 U	1 U	0.7 J	0.4 J	1 U	1 U	

(table continues)

Table 5-10 (continued)

STRATUM 2, LOWER BOAT CHANNEL							
SAMPLING LOCATION/SAMPLE NUMBER/DEPTH							
	S2S4/ C001SC59/ (0.5–3.5 ft)	S2S4/ C001SC60/ (3.5–7 ft)	S2S5/ C001SC61/ (0.5–3 ft)	S2S6/ C001SC62/ (3–7 ft)	S2S6/ C001SC63/ (0.5–3 ft)	S2S7/ C001SC64/ (3–7 ft)	S2S8/ C001SC32/ (0.5–5.5 ft)
Dibutyltin	0.6 J	1 U	1 U	1 U	1 U	1 U	2
Tetrabutyltin	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Tributyltin	1 U	1 U	1 U	0.5 J	1 U	0.5 J	1 U

STRATUM 2, LOWER BOAT CHANNEL							
SAMPLING LOCATION/SAMPLE NUMBER/DEPTH							
	S2S9/ C001SC33/ (5.5–7 ft)	S2S9/ C001SC30/ (0.5–3 ft)	S2S10/ C001SC31/ (3–7 ft)	S2S10/ C001SC28/ (0.5–3 ft)	S2S11/ C001SC29/ (3–7 ft)	S2S11/ C001SC24/ (0.5–3.5 ft)	S2S12/ C001SC25/ (3–7 ft)
Dibutyltin	1 U	9	1 U	0.6 J	1 U	1	1 U
Tetrabutyltin	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Tributyltin	1 U	0.7 J	1 U	0.5 J	1 U	0.7 J	1 U

STRATUM 2, LOWER BOAT CHANNEL							
SAMPLING LOCATION/SAMPLE NUMBER/DEPTH							
	S2S13/ C001SC20/ (0.5–3.5 ft)	S2S14/ C001SC21/ (3.5–7 ft)	S2S14/ C001SC18/ (0.5–4 ft)	S2S14/ C001SC19/ (4–7 ft)	S2S15/ C001SC14/ (0.5–3 ft)	S2S15/ C001SC15/ (3–7 ft)	S2S16/ C001SC11/ (0.5–3 ft)
Dibutyltin	2	1 U	3	1 U	1 J	1 U	2
Tetrabutyltin	3 U	3 U	3 U	.5 J	3 U	3 U	0.8 J
Tributyltin	1 U	1 U	0.6 J	1 U	1 U	0.7 J	1 U

(table continues)

Table 5-10 (continued)

		STRATUM 3, REFERENCE AREA									
		SAMPLING LOCATION/SAMPLE NUMBER/DEPTH									
Analyte		S3S1/ C001SC07/ (0.5–2.5 ft)	S3S1/ C001SC08/ (2.5–7 ft)	S3S2/ C001SC05/ (0.5–4 ft)	S3S2/ C001SC06/ (4–7 ft)	S3S3/ C001SC09/ (0.5–4 ft)	S3S3/ C001SC10/ (4–7 ft)	S3S4/ C001SC03/ (0.5–3 ft)	S3S4/ C001SC04/ (0.5–3 ft)	S3S5/ C001SC01/ (3–7 ft)	S3S5/ C001SC02/ (0.5–3 ft)
Dibutyltin	1 U	1 U	3	1 U	6	1 U	2	0.7 J	2	2	1 U
Tetrabutyltin	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Tributyltin	0.5 J	1 U	0.6 J	1 U	2	1 U	0.7 J	0.9 J	0.4 J	0.4 J	1 U

Acronym/Abbreviation:
ft – foot

Review Qualifiers:
J – estimated value
U – compound not detected at or above the sample quantitation limit

Section 5 Nature and Extent

Table 5-11
Results of Sulfide Analyses of Subsurface Sediment
(results reported in milligrams per kilogram as dry weight)

UPPER INTERVAL				LOWER INTERVAL			
Station	Sample ID	Depth Interval (feet)	Sulfide	Station	Sample ID	Depth Interval (feet)	Sulfide
Stratum 1, Upper Boat Channel							
S1S1	C001SC34	0.5-3	176 J	S1S1	C001SC35	3-7	29.9
S1S2	C001SC36	0.5-2.5	32.4 J	S1S2	C001SC37	2.5-7	1.6 J
S1S2	C001SC38	0.5-2.5	5.8 J	—	—	—	—
S1S3	C001SC39	0.5-3.5	4.3 J	S1S3	C001SC40	3.5-7	4.9 J
S1S4	C001SC47	0.5-3	R	S1S4	C001SC48	3-7	1.4 J
S1S5	C001SC43	0.5-2.3	64.6 J	S1S5	C001SC44	2.3-7	2.3 J
S1S6	C001SC45	0.5-2.4	141 J	S1S6	C001SC46	2.4-7	2.9 J
S1S7	C001SC49	0.5-4	22.4 J	S1S7	C001SC50	4-7	2.4 J
S1S8	C001SC51	0.5-3.8	249	S1S8	C001SC52	3.8-6.8	2.1
S1S9	C001SC53	0.5-3.8	7.7 J	S1S9	C001SC54	3.8-6.5	1.5
S1S10	C001SC55	0.5-3	25	S1S10	C001SC57	3-7	4.8
Stratum 2, Lower Boat Channel							
S2S1	C001SC16	0.5-4	33.3	S2S1	C001SC17	4-7	5.8
S2S2	C001SC26	0.5-4	10.3	S2S2	C001SC27	4-7	2
S2S3	C001SC57	0.5-3.8	33.1	S2S3	C001SC58	3.8-7	1.4
S2S4	C001SC59	0.5-3.5	4.7	S2S4	C001SC60	3.5-7	6.8
S2S5	C001SC61	0.5-3	10.6	S2S5	C001SC62	3-7	8.1
S2S6	C001SC63	0.5-3	5.5	S2S6	C001SC64	3-7	1.6
S2S7	C001SC65	0.5-3	83.8	S2S7	C001SC66	3-7	22.8
S2S8	C001SC32	0.5-5.5	0.5 U	S2S8	C001SC33	5.5-7	17.8
S2S9	C001SC30	0.5-3	41.4	S2S9	C001SC31	3-7	156
S2S10	C001SC28	0.5-3	22.4	S2S10	C001SC29	3-7	1
S2S11	C001SC24	0.5-3.5	27.8	S2S11	C001SC25	3.5-7	38.3
S2S12	C001SC22	0.5-3.5	18.9	S2S12	C001SC23	3.5-7	0.9
S2S13	C001SC20	0.5-3.5	62.9	S2S13	C001SC21	3.5-7	48.7
S2S14	C001SC18	0.5-4	33	S2S14	C001SC19	4-7	35
S2S15	C001SC14	0.5-3	12.1	S2S15	C001SC15	3-7	3.7
S2S16	C001SC11	0.5-3	13.1	S2S16	C001SC12	3-7	1.7
—	—	—	—	S2S16	C001SC13	3-7	1.1

(table continues)

Section 5 Nature and Extent

Table 5-11 (continued)

UPPER INTERVAL				LOWER INTERVAL			
Station	Sample ID	Depth Interval (feet)	Sulfide	Station	Sample ID	Depth Interval (feet)	Sulfide
Stratum 3, Reference Area							
S3S1	C001SC07	0.5–2.5	0.5	S3S1	C001SC08	2.5–7	0.6
S3S2	C001SC05	0.5–4	33.4	S3S2	C001SC09	4–7	0.6
S3S3	C001SC09	0.5–4	25.4	S3S3	C001SC10	4–7	0.5 U
S3S4	C001SC03	0.5–3	54.4	S3S4	C001SC04	3–7	4.7
S3S5	C001SC01	0.5–3	75.9	S3S5	C001SC02	3–8	1

Review Qualifiers:

J – estimated value

R – data rejected during validation process

U – compound or element was analyzed for but not detected at or above the sample quantitation limit

The 4,4'-DDE concentrations exceeding the ERL of 2.2 µg/kg were reported in the upper subsurface sediment sample interval at stations S1S1, S1S6, S1S7, S1S8, S1S10, S2S9, and S2S10. The total DDT concentrations exceeding the ERL of 1.58 µg/kg were reported in the upper subsurface sediment sample interval at stations S1S1, S1S3, S1S4, S1S5, S1S6, S1S7, S1S8, S1S9, S1S10, S2S7, S2S9, S2S10, and S2S13.

The total chlordane concentrations exceeding the ERL of 0.5 µg/kg were reported in all subsurface sediment sample intervals.

The ERM for 4,4'-DDE of 27 µg/kg was exceeded in the upper subsurface sediment sample interval at stations S2S9 and S2S10.

The ERM for total DDTs of 46.1 µg/kg was exceeded in the upper subsurface sediment sample interval from stations S1S1, S1S6, S1S7, S1S10, S2S9, and S2S10 and the lower subsurface sediment sample interval at station S2S11. Concentrations of total chlordane exceeded the ERM in the upper subsurface sediment sample interval at station S1S1.

5.5.6 Semivolatile Organic Compounds

The ERL values for pyrene and total HPAHs were exceeded in the upper subsurface sediment interval at station S1S8. The results of the PAH analyses are presented in Table 5-14.

5.6 SURFACE WATER CHEMISTRY

During low tide, surface water samples were collected with a Valscon sampler from nine stations at 1 foot below the water surface. This section describes the results of the chemical analyses of surface water samples. At the stations where duplicate samples were collected, both results are presented in tables; however, only the highest reported concentration is discussed in the text. Analytical results are included in Appendix G.

Table 5-12
Results of PCB Analyses of Subsurface Sediment
 (results reported in micrograms per kilogram)

Analyte	MDL	ERL	ERM	STRATUM 1, UPPER BOAT CHANNEL							
				S1S1/ C001SC34/ (0.5-3 ft)	S1S1/ C001SC35/ (3-7 ft)	S1S2/ C001SC36/ (0.5-2.5 ft)	S1S2/ C001SC37/ (0.5-2.5 ft)	S1S3/ C001SC39/ (0.5-3.5 ft)	S1S3/ C001SC40/ (3.5-7 ft)	S1S4/ C001SC47/ (0.5-3 ft)	
PCB-8 (2,4') ^a	0.4	NP	NP	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
PCB-18 (2,2',5) ^a	0.2	NP	NP	1 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
PCB-28 (2,4,4') ^a	0.09	NP	NP	1	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U	0.5 U
PCB-44 (2,2',3,5) ^a	0.07	NP	NP	2.7	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U	1.2
PCB-52 (2,2',5,5) ^a	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5	0.5 U	0.5 U	1.7
PCB-60	0.3	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	2 U
PCB-66 (2,3',4,4') ^a	0.09	NP	NP	7.3	0.5 U	0.5 U	0.5 U	0.5 U	1.1	0.5 U	3.4
PCB-77 (3,3',4,4')	0.3	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-81	0.06	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
PCB-87	0.07	NP	NP	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.5
PCB-90	0.2	NP	NP	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-101 (2,2',4,5,5) ^a	0.2	NP	NP	6.6	0.5 U	0.5 U	0.5 U	0.5 U	0.9	0.5 U	3.3
PCB-105 (2,3,3',4,4') ^a	0.4	NP	NP	2.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1
PCB-114	0.1	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-118 (2,3',4,4',5) ^a	0.07	NP	NP	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7	0.5 U	2.5
PCB-123	0.07	NP	NP	0.9 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J
PCB-126 (3,3',4,4',5)	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-128 (2,2',3,3',4,4') ^a	0.2	NP	NP	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.7
PCB-138 (2,2',3,4,4',5) ^a	0.3	NP	NP	9.8	0.5 U	0.5 U	0.5 U	0.5 U	1.3	0.5 U	5.3
PCB-153 (2,2',4,4',5,5) ^a	0.2	NP	NP	6.4	0.5 U	0.5 U	0.5 U	0.5 U	1	0.5 U	3.7
PCB-156	0.09	NP	NP	0.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5
PCB-157	0.07	NP	NP	1.2	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U	0.3 J
PCB-158	0.07	NP	NP	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5
PCB-166	0.1	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

(table continues)

Table 5-12 (continued)

Analyte	MDL	ERL Values	STRATUM 1, UPPER BOAT CHANNEL SAMPLING LOCATION/SAMPLE NUMBER/DEPTH							
			S1S1/ C001SC34/ (0.5 - 3 ft)	S1S1/ C001SC35/ (3 - 7 ft)	S1S2/ C001SC36/ (0.5 - 2.5 ft)	S1S2/ C001SC38/ (0.5 - 2.5 ft)	S1S3/ C001SC39/ (0.5 - 3.5 ft)	S1S3/ C001SC40/ (3.5 - 7 ft)	S1S4/ C001SC41/ (0.5 - 3 ft)	
PCB-167	0.2	NP	NP	1.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-169	0.09	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-170 (2,2',3,3',4,4',5) ^a	0.3	NP	NP	2.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.5
PCB-180 (2,2',3,4,4',5,5) ^a	0.3	NP	NP	3.7	0.5 U	0.5 U	0.5 U	0.5 U	0.7	0.5 U
PCB-183	0.08	NP	NP	1.2	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U
PCB-184	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-187 (2,2',3,4',5,5',6) ^a	0.2	NP	NP	2.5	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U
PCB-189	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-195 (2,2',3,3',4,4',5,6) ^a	0.07	NP	NP	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J
PCB-206 (2,2',3,3',4,4',5,5',6) ^a	0.07	NP	NP	0.9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6
PCB-209 (decachlorobiphenyl) ^a	0.08	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total PCBs ^b	NA	22.7	180	95.82	3.31	3.31	3.31	16.12	3.31	60.77

(table continues)

Table 5-12 (continued)

Analyte	MDL	ERL Values	STRATUM 1, UPPER BOAT CHANNEL								
			SAMPLING LOCATION/SAMPLE NUMBER/DEPTH		S1S5/ C001SC43/ (0.5-2.3 ft)		S1S6/ C001SC44/ (2.3-7 ft)		S1S7/ C001SC49/ (0.5-4 ft)		S1S8/ C001SC50/ (4-7 ft)
PCB-8 (2,4') ^a	0.4	NP	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.8 U
PCB-18 (2,2',5) ^a	0.2	NP	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.7 U
PCB-28 (2,4,4') ^a	0.09	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.4 J	0.5 U	0.8 U
PCB-44 (2,2',3,5) ^a	0.07	NP	0.5 U	0.1 J	0.5 U	0.5 U	0.5 U	0.5 U	1	0.5 U	1.6
PCB-52 (2,2',5,5) ^a	0.07	NP	0.5 U	0.1 J	0.5 U	0.5 U	0.5 U	0.5 U	1.5	0.5 U	2 U
PCB-60	0.3	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1 U	0.5 U	2.3 U
PCB-66 (2,3',4,4') ^a	0.09	NP	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	2.5	0.5 U	4.1
PCB-77 (3,3',4,4')	0.3	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	7.4 U
PCB-81	0.06	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-87	0.07	NP	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	1.2	0.5 U	4 U
PCB-90	0.2	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U
PCB-101 (2,2',4,5,5) ^a	0.2	NP	0.5 U	0.4 J	0.5 U	0.5 U	3.7	0.5 U	2.5	0.5 U	4.5
PCB-105 (2,3,3',4,4') ^a	0.4	NP	0.5 U	0.5 U	0.5 U	0.5 U	1.3	0.5 U	0.8	0.5 U	1.7
PCB-114	0.1	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U
PCB-118 (2,3',4,4',5) ^a	0.07	NP	0.5 U	0.1 J	0.5 U	0.6	0.5 U	0.5 U	1.8	0.5 U	3.2
PCB-123	0.07	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U
PCB-126 (3,3',4,4',5)	0.2	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
PCB-128 (2,2',3,3',4,4') ^a	0.2	NP	0.5 U	0.5 U	0.5 U	0.5 U	1	0.5 U	0.6	0.5 U	0.8
PCB-138 (2,2',3,4,4',5) ^a	0.3	NP	0.5 U	0.4 J	0.5 U	6.4	0.5 U	3.7	0.5 U	3.7	7.6
PCB-153 (2,2',4,4',5,5) ^a	0.2	NP	0.5 U	0.3 J	0.5 U	3	0.5 U	2.4	0.5 U	4	
PCB-156	0.09	NP	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.4 J	0.5 U	0.5 U	1
PCB-157	0.07	NP	0.5 U	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-158	0.07	NP	0.5 U	0.5 U	0.5 U	0.6	0.5 U	0.4 J	0.5 U	0.5 U	0.6
PCB-166	0.1	NP	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

(table continues)

Table 5-12 (continued)

Analyte	MDL Values	ERL Values	ERM Values	STRATUM 1, UPPER BOAT CHANNEL SAMPLING LOCATION/SAMPLE NUMBER/DEPTH								
				S1S4/ C001SC48/ (3-7 ft)	S1S5/ C001SC48/ (0.5-2.3 ft)	S1S5/ C001SC43/ (2.3-7 ft)	C001SC44/ (2.3-7 ft)	S1S6/ C001SC45/ (0.5-2.4 ft)	S1S6/ C001SC46/ (2.4-7 ft)	S1S7/ C001SC49/ (0.5-4 ft)	S1S7/ C001SC50/ (4-7 ft)	S1S8/ C001SC51/ (0.5-3.8 ft)
PCB-167	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.8
PCB-169	0.09	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-170 (2,2',3,3',4,4',5) ^a	0.3	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	0.5 U	0.8	0.5 U	1
PCB-180 (2,2',3,4,4',5,5') ^a	0.3	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	1.7	0.5 U	1.5	0.5 U	2.4
PCB-183	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U	0.4 J	0.5 U	0.4 J
PCB-184	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-187 (2,2',3,4',5,5',6) ^a	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	1.1	0.5 U	1	0.5 U	1.9
PCB-189	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-195 (2,2',3,3',4,4',5,6) ^a	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U
PCB-206 (2,2',3,3',4,4',5,5',6) ^a	0.07	NP	NP	0.5 U	0.07 J	0.5 U	0.7	0.5 U	0.4 J	0.5 U	0.5 U	0.7 U
PCB-209 (decachlorobiphenyl) ^a	0.08	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total PCBs ^b	NA	22.7	180	3.31	5.78	3.31	3.31	3.31	3.31	3.31	3.31	3.31

(Table continues)

Table 5-12 (continued)

Analyte	MDL Values	ERL Values	STRATUM 1, UPPER BOAT CHANNEL						STRATUM 2, LOWER BOAT CHANNEL					
			S1S8/ C001SC52/ (3.8–6.8 ft)	S1S9/ C001SC53/ (0.5–3.8 ft)	S1S9/ C001SC54/ (3.8–6.5 ft)	S1S10/ C001SC55/ (0.5–3 ft)	S1S10/ C001SC56/ (3–7 ft)	S2S1/ C001SC16/ (0.5–4 ft)	S2S1/ C001SC17/ (4–7 ft)	S2S1/ C001SC26/ (0.5–4 ft)				
PCB-8 (2,4'') ^a	0.4	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6	0.5 U	0.5 U	0.5 U	0.5 U
PCB-18 (2,2',5) ^a	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-28 (2,4,4') ^a	0.09	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.15 J	0.5 U	0.5 U	0.2 J	0.2 J
PCB-44 (2,2',3,5) ^a	0.07	NP	NP	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5	0.5 U	0.5 U	0.2 J	0.2 J
PCB-52 (2,2',5,5) ^a	0.07	NP	NP	0.5 U	0.08 J	0.5 U	0.5 J	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U	0.3 J	0.3 J
PCB-60	0.3	NP	NP	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-66 (2,3',4,4') ^a	0.09	NP	NP	0.5 U	0.6	0.5 U	1.1	0.5 U	1.5	0.5 U	0.5 U	0.5 U	0.8	0.8
PCB-77 (3,3',4,4')	0.3	NP	NP	0.5 U	1.2	0.5 U	1.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-81	0.06	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-87	0.07	NP	NP	0.5 U	0.2 J	0.5 U	0.9	0.5 U	0.43 J	0.5 U	0.5 U	0.5 U	0.4 J	0.4 J
PCB-90	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-101 (2,2',4,5,5) ^a	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3	0.5 U	0.5 U	0.7	0.7
PCB-105 (2,3,3',4,4') ^a	0.4	NP	NP	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.2 J
PCB-114	0.1	NP	NP	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	0.1 J
PCB-118 (2,3',4,4',5) ^a	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.7	0.5 U	0.9	0.5 U	0.5 U	0.6	0.6
PCB-123	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-126 (3,3',4,4',5)	0.2	NP	NP	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-128 (2,2',3,3',4,4',5) ^a	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.3 J	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U
PCB-138 (2,2',3,4,4',5) ^a	0.3	NP	NP	0.5 U	0.5 U	0.5 U	1.5 U	0.5 U	1.7	0.5 U	1	0.5 U	1	1
PCB-153 (2,2',4,4',5,5) ^a	0.2	NP	NP	0.5 U	0.4 J	0.5 U	0.9	0.5 U	1.6	0.5 U	0.8 J	0.5 U	0.8 J	0.8 J
PCB-156	0.09	NP	NP	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.14 J	0.5 U	0.5 U	0.5 U	0.5 U
PCB-157	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-158	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 J	0.5 U	0.5 U	0.5 U	0.5 U
PCB-166	0.1	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

(table continues)

Table 5-12 (continued)

Analyte	MDL Values	ERL Values	STRATUM 1, UPPER BOAT CHANNEL						STRATUM 2, LOWER BOAT CHANNEL					
			S1S8/ C001SC52/ (3.8-6.8 ft)	S1S9/ C001SC53/ (0.5-3.8 ft)	S1S9/ C001SC54/ (3.8-6.5 ft)	S1S10/ C001SC55/ (0.5-3 ft)	S1S10/ C001SC56/ (3-7 ft)	S2S1/ C001SC16/ (0.5-4 ft)	S2S1/ C001SC17/ (4-7 ft)	S2S2/ C001SC26/ (0.5-4 ft)	S2S1/ C001SC16/ (0.5-4 ft)	S2S1/ C001SC17/ (4-7 ft)	S2S2/ C001SC26/ (0.5-4 ft)	
PCB-167	0.2	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-169	0.09	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-170 (2,2',3,3',4,4',5) ^a	0.3	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.44 J	0.5 U	0.5 U	0.5 U	0.5 U
PCB-180 (2,2',3,4,4',5,5') ^a	0.3	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.6	0.5 U	0.5 U	0.8	0.5 U	0.5 U	0.6	0.6
PCB-183	0.08	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.11 J	0.5 U	0.5 U	0.1 J	0.1 J
PCB-184	0.08	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-187 (2,2',3,4',5,5',6) ^a	0.2	NP	0.5 U	0.4 J	0.5 U	0.6	0.5 U	0.5 U	0.5 U	0.8	0.5 U	0.5 U	0.4 J	0.4 J
PCB-189	0.08	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-195 (2,2',3,3',4,4',5,6) ^a	0.07	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 J	0.5 U	0.5 U	0.5 U	0.5 U
PCB-206 (2,2',3,3',4,4',5,5',6) ^a	0.07	NP	0.3 J	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5	0.21 J	0.2 J	0.2 J	0.2 J
PCB-209 ^a (decachlorobiphenyl)	0.08	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total PCBs ^b	NA	22.7	180	3.84	7.1	3.31	13.98	3.31	3.66	3.25	3.66	3.25	3.66	3.25

(table continues)

Table 5-12 (continued)

Analyte	MDL	ERL	Values	STRATUM 2, LOWER BOAT CHANNEL								
				S2S2/ C001SC2// (4-7 ft)	S2S3/ C001SC57// (0.5-3.8 ft)	S2S3/ C001SC58/ (3.8-7 ft)	S2S4/ C001SC59/ (0.5-3.5 ft)	S2S4/ C001SC60/ (3.5-7 ft)	S2S5/ C001SC61/ (0.5-3 ft)	S2S5/ C001SC62/ (3-7 ft)	S2S6/ C001SC63/ (0.5-3 ft)	
PCB-8 (2,4) ^a	0.4	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
PCB-18 (2,2',5) ^a	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UU
PCB-28 (2,4,4) ^a	0.09	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-44 (2,2',3,5) ^a	0.07	NP	NP	0.5 U	0.09 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-52 (2,2',5,5) ^a	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-60	0.3	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-56 (2,3',4,4) ^a	0.09	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U	0.1 J
PCB-77 (3,3',4,4) ^a	0.3	NP	NP	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6	0.5 U	0.5 U	0.5 U	0.5 U
PCB-81	0.06	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-87	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.1 J
PCB-90	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-101 (2,2',4,5, ^b 5) ^a	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-105 (2,3,3',4,4) ^a	0.4	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-114	0.1	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-118 (2,3',4,4',5) ^a	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.09 J
PCB-123	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-126 (3,3',4,4',5)	0.2	NP	NP	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-128 (2,2',3,3',4,4') ^a	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-138 (2,2',3,4,4',5) ^a	0.3	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-153 (2,2',4,4',5,5) ^a	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-156	0.09	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-157	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-158	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-166	0.1	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

(table continues)

Table 5-12 (continued)

STRATUM 2, LOWER BOAT CHANNEL											
SAMPLING LOCATION/SAMPLE NUMBER/DEPTH											
Analyte	MDL	ERL	ERM	Values	S2S2/ C001SC27/ (4-7 ft)	S2S3/ C001SC57/ (0.5-3.8 ft)	S2S4/ C001SC59/ (3.8-7 ft)	S2S5/ C001SC60/ (3.5-3.5 ft)	S2S6/ C001SC61/ (3.5-3 ft)	S2S6/ C001SC62/ (3-7 ft)	S2S6/ C001SC63/ (0.5-3 ft)
PCB-167	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U
PCB-169	0.09	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-170 (2,2',3,3',4,4',5) ^a	0.3	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-180 (2,2',3,3',4,4',5,5') ^a	0.3	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-183	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-184	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-187 (2,2',3,3',4,5,5',6) ^a	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U
PCB-189	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-195 (2,2',3,3',4,4',5,6) ^a	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-206 (2,2',3,3',4,4',5,5',6) ^a	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U
PCB-209 ^a (decachlorobiphenyl)	0.08	NP	NP	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total PCBs ^b	NA	22.7	180	3.31	3.42	3.31	3.91	3.31	3.42	3.44	3.53

(table continues)

Table 5-12 (continued)

Analyte	MDL	ERL	Values	STRATUM 2, LOWER BOAT CHANNEL							
				S2S6/ C001SC64/ (3-7 ft)	S2S7/ C001SC65/ (0.5-3 ft)	S2S7/ C001SC66/ (3-7 ft)	S2S8/ C001SC32/ (0.5-5.5 ft)	S2S8/ C001SC33/ (5.5-7 ft)	S2S9/ C001SC30/ (0.5-3 ft)	S2S9/ C001SC31/ (3-7 ft)	S2S10/ C001SC28/ (0.5-3 ft)
PCB-8 (2,4) ^a	0.4	NP	NP	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6	0.5 U	0.5 U	0.5 U
PCB-18 (2,2',5) ^a	0.2	NP	NP	0.3 J	0.5 UJ	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-28 (2,4,4') ^a	0.09	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U
PCB-44 (2,2',3,5') ^a	0.07	NP	NP	0.5 U	0.8	0.2 J	0.1 J	0.5 U	0.7	0.1 J	0.5 U
PCB-52 (2,2',5,5') ^a	0.07	NP	NP	0.5 U	1.3	0.1 J	0.5 U	0.5 U	0.8	0.5 U	0.5 U
PCB-60	0.3	NP	NP	0.5 U	1.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-66 (2,3',4,4') ^a	0.09	NP	NP	0.5 U	2.9	0.3 J	0.1 J	0.5 U	2.4	0.3 J	0.1 J
PCB-77 (3,3',4,4')	0.3	NP	NP	0.5 U	1.5 U	0.5 U	0.5 U	0.5 U	1.1 U	0.5 U	0.5 UJ
PCB-81	0.06	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-87	0.07	NP	NP	0.5 U	0.9	0.2 J	0.5 U	0.5 U	0.6	0.1 J	0.1 J
PCB-90	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-101 (2,2',4,5,5) ^a	0.2	NP	NP	0.5 U	2.4	0.3 J	0.5 U	0.5 U	2.2	0.4 J	0.5 U
PCB-105 (2,3,3',4,4') ^a	0.4	NP	NP	0.5 U	0.8	0.5 U	0.5 U	0.5 U	0.6	0.5 U	0.5 U
PCB-114	0.1	NP	NP	0.5 U	0.5	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U
PCB-118 (2,3',4,4',5) ^a	0.07	NP	NP	0.5 U	1.9	0.2 J	0.1 J	0.5 U	1.7	0.2 J	0.1 J
PCB-123	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-126 (3,3',4,4',5)	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
PCB-128 (2,2',3,3',4,4') ^a	0.2	NP	NP	0.5 U	0.6	0.5 U	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U
PCB-138 (2,2',3,4,4',5') ^a	0.3	NP	NP	0.5 U	3.6	0.5 U	0.3 J	0.5 U	3.1	0.5	0.5 U
PCB-153 (2,2',4,4',5,5') ^a	0.2	NP	NP	0.5 UJ	2.8	0.5 U	0.2 J	0.5 U	2.6	0.5 J	0.3 J
PCB-156	0.09	NP	NP	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U
PCB-157	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-158	0.07	NP	NP	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U
PCB-166	0.1	NP	NP	0.5 UJ	0.5 U	0.1 J	0.5 U	0.5 U	0.1 J	0.5 U	0.5 U

(table continues)

Table 5-12 (continued)

Analyte	MDL	ERL Values	ERM	STRATUM 2, LOWER BOAT CHANNEL							
				S2S6/ C001SC64/ (3-7 ft)	S2S7/ C001SC65/ (0.5-3 ft)	S2S7/ C001SC66/ (3-7 ft)	S2S8/ C001SC32/ (0.5-5 ft)	S2S8/ C001SC33/ (5.5-7 ft)	S2S9/ C001SC30/ (0.5-3 ft)	S2S9/ C001SC31/ (3-7 ft)	S2S10/ C001SC28/ (0.5-3 ft)
PCB-167	0.2	NP	NP	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U
PCB-169	0.09	NP	NP	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-170 (2,2',3,3',4,4',5) ^a	0.3	NP	NP	0.5 UJ	0.9 U	0.5 U	0.5 U	0.5 U	0.9	0.5 U	0.5 U
PCB-180 (2,2',3,4,4',5,5') ^a	0.3	NP	NP	0.5 UJ	1.6	0.5 U	0.5 U	0.5 U	1.6	0.4 J	0.5 U
PCB-183	0.08	NP	NP	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U
PCB-184	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-187 (2,2',3,4',5,5',6) ^a	0.2	NP	NP	0.5 U	1.2	0.5 U	0.5 U	0.5 U	1.3	0.2 J	0.5 U
PCB-189	0.08	NP	NP	0.5 U	0.1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-195 (2,2',3,3',4,4',5,6) ^a	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-206 (2,2',3,3',4,4',5,5',6) ^a	0.07	NP	NP	0.5 U	0.5	0.2 J	0.3 J	0.5 U	0.6	0.4 J	0.1 J
PCB-209 ^a (decachlorobiphenyl)	0.08	NP	NP	2 U	2 U	2 U	2 UJ	2 UJ	200 U	2 UJ	200 U
Total PCBs ^b	NA	22.7	180	3.71	4.0	5.54	4.71	4.11	39.35	7.81	4.08

(table continues)

Table 5-12 (continued)

STRATUM 2, LOWER BOAT CHANNEL									
SAMPLING LOCATION/SAMPLE NUMBER/DEPTH									
Analyte	MDL	ERL	ERM	Values	S2S10/ C001SC29/ (3-7 ft)	S2S11/ C001SC24/ (0.5-3.5 ft)	S2S12/ C001SC25/ (3.5-7 ft)	S2S13/ C001SC23/ (0.5-3.5 ft)	S2S14/ C001SC21/ (3.5-7 ft)
					NP	NP	NP	NP	NP
PCB-8 (2,4) ^a	0.4	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-18 (2,2',5) ^a	0.2	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-28 (2,4,4) ^a	0.09	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-44 (2,2',3,5') ^a	0.07	NP	0.5 U	0.1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J
PCB-52 (2,2',5,5') ^a	0.07	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-60	0.3	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U
PCB-66 (2,3',4,4) ^a	0.09	NP	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	1.4	0.5 U
PCB-77 (3,3',4,4)	0.3	NP	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8
PCB-81	0.06	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-87	0.07	NP	0.5 U	0.1 J	0.5 U	0.5 U	0.5 U	0.5 J	0.2 J
PCB-90	0.2	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-101 (2,2',4,5,5') ^a	0.2	NP	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	1.3	0.5 U
PCB-105 (2,3,3',4,4) ^a	0.4	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J
PCB-114	0.1	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U
PCB-118 (2,3',4,4',5) ^a	0.07	NP	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.9	0.5 U
PCB-123	0.07	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-126 (3,3',4,4',5)	0.2	NP	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.1 J	0.5 U
PCB-128 (2,2',3,3',4,4) ^a	0.2	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U
PCB-138 (2,2',3,4,4',5) ^a	0.3	NP	0.5 U	0.6	0.5 U	0.5 U	0.5 U	1.6	0.5 U
PCB-153 (2,2',4,4',5,5') ^a	0.2	NP	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	1.4	0.5 U
PCB-156	0.09	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U
PCB-157	0.07	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-158	0.07	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.1 J
PCB-166	0.1	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J

(table continues)

Table 5-12 (continued)

Analyte	MDL	ERL	ERM	STRATUM 2, LOWER BOAT CHANNEL							
				S2S10/ C001SC29/ (3-7 ft)	S2S11/ C001SC24/ (0.5-3.5 ft)	S2S11/ C001SC25/ (3.5-7 ft)	S2S12/ C001SC22/ (0.5-3.5 ft)	S2S12/ C001SC23/ (3-7 ft)	S2S13/ C001SC20/ (0.5-3.5 ft)	S2S13/ C001SC21/ (3.5-7 ft)	S2S14/ C001SC18/ (0.5-4 ft)
PCB-167	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-169	0.09	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-170 (2,2',3,3',4,4',5) ^a	0.3	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U
PCB-180 (2,2',3,3',4,4',5,5') ^a	0.3	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7	0.5 U	0.5 J
PCB-183	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-184	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-187 (2,2',3,3',4,4',5,5',6) ^a	0.2	NP	NP	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.7	0.5 U	0.8
PCB-189	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-195 (2,2',3,3',4,4',5,6) ^a	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U	0.5 U
PCB-206 (2,2',3,3',4,4',5,5',6) ^a (decachlorobiphenyl)	0.07	NP	NP	0.5 U	0.1 J	0.1 J	0.5 U	0.5 U	0.3 J	0.2 J	0.2 J
PCB-209 ^a	0.08	NP	NP	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Total PCBs ^b	NA	22.7	180	3.31	7.11	3.44	3.31	3.31	20.44	3.64	13.41

(Table continues)

Table 5-12 (continued)

Analyte	MDL	ERL Values	STRATUM 2, LOWER BOAT CHANNEL									STRATUM 3, REFERENCE AREA SAMPLING		
			S2S14/ C001SC19/ (4-7 ft)	S2S15/ C001SC14/ (0.5-3 ft)	S2S16/ C001SC15/ (3-7 ft)	S2S16/ C001SC11/ (0.5-3 ft)	S2S16/ C001SC12/ (3-7 ft)	S3S1/ C001SC07/ (0.5-2.5 ft)	S3S1/ C001SC08/ (2.5-7 ft)	LOCATION/SAMPLE NUMBER/DEPTH	LOCATION/SAMPLE NUMBER/DEPTH	LOCATION/SAMPLE NUMBER/DEPTH	LOCATION/SAMPLE NUMBER/DEPTH	
PCB-8 (2,4) ^a	0.4	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-18 (2,2',5) ^a	0.2	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-28 (2,4,4') ^a	0.09	NP	0.5 U	0.29 J	0.5 U	0.16 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-44 (2,2',3,5') ^a	0.07	NP	0.5 U	0.2 J	0.5 U	0.45 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-52 (2,2',5,5') ^a	0.07	NP	0.5 U	0.5 U	0.5 U	0.58	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-60	0.3	NP	0.5 U	0.33 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-66 (2,3',4,4') ^a	0.09	NP	0.5 U	0.26 J	0.5 U	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-77 (3,3',4,4')	0.3	NP	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-81	0.06	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-87	0.07	NP	0.5 U	0.19 J	0.5 U	0.44 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-90	0.2	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-101 (2,2',4,5,5') ^a	0.2	NP	0.5 U	0.5	0.5 U	1.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-105 (2,3,3',4,4') ^a	0.4	NP	0.5 U	0.17 J	0.5 U	0.45 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-114	0.1	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-118 (2,3',4,4',5) ^a	0.07	NP	0.5 U	0.38 J	0.5 U	0.99	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-123	0.07	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-126 (3,3',4,4',5)	0.2	NP	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-128 (2,2',3,3',4,4') ^a	0.2	NP	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-138 (2,2',3,4,4',5) ^a	0.3	NP	0.5 U	0.7	0.5 U	1.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-153 (2,2',4,4',5,5') ^a	0.2	NP	0.5 U	0.6	0.5 U	1.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-156	0.09	NP	0.5 U	0.5 U	0.5 U	0.17 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-157	0.07	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-158	0.07	NP	0.5 U	0.5 U	0.5 U	0.16 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
PCB-166	0.1	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	

(table continues)

Table 5-12 (continued)

Analyte	MDL	ERL	ERM	STRATUM 2, LOWER BOAT CHANNEL						STRATUM 3, REFERENCE AREA SAMPLING	
				S2S14/ C001SC19/ (4-7 ft)	S2S15/ C001SC14/ (0.5-3 ft)	S2S15/ C001SC15/ (3-7 ft)	S2S16/ C001SC11/ (0.5-3 ft)	S2S16/ C001SC12/ (3-7 ft)	S2S16/ C001SC13/ (3-7 ft)	S3S1/ C001SC07/ (0.5-2.5 ft)	S3S1/ C001SC08/ (2.5-7 ft)
PCB-167	0.2	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-169	0.09	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-170 (2,2',3,3',4,4',5) ^a	0.3	NP	NP	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U
PCB-180 (2,2',3,4,4',5,5') ^a	0.3	NP	NP	0.5 U	0.32 J	0.5 U	0.8	0.5 U	0.5 U	0.5 U	0.5 U
PCB-183	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.14 J	0.5 U	0.5 U	0.5 U	0.5 U
PCB-184	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-187 (2,2',3,4',5,5',6) ^a	0.2	NP	NP	0.5 U	0.31 J	0.5 U	0.67	0.5 U	0.5 U	0.5 U	0.5 U
PCB-189	0.08	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-195 (2,2',3,3',4,4',5,6) ^a	0.07	NP	NP	0.5 U	0.5 U	0.5 U	0.12 J	0.5 U	0.5 U	0.5 U	0.5 U
PCB-206 (2,2',3,3',4,4',5,5',6) ^a	0.07	NP	NP	0.5 U	0.28 J	0.41 J	0.27 J	0.2 J	0.5 U	0.5 U	0.5 U
PCB-209 ^a (decachlorobiphenyl)	0.08	NP	NP	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total PCBs ^b	NA	22.7	180	3.31	9.34	4.06	23.26	3.64	3.31	3.31	3.31

(table continues)

Table 5-12 (continued)

Analyte	MDL	ERL Values	ERM Values	STRATUM 3, REFERENCE AREA							
				S3S2/ C001SC05/ (0.5-4 ft)	S3S2/ C001SC06/ (4-7 ft)	S3S3/ C001SC09/ (0.5-4 ft)	S3S3/ C001SC10/ (4-7 ft)	S3S4/ C001SC03/ (0.5-3 ft)	S3S4/ C001SC04/ (3-7 ft)	S3S5/ C001SC01/ (0.5-3 ft)	S3S5/ C001SC02/ (3-8 ft)
PCB-8 (2,4) ^a	0.4	NP	NP	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-18 (2,2',5) ^a	0.2	NP	NP	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-28 (2,4,4) ^a	0.09	NP	NP	0.5	0.5 U	0.11 J	0.5 U	0.2 J	0.11 J	0.5 U	0.5 U
PCB-44 (2,2',3,5) ^a	0.07	NP	NP	0.44 J	0.5 U	0.5 U	0.5 U	0.8	0.5 U	0.5	0.5 U
PCB-52 (2,2',5,5) ^a	0.07	NP	NP	0.6	0.5 U	0.5 U	0.5 U	0.9	0.5 U	0.38 J	0.5 U
PCB-60	0.3	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5	0.5 U
PCB-66 (2,3',4,4) ^a	0.09	NP	NP	0.8	0.5 U	0.13 J	0.5 U	2.3	0.5 U	1.3	0.5 U
PCB-77 (3,3',4,4) ^a	0.3	NP	NP	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U
PCB-81	0.06	NP	NP	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-87	0.07	NP	NP	0.37 J	0.5 UJ	0.1 J	0.5 U	0.6	0.5 U	0.36 J	0.5 U
PCB-90	0.2	NP	NP	0.5 U	0.5 U						
PCB-101 (2,2',4,5,5) ^a	0.2	NP	NP	1.1	0.5 U	0.27 J	0.5 U	2	0.5 U	0.7	0.5 U
PCB-105 (2,3,3,4,4) ^a	0.4	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.6	0.5 U	0.33 J	0.5 U
PCB-114	0.1	NP	NP	0.25 J	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.23 J	0.5 U
PCB-118 (2,3',4,4',5) ^a	0.07	NP	NP	0.9	0.5 U	0.24 J	0.5 U	1.6	0.5 U	0.8	0.5 U
PCB-123	0.07	NP	NP	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-126 (3,3',4,4',5)	0.2	NP	NP	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-128 (2,2',3,3',4,4) ^a	0.2	NP	NP	0.24 J	0.5 U	0.5 U	0.5 U	0.45 J	0.5 U	0.26 J	0.5 U
PCB-138 (2,2',3,4,4',5) ^a	0.3	NP	NP	1.6 J	0.5 UJ	0.6	0.5 U	2.7	0.5 U	1.5	0.5 U
PCB-153 (2,2',4,4',5,5) ^a	0.2	NP	NP	1.3	0.5 U	0.48 J	0.5 U	2.4	0.5 U	1.3	0.5 U
PCB-156	0.09	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.23 J	0.5 U	0.13 J	0.5 U
PCB-157	0.07	NP	NP	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-158	0.07	NP	NP	0.08 J	0.5 U	0.5 U	0.5 U	0.29 J	0.5 U	0.16 J	0.5 U
PCB-166	0.1	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U	0.5 U	0.5 U

(table continues)

Table 5-12 (continued)

Analyte	MDL	ERL Values	Stratum 3, Reference Area Sampling Location/Sample Number/Depth							
			S3S2/ C001SC05/ (0.5–4 ft)	S3S2/ C001SC06/ (4–7 ft)	S3S3/ C001SC09/ (0.5–4 ft)	S3S3/ C001SC10/ (4–7 ft)	S3S4/ C001SC03/ (0.5–3 ft)	S3S4/ C001SC04/ (3–7 ft)	S3S5/ C001SC01/ (0.5–3 ft)	S3S5/ C001SC02/ (3–8 ft)
PCB-167	0.2	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-169	0.09	NP	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-170 (2,2',3,3',4,4',5)^a	0.3	NP	0.4 J	0.5 U	0.5 U	0.5 U	0.8	0.5 U	0.35 J	0.5 U
PCB-180 (2,2',3,4,4',5,5)^a	0.3	NP	0.8	0.5 U	0.3 J	0.5 U	1.4	0.5 U	0.6	0.5 U
PCB-183	0.08	NP	0.21 J	0.5 UJ	0.5 U	0.5 U	0.35 J	0.5 U	0.5 U	0.5 U
PCB-184	0.08	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-187 (2,2',3,4',5,5',6)^a	0.2	NP	0.6	0.5 U	0.2 J	0.5 U	1.1	0.5 U	0.6	0.5 U
PCB-189	0.08	NP	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PCB-195 (2,2',3,3',4,4',5,6)^a	0.07	NP	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.17 J	0.5 U	0.5 U	0.5 U
PCB-206 (deachlorobiphenyl)	0.07	NP	0.18 J	0.5 U	0.5 U	0.5 U	0.5	0.5 U	0.29 J	0.18 J
PCB-209 ^a	0.08	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total PCBs ^b	NA	22.7	180	20.07	3.31	6.52	3.31	3.44	18.66	3.6

Notes:

^a boldface indicates the NOAA 18 PCB congeners^b total PCBs are equal to 2 times the sum of the NOAA 18 congeners; nondetects were included in the summation at one-half the method detection limit

c shading indicates value exceeds the ERL

Acronyms/Abbreviations:

ERL – effects-range low

ERM – effects-range median

MDL – method detection limit

NOAA – National Oceanic and Atmospheric Administration

NP – not published

PCB – polychlorinated biphenyl

Review Qualifiers:

J – estimated value

U – compound not detected at or above the sample quantitation limit

UJ – analyzed for but not detected above the sample quantitation limit and the quantitation limit is an estimated value

Table 5-13
Results of Pesticide Analyses of Subsurface Sediment
 (results reported in micrograms per kilogram)

Analyte	MDL	ERM	Values	STRATUM 1, UPPER BOAT CHANNEL							
				S1S1/ C001SC34/ (0.5-3 ft)	S1S1/ C001SC35/ (3-7 ft)	S1S2/ C001SC36/ (0.5-2.5 ft)	S1S2/ C001SC37/ (2.5-7 ft)	S1S3/ C001SC39/ (0.5-3.5 ft)	S1S3/ C001SC40/ (3.5-7 ft)	S1S4/ C001SC47/ (0.5-3 ft)	
4,4'-DDD	0.2	NP	NP	227	0.9 J	1 J	2 U	0.5 J	1 J	2 U	4
4,4'-DDE	0.4	2.2	27	26	2 U	0.4 J	2 U	2 U	0.5 J	2 U	0.9 J
4,4'-DDT	0.2	NP	NP	40	2 U	2 U	2 U	0.4 J	1 J	2 U	2 U
Total DDTs ^b	NA	1.58	46.1	93	1.2	1.3	0.4	1.3	2.5	0.4	53
alpha-Chlordane	0.4	NP	NP	7	2 U	2 U	2 U	2 U	2 U	2 U	2 U
gamma-Chlordane	0.2	NP	NP	11	2 U	0.2 J	2 U	2 U	0.2 J	2 U	0.4 J
Total chlordane ^b	NA	0.5	6	18	0.3	0.4	0.3	0.3	0.4	0.3	0.5
Aldrin	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
alpha-BHC	0.2	NP	NP	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
beta-BHC	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
delta-BHC	0.4	NP	NP	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Dieldrin	0.4	0.02	8	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Endosulfan I	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endosulfan II	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endosulfan sulfate	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endrin	0.4	0.02	45	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endrin aldehyde	0.2	NP	NP	4	2 U	0.3 J	2 U	0.4 J	2 U	0.2 J	
Endrin ketone	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
gamma-BHC (lindane)	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Heptachlor	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Heptachlor epoxide	0.4	NP	NP	1.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8	
Methoxychlor	1	NP	NP	4 U	4 U	4 U	4 U	4 U	4 U	4 U	
Toxaphene	5	NP	NP	30 U	30 U	30 U	30 U	30 U	30 U	30 U	

(table continues)

Table 5-13 (continued)

Analyte	MDL Values	ERM Values	STRATUM 1, UPPER BOAT CHANNEL							
			S1S4/ C001SC48/ (3-7 ft)	S1S5/ C001SC43/ (0.5-2.3 ft)	S1S6/ C001SC45/ (2.3-7 ft)	S1S6/ C001SC46/ (0.5-2.4 ft)	S1S7/ C001SC49/ (2.4-7 ft)	S1S7/ C001SC50/ (0.5-4 ft)	S1S8/ C001SC51/ (0.5-3.8 ft)	
4,4'-DDD	0.2	NP	NP	2 U	2 J	2 U	90	0.3 J	170	2 U
4,4'-DDE	0.4	2.2	27	2 U	0.6 J	2 U	17	2 U	16	2 U
4,4'-DDT	0.2	NP	NP	2 U	0.5 J	2 U	2 U	2	2 U	2 U
Total DDTs ^b	NA	1.58	46.1	0.4	3	0.4	0.08	0.6	88	0.4
alpha-Chlordane	0.4	NP	NP	2 U	2 U	1 J	2 U	6	2 U	2 J
gamma-Chlordane	0.2	NP	NP	2 U	2 U	2	2 U	10	2 U	3
Total chlordane ^b	NA	0.5	6	0.3	0.3	0.3	0.5	0.3	16	0.3
Aldrin	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U
alpha-BHC	0.2	NP	NP	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
beta-BHC	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U
delta-BHC	0.4	NP	NP	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Dieldrin	0.4	0.02	8	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Endosulfan I	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endosulfan II	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endosulfan sulfate	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endrin	0.4	0.02	45	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endrin aldehyde	0.2	NP	NP	2 U	0.7 J	2 U	3	2 U	3	2 U
Endrin ketone	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	0.8 J
gamma-BHC (lindane)	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Heptachlor	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	1 J	2 U
Heptachlor epoxide	0.4	NP	NP	0.5 U	0.1 J	0.5 U	0.8	0.5 U	0.4 J	0.5 U
Methoxychlor	1	NP	NP	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Toxaphene	5	NP	NP	30 U	30 U	30 U	30 U	30 U	30 U	30 U

(Table continues)

Table 5-13 (continued)

Analyte	MDL Values	ERL, ERM Values	STRATUM 1, UPPER BOAT CHANNEL						STRATUM 2, LOWER BOAT CHANNEL					
			S1S8/ C001SC52/ (3.8–6.8 ft)	S1S9/ C001SC53/ (0.5–3.8 ft)	S1S10/ C001SC54/ (3.8–6.5 ft)	S1S10/ C001SC55/ (0.5–3 ft)	S1S10/ C001SC56/ (3–7 ft)	S2S1/ C001SC16/ (0.5–4 ft)	S2S1/ C001SC17/ (4–7 ft)	S2S2/ C001SC26/ (0.5–4 ft)	S2S1/ C001SC16/ (0.5–4 ft)	S2S1/ C001SC17/ (4–7 ft)	S2S2/ C001SC26/ (0.5–4 ft)	
4,4'-DDD	0.2	NP	NP	2 U	0.9 J	2 U	43	2 U	2 U	2 U	2 U	2 U	2 U	
4,4'-DDE	0.4	2.2	27	2 U	0.5 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
4,4'-DDT	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Total DDTs ^b	NA	1.58	46.1	0.4	25	0.4	18	0.4	0.4	0.4	0.4	0.4	0.4	
alpha-Chlordane	0.4	NP	NP	2 U	2 U	2 U	1 J	2 U	2 U	2 U	2 U	2 U	2 U	
gamma-Chlordane	0.2	NP	NP	2 U	2 U	2 U	2	2 U	2 U	2 U	2 U	2 U	2 U	
Total chlordane ^b	NA	0.5	6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
Aldrin	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
alpha-BHC	0.2	NP	NP	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	
beta-BHC	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
delta-BHC	0.4	NP	NP	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	
Dieldrin	0.4	0.02	8	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	
Endosulfan I	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Endosulfan II	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Endosulfan sulfate	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Endrin	0.4	0.02	45	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Endrin aldehyde	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Endrin ketone	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
gamma-BHC (lindane)	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Heptachlor	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Heptachlor epoxide	0.4	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7	0.5 U	0.4 J	0.4 J	
Methoxychlor	1	NP	NP	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	
Toxaphene	5	NP	NP	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	

(table continues)

Table 5-13 (continued)

Analyte	MDL Values	ERL Values	ERM Values	STRATUM 2, LOWER BOAT CHANNEL							
				S2S2/ C001SC27/ (4-7 ft)	S2S3/ C001SC57/ (0.5-3.8 ft)	S2S3/ C001SC58/ (3.8-7 ft)	S2S4/ C001SC59/ (0.5-3.5 ft)	S2S5/ C001SC60/ (0.5-3 ft)	S2S5/ C001SC61/ (0.5-3 ft)	S2S6/ C001SC62/ (3-7 ft)	S2S6/ C001SC63/ (0.5-3 ft)
4,4'-DDD	0.2	NP	NP	2 U	2 U	2 U	0.4 J	2 U	2 U	2 U	2 U
4,4'-DDE	0.4	2.2	27	2 U	2 U	2 U	0.4 J	2 U	2 U	2 U	2 U
4,4'-DDT	0.2	NP	NP	2 U	2 U	2 U	0.3 J	2 U	2 U	2 U	2 U
Total DDTs ^b	NA	1.58	46.1	0.3	0.3	0.3	1.1	0.4	0.4	0.4	0.4
alpha-Chlordane	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
gamma-Chlordane	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total chlordane ^b	NA	0.5	6	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
Aldrin	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
alpha-BHC	0.2	NP	NP	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
beta-BHC	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
delta-BHC	0.4	NP	NP	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Dieldrin	0.4	0.02	8	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Endosulfan I	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endosulfan II	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endosulfan sulfate	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endrin	0.4	0.02	45	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endrin aldehyde	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endrin ketone	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
gamma-BHC (lindane)	0.2	NP	NP	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Heptachlor	0.2	NP	NP	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Heptachlor epoxide	0.4	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J
Methoxychlor	1	NP	NP	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Toxaphene	5	NP	NP	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U

(table continues)

Table 5-13 (continued)

Analyte	MDL Values	ERL Values	STRATUM 2, LOWER BOAT CHANNEL SAMPLING LOCATION/SAMPLE NUMBER/DEPTH							
			S2S6/ C001SC64/ (3-7 ft)	S2S7/ C001SC65/ (0.5-3 ft)	S2S7/ C001SC66/ (3-7 ft)	S2S8/ C001SC32/ (0.5-5.5 ft)	S2S8/ C001SC33/ (5.5-7 ft)	S2S9/ C001SC30/ (0.5-3 ft)	S2S9/ C001SC31/ (3-7 ft)	S2S10/ C001SC28/ (0.5-3 ft)
4,4'-DDD	0.2	NP	2 U	0.8 J	2 U	2 U	2 U	200 U	2 U	200 U
4,4'-DDE	0.4	2.2	27	2 U	1 J	2 U	2 U	2 U	2 U	90 U
4,4'-DDT	0.2	NP	2 U	1 J	2 U	2 U	2 U	7,000	2 U	17,400
Total DDTs ^b	NA	1.58	46.1	0.4	2.8	0.4	0.4	7,040 U	0.4	17,490 U
alpha-Chlordane	0.4	NP	NP	2 U	2 U	2 U	2 U	200 U	2 U	200 U
gamma-Chlordane	0.2	NP	NP	2 U	0.2 J	2 U	2 U	200 U	2 U	200 U
Total chlordane ^b	NA	0.5	6	0.3	2.2	0.3	0.3	0.3	0.3	0.3
Aldrin	0.2	NP	NP	2 U	2 U	2 U	2 U	200 U	2 U	200 U
alpha-BHC	0.2	NP	NP	2 UJ	2 UJ	2 UJ	2 U	200 U	2 U	200 U
beta-BHC	0.4	NP	NP	2 U	2 U	2 U	2 U	200 U	2 U	200 U
delta-BHC	0.4	NP	NP	2 UJ	2 UJ	2 UJ	2 U	200 U	2 U	200 U
Dieldrin	0.4	0.02	8	2 UJ	2 UJ	2 UJ	2 U	200 U	2 U	200 U
Endosulfan I	0.2	NP	NP	2 U	2 U	2 U	2 U	200 U	2 U	200 U
Endosulfan II	0.2	NP	NP	2 U	2 U	2 U	2 U	200 U	2 U	200 U
Endosulfan sulfate	0.4	NP	NP	2 U	2 U	2 U	2 U	200 U	2 U	200 U
Endrin	0.4	0.02	45	2 U	2 U	2 U	2 U	200 U	2 U	200 U
Endrin aldehyde	0.2	NP	NP	2 U	0.5 J	2 U	2 U	200 U	2 U	200 U
Endrin ketone	0.4	NP	NP	2 U	2 U	2 U	2 U	200 U	2 U	200 U
gamma-BHC (lindane)	0.2	NP	NP	2 U	2 U	2 U	2 UJ	200 U	2 UJ	200 U
Heptachlor	0.2	NP	NP	2 U	2 U	2 U	2 UJ	200 U	2 UJ	200 U
Heptachlor epoxide	0.4	NP	NP	0.5 U	0.9	0.2 J	0.5 U	0.8	0.5 U	0.5 U
Methoxychlor	1	NP	NP	4 U	4 U	4 U	4 U	400 U	4 U	400 U
Toxaphene	5	NP	NP	30 U	30 U	30 U	30 U	3,000 U	30 U	3,000 U

(Table continues)

Table 5-13 (continued)

Analyte	MDL Values	ERL Values	ERM Values	STRATUM 2, LOWER BOAT CHANNEL							
				S2S10/ C001SC29/ (3–7 ft)	S2S11/ C001SC24/ (0.5–3.5 ft)	S2S11/ C001SC25/ (3.5–7 ft)	S2S12/ C001SC22/ (0.5–3.5 ft)	S2S12/ C001SC23/ (3–7 ft)	S2S13/ C001SC20/ (0.5–3.5 ft)	S2S13/ C001SC21/ (3.5–7 ft)	S2S14/ C001SC18/ (0.5–4 ft)
4,4'-DDD	0.2	NP	NP	2 U	2 U	10	2 U	2 U	0.6	2 U	2 U
4,4'-DDE	0.4	2.2	27	2 U	2 U	0.9 J	2 U	2 U	0.6	2 U	2 U
4,4'-DDT	0.2	NP	NP	0.3 J	2 U	260	2 U	0.2 J	10	2	1
Total DDTs ^b	NA	1.58	46.1	0.6	0.4	2709	0.4	0.5	12	23	1.3
alpha-Chlordane	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
gamma-Chlordane	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total chlordane ^b	NA	0.5	6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Aldrin	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
alpha-BHC	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
beta-BHC	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
delta-BHC	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dieldrin	0.4	0.02	8	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endosulfan I	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endosulfan II	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endosulfan sulfate	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endrin	0.4	0.02	45	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endrin aldehyde	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endrin ketone	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	0.4	2 U	2 U
gamma-BHC (lindane)	0.2	NP	NP	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
heptachlor	0.2	NP	NP	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Heptachlor epoxide	0.4	NP	NP	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U
Methoxychlor	1	NP	NP	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Toxaphene	5	NP	NP	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U

(table continues)

Table 5-13 (continued)

Analyte	MDL Values	ERL Values	ERM Values	STRATUM 2, LOWER BOAT CHANNEL						STRATUM 3, REFERENCE AREA		
				S2S14/ C001SC19/ (4-7 ft)	S2S15/ C001SC14/ (0.5-3 ft)	S2S15/ C001SC14/ (0.5-3 ft)	S2S16/ C001SC11/ (0.5-3 ft)	S2S16/ C001SC12/ (3-7 ft)	S2S16/ C001SC13/ (3-7 ft)	S3S1/ C001SC07// (0.5-2.5 ft)	S3S1/ C001SC08/ (2.5-7 ft)	
4,4'-DDD	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
4,4'-DDE	0.4	2.2	27	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
4,4'-DDT	0.2	NP	NP	2	2 U	0.2 J	1 J	2 U	2 U	2 U	2 U	2 U
Total DDTs ^b	NA	1.58	46.1		0.4	0.5			0.4	0.4	0.4	0.4
alpha-Chlordane	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
gamma-Chlordane	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total chlordane ^b	NA	0.5	6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Aldrin	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
alpha-BHC	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
beta-BHC	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
delta-BHC	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dieldrin	0.4	0.02	8	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endosulfan I	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endosulfan II	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endosulfan sulfate	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endrin	0.4	0.02	45	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endrin aldehyde	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endrin ketone	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
gamma-BHC (lindane)	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Heptachlor	0.2	NP	NP	2 U	2 U	0.5 U	0.5 U	0.12 J	0.5 U	0.5 U	0.5 U	0.5 U
Heptachlor epoxide	0.4	NP	NP									
Methoxychlor	1	NP	NP	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Toxaphene	5	NP	NP	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U

(table continues)

Table 5-13 (continued)

Analyte	MDL Values	ERL Values	ERM Values	STRATUM 3, REFERENCE AREA							
				S3S2/ C001SC05/ (0.5-4 ft)	S3S2/ C001SC06/ (4-7 ft)	S3S3/ C001SC09/ (0.5-4 ft)	S3S3/ C001SC10/ (4-7 ft)	S3S4/ C001SC03/ (0.5-3 ft)	S3S4/ C001SC04/ (0.5-3 ft)	S3S5/ C001SC01/ (0.5-3 ft)	S3S5/ C001SC02/ (3-8 ft)
4,4'-DDD	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
4,4'-DDE	0.4	2.2	27	2 U	2 U	2 U	2 U	0.6 J	2 U	2 U	2 U
4,4'-DDT	0.2	NP	NP	0.7 J	2 U	2 U	2 U	5	2 U	0.5 J	2 U
Total DDTs ^b	NA	1.58	46.1	1.0	0.4	0.4	0.4	57	0.4	0.8	0.4
alpha-Chlordane	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
gamma-Chlordane	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total chlordane ^b	NA	0.5	6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Aldrin	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
alpha-BHC	0.2	NP	NP	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
beta-BHC	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
delta-BHC	0.4	NP	NP	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Dieldrin	0.4	0.02	8	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Endosulfan I	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endosulfan II	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endosulfan sulfate	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endrin	0.4	0.02	45	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endrin aldehyde	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Endrin ketone	0.4	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
gamma-BHC (lindane)	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Heptachlor	0.2	NP	NP	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Heptachlor epoxide	0.4	NP	NP	0.28 J	0.5 U	0.5 U	0.5 U	0.6	0.5 U	1.2	0.5 U
Methoxychlor	1	NP	NP	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Toxaphene	5	NP	NP	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U

(table continues)

Table 5-13 (continued)

Notes:

- a shading indicates value exceeds ERL
- b nondetects are included in summations at one-half the MDL
- c outline indicates value exceeds ERM

Acronyms/Abbreviations:

- BHC – benzene hexachloride
- DDD – dichlorodiphenyltrichloroethane
- DDE – dichlorodiphenyl dichloroethene
- DDT – dichlorodiphenyltrichloroethane
- ERL – effects-range low
- ERM – effects-range median
- MDL – method detection limit
- NP – not published

Review Qualifiers:

- J – estimated value
- U – compound not detected at or above the sample quantitation limit
- UJ – analyzed for but not detected above the sample quantitation limit and the quantitation limit is an estimated value

Table 5-14
Results of PAH Analyses of Subsurface Sediment
 (results reported in micrograms per kilogram)

Analyte	MDL	ERL Values	ERM Values	STRATUM 1, UPPER BOAT CHANNEL					
				S1S1/ C001SC34/ (0.5–3 ft)	S1S1/ C001SC35/ (3–7 ft)	S1S2/ C001SC36/ (0.5–2.5 ft)	S1S2/ C001SC37/ (2.5–7 ft)	S1S3/ C001SC38/ (0.5–2.5 ft)	S1S3/ C001SC39/ (0.5–3.5 ft)
Acenaphthene	2	16	500	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	2	44	640	5 J	10 U	10 U	10 U	10 U	10 U
Anthracene	1	85.3	1,100	11	5 U	5 U	5 U	5 U	3 J
Fluorene	2	19	540	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	1	160	2,100	2 J	5 U	5 U	5 U	5 U	5 U
Phenanthrene	2	240	1,500	18	10 U	2 J	10 U	3 J	9 J
Total LPAHs ^a	NA	552	3,160	38	5	6	5	7	15.5
Benz(a)anthracene	2	261	1,600	36	10 U	2 J	10 U	3 J	5 J
Benz(a)pyrene	2	430	1,600	74	10 U	6 J	10 U	6 J	13
Benz(b)fluoranthene	2	NP	NP	120	10 U	5 J	10 U	6 J	15
Benz(g,h,i)perylene	1	NP	NP	50	5 U	5 J	5 U	6	11
Benz(k)fluoranthene	2	NP	NP	50	10 U	4 J	10 U	4 J	11
Chrysene	3	384	2,800	30	10 U	3 J	10 U	3 J	8 J
Dibenz(a,h)anthracene	1	63.4	260	16 J	5 U	5 U	5 U	5 U	2 J
Fluoranthene	2	600	5,100	54	10 U	6 J	10 U	7 J	18
Indeno(1,2,3-c,d)pyrene	1	NP	NP	150 J	2 J	10	5 U	12	22
Pyrene	3	240	2,600	230	10 U	7 J	10 U	9 J	18
Total HPAHs ^b	NA	1,700	9,600	810	11.5	48.5	9.5	56.5	123
Total PAHs ^c	NA	4,022	44,792	848	16.5	54.5	14.5	63.5	138.5

(table continues)

Table 5-14 (continued)

Analyte	MDL	ERL Values	STRATUM 1, UPPER BOAT CHANNEL SAMPLING LOCATIONS/SAMPLE NUMBER/DEPTH					
			S1S3/ C001SC40/ (3.5-7 ft)	S1S4/ C001SC47/ (0.5-3 ft)	S1S4/ C001SC48/ (3-7 ft)	S1S5/ C001SC43/ (0.5-2.3 ft)	S1S5/ C001SC44/ (2.3-7 ft)	S1S6/ C001SC45/ (0.5-2.4 ft)
Acenaphthene	2	16	500	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	2	44	640	10 U	3 J	10 U	6 J	10 U
Anthracene	1	85.3	1,100	2 J	4 J	5 U	6	5 U
Fluorene	2	19	540	10 U	10 U	10 U	10 U	10 U
Naphthalene	1	160	2,100	5 U	1 J	5 U	2 J	5 U
Phenanthrene	2	240	1,500	8 J	9 J	10 U	26	10 U
Total I-PAHs ^a	NA	552	3,160	13.5	19	5	42	5
Benz(a)anthracene	2	261	1,600	6 J	12	10 U	27	10 U
Benzo(a)pyrene	2	430	1,600	8 J	32	10 U	73	10 U
Benzo(b)fluoranthene	2	NP	NP	7 J	36	10 U	62	10 U
Benzo(g,h,i)perylene	1	NP	NP	6	21	1 J	61	5 U
Benzo(k)fluoranthene	2	NP	NP	6 J	24	10 U	43	10 U
Chrysene	3	384	2,800	6 J	13	10 U	38	10 U
Dibenz(a,h)anthracene	1	63.4	260	5 U	5 J	5 U	9	5 U
Fluoranthene	2	600	5,100	11	24	2 J	67	10 U
Indeno(1,2,3-c,d)pyrene	1	NP	NP	12	49	3 J	130	5 U
Pyrene	3	240	2,600	15	66	10 U	93	10 U
Total H-PAHs ^b	NA	1,700	9,600	77.5	282	13.5	603	9.5
Total PAHs ^c	NA	4,022	44,792	91	301	18.5	645	14.5

(Table continues)

Table 5-14 (continued)

Analyte	MDL	ERL Values	STRATUM 1, UPPER BOAT CHANNEL					
			S1S6/ C001SC46/ (2.4-7 ft)	S1S7/ C001SC49/ (0.5-4 ft)	S1S7/ C001SC50/ (4-7 ft)	S1S8/ C001SC51/ (0.5-3.8 ft)	S1S8/ C001SC52/ (3.8-6.8 ft)	S1S9/ C001SC53/ (0.5-3.8 ft)
Acenaphthene	2	16	500	10 U	10 U	5 J	10 UJ	10 UJ
Acenaphthylene	2	44	640	10 U	3 J	10 U	11	10 U
Anthracene	1	85.3	1,100	5 U	6	5 U	21	5 U
Fluorene	2	19	540	10 U	10 U	3 J	10 U	10 U
Naphthalene	1	160	2,100	5 U	1 J	5 U	2 J	5 U
Phenanthrene	2	240	1,500	10 U	11	10 U	45	10 U
Total LPAHs ^a	NA	552	3,160	5	23	5	87	5
Benz(a)anthracene	2	261	1,600	10 U	15	10 U	160	2 J
Benzo(a)pyrene	2	430	1,600	10 U	32	10 U	200	10 U
Benzo(b)fluoranthene	2	NP	NP	10 U	34	10 U	320	10 U
Benzo(g,h,i)perylene	1	NP	NP	5 U	21	5 U	140	5 U
Benzo(k)fluoranthene	2	NP	NP	10 U	24	10 U	210	10 U
Chrysene	3	384	2,800	10 U	18	10 U	200	10 U
Dibenz(a,h)anthracene	1	63.4	260	5 U	5 J	5 U	37	5 U
Fluoranthene	2	600	5,100	10 U	31	10 U	180	10 U
Indeno(1,2,3-c,d)pyrene	1	NP	NP	5 U	47	5 U	250	6 U
Pyrene	3	240	2,600	10 U	86	10 U	1200 D ^d	4 J
Total HPAHs ^b	NA	1,700	9,600	9.5	313	9.5	2,897	13
Total PAHs ^c	NA	4,022	44,792	14.5	336	14.5	2,984	18
							32	32

(table continues)

Table 5-14 (continued)

Analyte	MDL	ERL Values	STRATUM 1, UPPER BOAT CHANNEL SAMPLING LOCATIONS/SAMPLE NUMBER/DEPTH			STRATUM 2, LOWER BOAT CHANNEL SAMPLING LOCATION/SAMPLE NUMBER/DEPTH		
			S1S9/ C001SC54/ (3.8-6.5 ft)	S1S10/ C001SC55/ (0.5-3 ft)	S1S10/ C001SC56/ (3-7 ft)	S2S1/ C001SC16/ (0.5-4 ft)	S2S1/ C001SC17/ (4-7 ft)	S2S2/ C001SC26/ (0.5-4 ft)
Acenaphthene	2	16	500	10 UJ	10 UJ	10 U	10 U	10 U
Acenaphthylene	2	44	640	10 UJ	10 U	3 J	10 U	10 U
Antracene	1	85.3	1,100	5 UJ	5 U	4 J	5 U	1 J
Fluorene	2	19	540	10 UJ	10 U	10 U	10 U	10 U
Naphthalene	1	160	2,100	5 UJ	1 J	5 U	5 U	5 U
Phenanthrene	2	240	1,500	10 UJ	10 U	2 J	5 U	5 U
Total LPAHs ^a	NA	552	3,160	5	5.5	5	23	5
Benz(a)anthracene	2	261	1,600	10 UJ	4 J	10 U	16	2 J
Benzo(a)pyrene	2	430	1,600	10 UJ	10 U	10 U	47	3 J
Benzo(b)fluoranthene	2	NP	NP	10 UJ	10 U	10 U	49	2 J
Benzo(g,h,i)perylene	1	NP	NP	5 UJ	10 U	5 U	47	4 J
Benzo(k)fluoranthene	2	NP	NP	10 UJ	10 U	10 U	32	10 U
Chrysene	3	384	2,800	10 UJ	4 J	10 U	23	10 U
Dibenz(a,h)anthracene	1	63.4	260	5 UJ	5 U	5 U	7	5 U
Fluoranthene	2	600	5,100	10 UJ	10 U	10 U	26	4 J
Indeno(1,2,3-c,d)pyrene	1	NP	NP	5 UJ	18 U	5 U	83 J	6 J
Pyrene	3	240	2,600	10 UJ	15	10 U	35	5 J
Total HPAHs ^b	NA	1,700	9,600	9.5	28.5	9.5	365	29
Total PAHs ^c	NA	4,022	44,792	14.5	34	14.5	388	34

(table continues)

Table 5-14 (continued)

Analyte	MDL	ERL Values	STRATUM 2, LOWER BOAT CHANNEL SAMPLING LOCATION/SAMPLE NUMBER/DEPTH					
			S2S2/ C001SC27/ (4-7 ft)	S2S3/ C001SC57/ (0.5-3.8 ft)	S2S3/ C001SC58/ (3.8-7 ft)	S2S4/ C001SC59/ (0.5-3.5 ft)	S2S4/ C001SC60/ (3.5-7 ft)	S2S5/ C001SC61/ (0.5-3 ft)
Acenaphthene	2	16	500	10 U	10 UJ	10 UJ	10 UJ	10 UJ
Acenaphthylene	2	44	640	10 U	10 U	10 U	10 U	10 U
Anthracene	1	85.3	1,100	5 U	5 U	5 U	5 U	5 U
Fluorene	2	19	540	10 U	10 U	10 U	10 U	10 U
Naphthalene	1	160	2,100	5 U	1 J	5 U	5 U	5 U
Phenanthrene	2	240	1,500	10 U	10 U	10 U	10 U	10 U
Total PAHs ^a	NA	552	3,160	5	5.5	5	5	5
Benz(a)anthracene	2	261	1,600	10 U	3 J	10 U	2 J	10 U
Benzof(a)pyrene	2	430	1,600	10 U	10 U	10 U	10 U	10 U
Benzof(b)fluoranthene	2	NP	NP	10 U	10 U	10 U	10 U	10 U
Benzof(g,h,i)perylene	1	NP	NP	5 U	8 U	5 U	9 U	5 U
Benzof(k)fluoranthene	2	NP	NP	10 U	10 U	10 U	10 U	10 U
Chrysene	3	384	2,800	10 U	3 J	10 U	10 U	10 U
Dibenz(a,h)anthracene	1	63.4	260	5 U	5 U	5 U	5 U	5 U
Fluoranthene	2	600	5,100	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-c,d)pyrene	1	NP	NP	1 J	13 U	5 U	20 U	10 U
Pyrene	3	240	2,600	10 U	9 J	10 U	5 J	10 U
Total HPAHs ^b	NA	1,700	9,600	10	20.5	9.5	14	9.5
Total PAHs ^c	NA	4,022	44,792	15	25.5	14.5	19	14.5

(table continues)

Table 5-14 (continued)

Analyte	MDL	ERL Values	STRATUM 2, LOWER BOAT CHANNEL SAMPLING LOCATION/SAMPLE NUMBER/DEPTH					
			S2S5/ C001SC62/ (3-7 ft)	S2S6/ C001SC63/ (0.5-3 ft)	S2S6/ C001SC64/ (3-7 ft)	S2S7/ C001SC65/ (0.5-3 ft)	S2S7/ C001SC66/ (3-7 ft)	S2S8/ C001SC32/ (0.5-5.5 ft)
Acenaphthene	2	16	500	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Acenaphthylene	2	44	640	10 U	10 U	2 J	10 U	10 U
Anthracene	1	85.3	1,100	5 U	5 U	5 U	5 U	5 U
Fluorene	2	19	540	10 U	10 U	10 U	10 U	10 U
Naphthalene	1	160	2,100	5 U	5 U	2 J	1 J	5 U
Phenanthrene	2	240	1,500	10 U	10 U	10 U	10 U	4 J
Total PAHs ^a	NA	552	3,160	5	5	7.5	5.5	8
Benz(a)anthracene	2	261	1,600	10 U	10 U	10 U	12	4 J
Benzo(a)pyrene	2	430	1,600	10 UJ	10 U	10 U	27	10 U
Benzo(b)fluoranthene	2	NP	NP	10 UJ	10 U	10 U	36	10 U
Benzo(g,h,i)perylene	1	NP	NP	13 UJ	5 U	5 U	28 U	13 U
Benzo(k)fluoranthene	2	NP	NP	10 UJ	10 U	10 U	26 U	10 U
Chrysene	3	384	2,800	10 U	10 U	10 U	13	5 J
Dibenz(a,h)anthracene	1	63.4	260	5 UJ	5 U	5 U	5 U	1 J
Fluoranthene	2	600	5,100	10 U	10 U	10 U	17	11
Indeno(1,2,3-c,d)pyrene	1	NP	NP	20 UJ	7 U	5 U	51	22 U
Pyrene	3	240	2,600	7 J	7 J	10 U	22	15
Total HPAHs ^b	NA	1,700	9,600	15	15	9.5	180	39.5
Total PAHs ^c	NA	4,022	44,792	20	20	14.5	187.5	45
								86

(table continues)

Table 5-14 (continued)

Analyte	MDL	ERL Values	STRATUM 2, LOWER BOAT CHANNEL					
			S2S8/ C001SC33/ (5.5-7 ft)	S2S9/ C001SC30/ (0.5-3 ft)	S2S9/ C001SC31/ (3-7 ft)	S2S10/ C001SC28/ (0.5-3 ft)	S2S10/ C001SC29/ (3-7 ft)	S2S11/ C001SC24/ (0.5-3.5 ft)
Acenaphthene	2	16	500	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	2	44	640	10 U	3 J	10 U	10 U	10 U
Anthracene	1	85.3	1,100	5 U	5	1 J	5 U	5 U
Fluorene	2	19	540	10 U	10 U	10 U	10 U	10 U
Naphthalene	1	160	2,100	5 U	5 U	5 U	5 U	5 U
Phenanthrene	2	240	1,500	10 U	11	3 J	4 J	10 U
Total PAHs ^a	NA	552	3,160	5	21.5	7.5	8	5
Benz(a)anthracene	2	261	1,600	10 U	16	3 J	5 J	10 U
Benz(a)pyrene	2	430	1,600	10 U	43	7 J	9 J	10 U
Benz(b)fluoranthene	2	NP	NP	10 U	56	9 J	8 J	10 U
Benz(g,h,i)perylene	1	NP	NP	5 U	33	6	11	1 J
Benz(k)fluoranthene	2	NP	NP	10 U	30	5 J	5 J	10 U
Chrysene	3	384	2,800	10 U	17	10 U	6 J	10 U
Dibenz(a,h)anthracene	1	63.4	260	5 U	8 J	1 J	1 J	5 J
Fluoranthene	2	600	5,100	10 U	22	5 J	13	10 U
Indeno(1,2,3-c,d)pyrene	1	NP	NP	2 J	110 J	22 J	31 J	3 J
Pyrene	3	240	2,600	10 U	31	7 J	16	10 U
Total HPAHs ^b	NA	1,700	9,600	11	366	66.5	105	12.5
Total PAHs ^c	NA	4,022	44,792	16	3875	74	113	40
								17.5

(table continues)

Table 5-14 (continued)

Analyte	MDL Values	ERL Values	ERM Values	STRATUM 2, LOWER BOAT CHANNEL					
				S2S11/ C001SC25/ (3.5-7 ft)	S2S12/ C001SC22/ (0.5-3.5 ft)	S2S12/ C001SC23/ (3-7 ft)	C001SC20/ (0.5-3.5 ft)	S2S13/ C001SC21/ (3.5-7 ft)	S2S14/ C001SC18/ (0.5-4 ft)
Acenaphthene	2	16	500	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	2	44	640	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	1	85.3	1,100	2 J	5 U	2 J	2 J	5 U	2 J
Fluorene	2	19	540	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	1	160	2,100	5 U	5 U	5 U	5 U	5 U	5 U
Phenanthrene	2	240	1,500	5 J	10 U	4 J	4 J	2 J	7 J
Total PAHs ^a	NA	552	3,160	10.5	5	9.5	9.5	6	12.5
Benz(a)anthracene	2	261	1,600	6 J	10 U	5 J	8 J	2 J	11
Benzo(a)pyrene	2	430	1,600	14	10 U	10	21	3 J	28
Benzo(b)fluoranthene	2	NP	NP	12	10 U	9 J	27	3 J	32
Benzo(g,h,i)perylene	1	NP	NP	12	2 J	10	14	3 J	18
Benzo(k)fluoranthene	2	NP	NP	7 J	10 U	6 J	15	4 J	16
Chrysene	3	384	2,800	7 J	10 U	6 J	8 J	10 U	14
Dibenz(a,h)anthracene	1	63.4	260	1 J	5 U	1 J	4 J	5 U	4 J
Fluoranthene	2	600	5,100	17	3 J	13	12	5 J	24
Indeno(1,2,3-c,d)pyrene	1	NP	NP	39 J	5 J	31 J	52 J	7 J	65 J
Pyrene	3	240	2,600	23	3 J	16	15	7 J	30
Total HPAHs ^b	NA	1,700	9,600	138	19	107	176	36	242
Total PAHs ^c	NA	4,022	44,792	148.5	24	116.5	185.5	42	254.5

(Table continues)

Table 5-14 (continued)

Analyte	MDL	ERL Values	ERM Values	STRATUM 2, LOWER BOAT CHANNEL SAMPLING LOCATION/SAMPLE NUMBER/DEPTH					
				S2S14/ C001SC19/ (4–7 ft)	S2S15/ C001SC14/ (0.5–3 ft)	S2S15/ C001SC15/ (3–7 ft)	S2S16/ C001SC11/ (0.5–3 ft)	S2S16/ C001SC12/ (3–7 ft)	S2S16/ C001SC13/ (3–7 ft)
Acenaphthene	2	16	500	10 U	10 U	10 U	5 J	10 U	10 U
Acenaphthylene	2	44	640	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	1	85.3	1,100	5 U	1 J	5 U	19	5 U	5 U
Fluorene	2	19	540	10 U	10 U	10 U	5 J	10 U	10 U
Naphthalene	1	160	2,100	5 U	1 J	5 U	1 J	5 U	5 U
Phenanthrene	2	240	1,500	10 U	7 J	10 U	47	10 U	10 U
Total LPAHs ^a	NA	552	3,160	5	12	5	78	5	5
Benz(a)anthracene	2	261	1,600	10 U	7 J	10 U	52	10 U	10 U
Benz(a)pyrene	2	430	1,600	3 J	15	10 U	47	10 U	10 U
Benz(b)fluoranthene	2	NP	NP	3 J	14	10 U	36	10 U	10 U
Benz(g,h,i)perylene	1	NP	NP	2 J	16	5 U	24	5 U	5 U
Benz(k)fluoranthene	2	NP	NP	10 U	9 J	10 U	35	10 U	10 U
Chrysene	3	384	2,800	10 U	9 J	10 U	55	10 U	10 U
Dibenz(a,h)anthracene	1	63.4	260	5 U	2 J	5 U	4 J	5 U	5 U
Fluoranthene	2	600	5,100	4 J	16	10 U	97	10 U	10 U
Indeno(1,2,3-c,d)pyrene	1	NP	NP	8 J	29 J	1 J	51 J	5 UJ	1 J
Pyrene	3	240	2,600	5 J	21	10 U	99	10 U	10 U
Total HPAHs ^b	NA	1,700	9,600	29	138	10	500	9.5	10
Total PAHs ^c	NA	4,022	44,792	34	150	15	578	14.5	15

(table continues)

Table 5-14 (continued)

Analyte	MDL	ERL Values	ERM Values	STRATUM 3, REFERENCE AREA SAMPLING LOCATION/SAMPLE NUMBER/DEPTH					
				S3S1/ C001SC07/ (0.5–2.5 ft)	S3S1/ C001SC08/ (2.5–7 ft)	S3S2/ C001SC05/ (0.5–4 ft)	S3S2/ C001SC06/ (4–7 ft)	S3S3/ C001SC09/ (0.5–4 ft)	S3S3/ C001SC10/ (4–7 ft)
Acenaphthene	2	16	500	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	2	44	640	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	1	85.3	1,100	5 U	5 U	2 J	5 U	2 J	5 U
Fluorene	2	19	540	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	1	160	2,100	5 U	5 U	5 U	5 U	5 U	5 U
Phenanthrene	2	240	1,500	10 U	10 U	4 J	10 U	4 J	10 U
Total LPAHs ^a	NA	552	3,160	5	5	9.5	5	9.5	5
Benz(a)anthracene	2	261	1,600	10 U	10 U	6 J	10 U	9 J	10 U
Benz(a)pyrene	2	430	1,600	10 U	10 U	13	10 U	13	10 U
Benz(b)fluoranthene	2	NP	NP	10 U	10 U	15	10 U	17	10 U
Benz(g,h,i)perylene	1	NP	NP	5 U	5 U	13	1 J	12	5 U
Benz(k)fluoranthene	2	NP	NP	10 U	10 U	11	10 U	15	10 U
Chrysene	3	384	2,800	10 U	10 U	7 J	10 U	11	10 U
Dibenz(a,h)anthracene	1	63.4	260	5 U	5 U	2 J	5 U	3 J	5 U
Fluoranthene	2	600	5,100	10 U	10 U	9 J	10 U	11	10 U
Indeno(1,2,3-c,d)pyrene	1	NP	NP	1 J	5 U	24	2 J	25	5 UJ
Pyrene	3	240	2,600	10 U	10 U	13	10 U	13	10 U
Total HPAHs ^b	NA	1,700	9,600	10	9.5	113	11.5	129	9.5
Total PAHs ^c	NA	4,022	44,792	15	14.5	122.5	16.5	138.5	14.5

(table continues)

Table 5-14 (continued)

Analyte	MDL	ERL Values	STRATUM 3, REFERENCE AREA SAMPLING LOCATION/SAMPLE NUMBER/DEPTH				
			S3S4/ C001SC03/ (0.5-3 ft)	S3S4/ C001SC04/ (3-7 ft)	S3S5/ C001SC01/ (0.5-3 ft)	S3S5/ C001SC02/ (3-8 ft)	
Acenaphthene	2	16	500	10 U	10 U	10 U	10 U
Acenaphthylene	2	44	640	3 J	10 U	10 U	10 U
Anthracene	1	85.3	1,100	3 J	5 U	2 J	5 U
Fluorene	2	19	540	10 U	10 U	10 U	10 U
Naphthalene	1	160	2,100	1 J	5 U	1 J	5 U
Phenanthrene	2	240	1,500	7 J	10 U	6 J	10 U
Total LPAHs ^a	NA	552	3,160	16	5	12	5
Benz(a)anthracene	2	261	1,600	17	10 U	12	10 U
Benz(a)pyrene	2	430	1,600	38	10 U	27	10 U
Benz(b)fluoranthene	2	NP	NP	34	10 U	25	10 U
Benz(g,h,i)perylene	1	NP	NP	31	5 U	21	5 U
Benz(k)fluoranthene	2	NP	NP	24	10 U	18	10 U
Chrysene	3	384	2,800	19	10 U	14	10 U
Dibenz(a,h)anthracene	1	63.4	260	5 J	5 U	3 J	5 U
Fluoranthene	2	600	5,100	19	10 U	18	10 U
Indeno(1,2,3-c,d)pyrene	1	NP	NP	58 J	5 U	40	5 U
Pyrene	3	240	2,600	25	10 U	24	10 U
Total HPAHs ^b	NA	1,700	9,600	270	9.5	202	9.5
Total PAHs ^c	NA	4,022	44,792	286	14.5	214	14.5

Notes:

^a total LPAHs equal to sum of acenaphthene, acenaphthylene, anthracene, fluorene, naphthalene, and phenanthrene;
 all nondetects included in summation as one-half MDL

^b total HPAHs equal to sum of benz(a)anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene,
 benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, fluoranthene, indeno(1,2,3-c,d)pyrene, and pyrene; all
 nondetects are included in summations as one-half the MDL

^c total PAHs equal to sum of LPAHs and HPAHs
 shading indicates reported concentration above ERL

(table continues)

Table 5-14 (continued)

Acronyms/Abbreviations:

ERL – effects-range low
ERM – effects-range median
ft – foot
HPAH – high-molecular-weight polynuclear aromatic hydrocarbon
LPAH – low-molecular-weight polynuclear aromatic hydrocarbon
MDL – method detection limit
NP – not published
PAH – polynuclear aromatic hydrocarbon

Laboratory Flag:
D – dilution

Review Qualifiers:

J – estimated value
U – compound or element was analyzed for but not detected above the sample quantitation limit
UJ – analyzed for but not detected above the sample quantitation limit and the quantitation limit is an estimated value