TABLE 1-1. PHYSICAL PARAMETERS OF SEDIMENT
SPARROWS POINT SHIPYARD, OCTOBER 2006

	Sample ID	SPSY-01	SPSY-02	SPSY-03	SPSY-04
GRAINSIZE	**UNITS**				
GRAVEL	%	0.0	0.0	0.5	0.0
SAND	%	0.6	26.6	20.5	1.9
SILT	%	75.3	48.1	50.0	65.2
CLAY	%	24.1	25.3	29.0	32.9
SILT+CLAY	%	99.4	73.4	79.0	98.1
LIQUID LIMIT	--	99	45	69	85
PLASTIC LIMIT	--	42	20	25	33
PLASTICITY INDEX	--	57	25	44	52
NATURAL MOISTURE	%	213.8	60.1	66.6	79.8
SPECIFIC GRAVITY	%	2.7	2.68	2.61	2.69
LOSS ON IGNITION	%	10	3.0	5.0	7.0

TABLE 1-2 GENERAL CHEMISTRY PARAMETERS IN SEDIMENT
SPARROWS POINT SHIPYARD, OCTOBER 2006

ANALYTE	UNITS	RL	SPSY-01	SPSY-02	SPSY-03	SPSY-04
OIL & GREASE	MG/KG	373	**1,250**	270 U	291 U	**3,330**
TOTAL KJELDAHL NITROGEN	MG/KG	336	**3,100**	**732**	**1,120**	**1,350**
TOTAL ORGANIC CARBON	MG/KG	1042	**27,300**	**6,770**	**9,820**	**17,800**
TOTAL PHOSPHORUS	MG/KG	108	**1,720**	**255**	**693**	**819**
PERCENT SOLIDS	%	1	**28**	**61.7**	**57.2**	**51.3**
pH	NO UNITS	--	**8**	**8**	**8**	**7.4**

NOTE: Shaded and bold values represent detected concentrations.
RL = average reporting limit
U = compound was analyzed, but not detected

TABLE 1-3 METAL CONCENTRATIONS (MG/KG) IN SEDIMENT
SPARROWS POINT SHIPYARD, OCTOBER 2006

ANALYTE	UNITS	RL	SPSY-01	SPSY-02	SPSY-03	SPSY-04
ANTIMONY	MG/KG	1.18	**0.96 BN**	0.97 N U	0.96 N U	**0.73 BN**
ARSENIC	MG/KG	1.18	**56.9**	**4.7**	**5.1**	**12.5**
BERYLLIUM	MG/KG	0.47	**1.7**	**0.58**	**1.1**	**1.4**
CADMIUM	MG/KG	0.71	**1.5**	0.48 U	0.48 U	**1.6**
CHROMIUM	MG/KG	0.71	**328 NE**	**31.5 NE**	**31.9 NE**	**128 NE**
COPPER	MG/KG	2.93	**201**	**13**	**16.1**	**129**
LEAD	MG/KG	0.36	**180 E**	**17.8 E**	**14.9 E**	**203 E**
MERCURY	MG/KG	0.04	**0.3**	**0.039**	**0.04**	**0.32**
NICKEL	MG/KG	4.73	**43 E**	**10.6 E**	**21.1 E**	**43.7 E**
SELENIUM	MG/KG	0.59	**6.2**	**0.4 B**	0.48 U	**1.2**
SILVER	MG/KG	0.59	**1.5**	**0.18 B**	**0.2 B**	**0.75**
THALLIUM	MG/KG	1.18	1.8 U	0.97 U	0.96 U	0.97 U
ZINC	MG/KG	2.33	**670 E**	**58.1 E**	**70.3 E**	**380 E**

NOTE: Shaded and bold values represent detected concentrations.
RL = average reporting limit
B = compound was detected, but below the reporting limit (value is estimated)
E = Reported value is estimated because of presence of interference.
N = Spiked sample recovery is not within control limits.
U = compound was analyzed, but not detected

TABLE 1-4 PCB CONGENER CONCENTRATIONS (UG/KG) IN SEDIMENT
SPARROWS POINT SHIPYARD, OCTOBER 2006

ANALYTE	UNITS	RL	SPSY-01	SPSY-02	SPSY-03	SPSY-04
PCB 8 (BZ)	UG/KG	1.93	**1.2 J PG**	1.4 U	1.5 U	**0.58 J PG**
PCB 18 (BZ)	UG/KG	1.93	**4.7 PG**	**0.2 J PG**	**0.2 J PG**	**2.5 PG**
PCB 28 (BZ)	UG/KG	1.93	**7.7 PG**	**0.32 J PG**	1.5 U	**3.3 PG**
PCB 44 (BZ)	UG/KG	1.93	**7.2**	1.4 U	1.5 U	**2.3 PG**
PCB 49 (BZ)	UG/KG	1.93	**7.4**	1.4 U	1.5 U	**5.7**
PCB 52 (BZ)	UG/KG	1.93	**9.5**	1.4 U	1.5 U	**8.1**
PCB 66 (BZ)	UG/KG	1.93	**7 PG**	**0.5 J**	1.5 U	**2.5 PG**
PCB 77 (BZ)	UG/KG	1.93	**1.2 J PG**	1.4 U	1.5 U	**0.57 J PG**
PCB 87 (BZ)	UG/KG	1.93	**2.6 J PG**	1.4 U	1.5 U	**1.7 PG**
PCB 90 (BZ)	UG/KG	1.93	3.1 U	1.4 U	1.5 U	1.7 U
PCB 101 (BZ)	UG/KG	1.93	**11**	1.4 U	1.5 U	**9.4**
PCB 105 (BZ)	UG/KG	1.93	**2.6 J**	1.4 U	1.5 U	**1.6 J**
PCB 118 (BZ)	UG/KG	1.93	**9**	1.4 U	1.5 U	**4.8**
PCB 126 (BZ)	UG/KG	1.93	3.1 U	1.4 U	1.5 U	1.7 U
PCB 128 (BZ)	UG/KG	1.93	**1.6 J PG**	1.4 U	1.5 U	**0.91 J PG**
PCB 138 (BZ)	UG/KG	1.93	**5.1 PG**	1.4 U	1.5 U	**3.5 PG**
PCB 153 (BZ)	UG/KG	1.93	**12**	**0.47 J**	**0.38 J**	**12**
PCB 156 (BZ)	UG/KG	1.93	**0.81 J**	1.4 U	1.5 U	**0.52 J**
PCB 169 (BZ)	UG/KG	1.93	3.1 U	1.4 U	1.5 U	1.7 U
PCB 170 (BZ)	UG/KG	1.93	**3.9**	1.4 U	1.5 U	**2.3 PG**
PCB 180 (BZ)	UG/KG	1.93	**8.1**	1.4 U	1.5 U	**4.6 PG**
PCB 183 (BZ)	UG/KG	1.93	**1.8 J PG**	1.4 U	1.5 U	**1.3 J PG**
PCB 184 (BZ)	UG/KG	1.93	3.1 U	1.4 U	1.5 U	1.7 U
PCB 187 (BZ)	UG/KG	1.93	**6.1**	1.4 U	1.5 U	**5.4**
PCB 195 (BZ)	UG/KG	1.93	**0.79 J**	1.4 U	1.5 U	**0.48 J PG**
PCB 206 (BZ)	UG/KG	1.93	**3.1**	1.4 U	1.5 U	**1.2 J**
PCB 209 (BZ)	UG/KG	1.93	**3 J PG**	1.4 U	1.5 U	1.7 U
TOTAL PCBs (ND=0)	UG/KG	---	**196**	**2.98**	**1.16**	**129**
TOTAL PCBs (ND=1/2DL)	UG/KG	---	**202**	**22.6**	**25.2**	**132**

*PCB congeners used for Total PCB summation, as per Table 9-3 of the ITM (USEPA/USACE 1998)

NOTE: Shaded and bold values represent detected concentrations.
RL = average reporting limit
J = compound was detected, but below the reporting limit (value is estimated)
PG = the percent difference between the original and confirmation analysis is greater than 40%
U = compound was analyzed, but not detected

TABLE 1-5 CHLORINATED PESTICIDE CONCENTRATIONS (UG/KG) IN SEDIMENT
SPARROWS POINT SHIPYARD, OCTOBER 2006

ANALYTE	UNITS	RL	SPSY-01	SPSY-02	SPSY-03	SPSY-04
4,4'-DDD	UG/KG	5.85	**9**	1.7 U	1.6 U	17 U
4,4'-DDE	UG/KG	5.85	**8.7**	1.7 U	1.6 U	**6 J**
4,4'-DDT	UG/KG	5.85	**7.9 PG**	**1.4 J**	1.6 U	**8.1 J PG**
ALDRIN	UG/KG	5.85	**7.1**	1.7 U	1.6 U	17 U
ALPHA-BHC	UG/KG	5.85	**5 PG**	**0.96 J PG**	**1.3 J PG**	**1.6 J PG**
ALPHA-CHLORDANE	UG/KG	5.85	**1.4 J PG**	1.7 U	1.6 U	17 U
BETA-BHC	UG/KG	5.85	3.1 U	1.7 U	1.6 U	17 U
DELTA-BHC	UG/KG	5.85	3.1 U	1.7 U	1.6 U	17 U
DIELDRIN	UG/KG	5.85	**0.78 J PG**	1.7 U	1.6 U	17 U
ENDOSULFAN I	UG/KG	5.85	3.1 U	1.7 U	1.6 U	17 U
ENDOSULFAN II	UG/KG	5.85	**10**	**1.1 J**	1.6 U	17 U
ENDOSULFAN SULFATE	UG/KG	5.85	3.1 U	1.7 U	1.6 U	17 U
ENDRIN	UG/KG	5.85	**3 J PG**	**0.28 J PG**	**0.24 J PG**	**4.5 J PG**
ENDRIN ALDEHYDE	UG/KG	5.85	**2.5 J PG**	**0.68 J PG**	**1.1 J PG**	**6.3 J PG**
ENDRIN KETONE	UG/KG	5.85	**2.3 J PG**	1.7 U	1.6 U	17 U
GAMMA-BHC (LINDANE)	UG/KG	5.85	3.1 U	1.7 U	1.6 U	17 U
GAMMA-CHLORDANE	UG/KG	5.85	**0.99 J PG**	1.7 U	1.6 U	**2.1 J PG**
HEPTACHLOR	UG/KG	5.85	3.1 U	**0.22 J PG**	**0.19 J PG**	17 U
HEPTACHLOR EPOXIDE	UG/KG	5.85	3.1 U	1.7 U	1.6 U	17 U
METHOXYCHLOR	UG/KG	11.10	6 U	3.2 U	3.2 U	32 U
TOXAPHENE	UG/KG	225	120 U	65 U	64 U	650 U

NOTE: Shaded and bold values represent detected concentrations.
RL = average reporting limit
J = compound was detected, but below the reporting limit (value is estimated)
PG = the percent difference between the original and confirmation analysis is greater than 40%
U = compound was analyzed, but not detected

TABLE 1-6 PAH CONCENTRATIONS (UG/KG) IN SEDIMENT
SPARROWS POINT SHIPYARD, OCTOBER 2006

ANALYTE	UNITS	RL	SPSY-01	SPSY-02	SPSY-03	SPSY-04
ACENAPHTHENE	UG/KG	778	**42 J**	640 U	630 U	**340 J**
ACENAPHTHYLENE	UG/KG	778	**110 J**	640 U	630 U	**220 J**
ANTHRACENE	UG/KG	778	**200 J**	640 U	630 U	**600 J**
BENZO(A)ANTHRACENE	UG/KG	778	**580 J**	**40 J**	**39 J**	**1100**
BENZO(A)PYRENE	UG/KG	778	**620 J**	640 U	**46 J**	**950**
BENZO(B)FLUORANTHENE	UG/KG	778	**680 J**	**64 J**	**51 J**	**960**
BENZO(GHI)PERYLENE	UG/KG	778	**470 J**	**49 J**	**38 J**	**570 J**
BENZO(K)FLUORANTHENE	UG/KG	778	**260 J**	**23 J**	**21 J**	**370 J**
CHRYSENE	UG/KG	778	**620 J**	**35 J**	**35 J**	**1100**
DIBENZ(A,H)ANTHRACENE	UG/KG	778	**110 J**	640 U	630 U	**150 J**
FLUORANTHENE	UG/KG	778	**940 J**	**65 J**	**64 J**	**2600**
FLUORENE	UG/KG	778	**85 J**	640 U	630 U	**400 J**
INDENO(1,2,3-CD)PYRENE	UG/KG	778	**500 J**	**53 J**	**42 J**	**730**
NAPHTHALENE	UG/KG	778	**560 J**	**85 J**	**50 J**	**790**
PHENANTHRENE	UG/KG	778	**390 J**	**27 J**	**24 J**	**1600**
PYRENE	UG/KG	778	**830 J**	**64 J**	**56 J**	**1500**
TOTAL PAHs (ND=0)	UG/KG	---	**6,997**	**505**	**466**	**13,980**
TOTAL PAHs (ND=1/2RL)	UG/KG	---	**6,997**	**2,425**	**2,041**	**13,980**

NOTE: Shaded and bold values represent detected concentrations.
RL = average reporting limit
J = compound was detected, but below the reporting limit (value is estimated)
U = compound was analyzed, but not detected

TABLE 1-7 SEMI-VOLATILE CONCENTRATIONS (UG/KG) IN SEDIMENT
SPARROWS POINT SHIPYARD, OCTOBER 2006

ANALYTE	UNITS	RL	SPSY-01	SPSY-02	SPSY-03	SPSY-04
1,2,4-TRICHLOROBENZENE	UG/KG	778	1200 U	640 U	630 U	640 U
1,2-DICHLOROBENZENE	UG/KG	778	1200 U	640 U	630 U	640 U
1,2-DIPHENYLHYDRAZINE	UG/KG	778	1200 U	640 U	630 U	640 U
1,3-DICHLOROBENZENE	UG/KG	778	1200 U	640 U	630 U	640 U
1,4-DICHLOROBENZENE	UG/KG	778	1200 U	640 U	630 U	640 U
2,4,6-TRICHLOROPHENOL	UG/KG	778	1200 U	640 U	630 U	640 U
2,4-DICHLOROPHENOL	UG/KG	778	1200 U	640 U	630 U	640 U
2,4-DIMETHYLPHENOL	UG/KG	778	1200 U	640 U	630 U	640 U
2,4-DINITROPHENOL	UG/KG	3750	5800 U	3100 U	3000 U	3100 U
2,4-DINITROTOLUENE	UG/KG	778	1200 U	640 U	630 U	640 U
2,6-DINITROTOLUENE	UG/KG	778	1200 U	640 U	630 U	640 U
2-CHLORONAPHTHALENE	UG/KG	778	1200 U	640 U	630 U	640 U
2-CHLOROPHENOL	UG/KG	778	1200 U	640 U	630 U	640 U
2-METHYL-4,6-DINITROPHENOL	UG/KG	3750	5800 U	3100 U	3000 U	3100 U
2-NITROPHENOL	UG/KG	778	1200 U	640 U	630 U	640 U
3,3'-DICHLOROBENZIDINE	UG/KG	3750	5800 U	3100 U	3000 U	3100 U
4-BROMOPHENYL PHENYL ETHER	UG/KG	778	1200 U	640 U	630 U	640 U
4-CHLORO-3-METHYLPHENOL	UG/KG	778	1200 U	640 U	630 U	640 U
4-CHLOROPHENYL PHENYL ETHER	UG/KG	778	1200 U	640 U	630 U	640 U
4-NITROPHENOL	UG/KG	3750	5800 U	3100 U	3000 U	3100 U
BENZIDINE	UG/KG	778	1200 U	640 U	630 U	640 U
BIS(2-CHLOROETHOXY)METHANE	UG/KG	778	1200 U	640 U	630 U	640 U
BIS(2-CHLOROETHYL) ETHER	UG/KG	778	1200 U	640 U	630 U	640 U
BIS(2-CHLOROISOPROPYL) ETHER	UG/KG	778	1200 U	640 U	630 U	640 U
BIS(2-ETHYLHEXYL) PHTHALATE	UG/KG	778	**440 J**	640 U	630 U	**340 J**
BUTYL BENZYL PHTHALATE	UG/KG	778	1200 U	640 U	630 U	**91 J**
DIETHYL PHTHALATE	UG/KG	778	1200 U	640 U	630 U	640 U
DIMETHYL PHTHALATE	UG/KG	778	1200 U	640 U	630 U	640 U
DI-N-BUTYL PHTHALATE	UG/KG	778	1200 U	640 U	630 U	640 U
DI-N-OCTYL PHTHALATE	UG/KG	778	1200 U	640 U	630 U	640 U
HEXACHLOROBENZENE	UG/KG	778	1200 U	640 U	630 U	640 U
HEXACHLOROBUTADIENE	UG/KG	778	1200 U	640 U	630 U	640 U
HEXACHLOROCYCLOPENTADIENE	UG/KG	3750	5800 U	3100 U	3000 U	3100 U
HEXACHLOROETHANE	UG/KG	778	1200 U	640 U	630 U	640 U
ISOPHORONE	UG/KG	778	**140 J**	**75 J**	**68 J**	**80 J**
NITROBENZENE	UG/KG	778	1200 U	640 U	630 U	640 U
N-NITROSODIMETHYLAMINE	UG/KG	778	1200 U	640 U	630 U	640 U
N-NITROSODI-N-PROPYLAMINE	UG/KG	778	1200 U	640 U	630 U	640 U
N-NITROSODIPHENYLAMINE	UG/KG	778	1200 U	640 U	630 U	640 U
PENTACHLOROPHENOL	UG/KG	3750	5800 U	3100 U	3000 U	3100 U
PHENOL	UG/KG	778	**68 J**	**55 J**	630 U	**94 J**

NOTE: Shaded and bold values represent detected concentrations.
RL = average reporting limit
J = compound was detected, but below the reporting limit (value is estimated)
U = compound was analyzed, but not detected

TABLE 1-8 VOLATILE CONCENTRATIONS (UG/KG) IN SEDIMENT
SPARROWS POINT SHIPYARD, OCTOBER 2006

ANALYTE	UNITS	RL	SPSY-01	SPSY-02	SPSY-03	SPSY-04
1,1,1-TRICHLOROETHANE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
1,1,2,2-TETRACHLOROETHANE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
1,1,2-TRICHLOROETHANE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
1,1-DICHLOROETHANE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
1,1-DICHLOROETHENE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
1,2-DICHLOROETHANE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
1,2-DICHLOROPROPANE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
2-CHLOROETHYL VINYL ETHER	UG/KG	22	36 U	16 U	17 U	19 U
ACROLEIN	UG/KG	220	360 U	160 U	170 U	190 U
ACRYLONITRILE	UG/KG	220	360 U	160 U	170 U	190 U
BENZENE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
BROMODICHLOROMETHANE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
BROMOFORM	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
BROMOMETHANE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
CARBON TETRACHLORIDE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
CHLOROBENZENE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
CHLOROETHANE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
CHLOROFORM	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
CHLOROMETHANE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
CIS-1,3-DICHLOROPROPENE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
DIBROMOCHLOROMETHANE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
ETHYLBENZENE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
METHYLENE CHLORIDE	UG/KG	11.1	**11 J B**	**31 B**	**7.1 J B**	**20 B**
TETRACHLOROETHENE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
TOLUENE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
TRANS-1,2-DICHLOROETHENE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
TRANS-1,3-DICHLOROPROPENE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
TRICHLOROETHENE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U
VINYL CHLORIDE	UG/KG	11.1	18 U	8.1 U	8.7 U	9.7 U

NOTE: Shaded and bold values represent detected concentrations.
RL = average reporting limit
B = analyte is present in the method blank at a reportable level
U = compound was analyzed, but not detected

TABLE 1-6 PAH CONCENTRATIONS (UG/KG) IN SEDIMENT
SPARROWS POINT SHIPYARD, OCTOBER 2006

ANALYTE	UNITS	RL	SPSY-01	SPSY-02	SPSY-03	SPSY-04
ACENAPHTHENE	UG/KG	778	**42 J**	640 U	630 U	**340 J**
ACENAPHTHYLENE	UG/KG	778	**110 J**	640 U	630 U	**220 J**
ANTHRACENE	UG/KG	778	**200 J**	640 U	630 U	**600 J**
BENZO(A)ANTHRACENE	UG/KG	778	**580 J**	**40 J**	**39 J**	**1100**
BENZO(A)PYRENE	UG/KG	778	**620 J**	640 U	**46 J**	**950**
BENZO(B)FLUORANTHENE	UG/KG	778	**680 J**	**64 J**	**51 J**	**960**
BENZO(GHI)PERYLENE	UG/KG	778	**470 J**	**49 J**	**38 J**	**570 J**
BENZO(K)FLUORANTHENE	UG/KG	778	**260 J**	**23 J**	**21 J**	**370 J**
CHRYSENE	UG/KG	778	**620 J**	**35 J**	**35 J**	**1100**
DIBENZ(A,H)ANTHRACENE	UG/KG	778	**110 J**	640 U	630 U	**150 J**
FLUORANTHENE	UG/KG	778	**940 J**	**65 J**	**64 J**	**2600**
FLUORENE	UG/KG	778	**85 J**	640 U	630 U	**400 J**
INDENO(1,2,3-CD)PYRENE	UG/KG	778	**500 J**	**53 J**	**42 J**	**730**
NAPHTHALENE	UG/KG	778	**560 J**	**85 J**	**50 J**	**790**
PHENANTHRENE	UG/KG	778	**390 J**	**27 J**	**24 J**	**1600**
PYRENE	UG/KG	778	**830 J**	**64 J**	**56 J**	**1500**
TOTAL PAHs (ND=0)	UG/KG	---	**6,997**	**505**	**466**	**13,980**
TOTAL PAHs (ND=1/2RL)	UG/KG	---	**6,997**	**2,425**	**2,041**	**13,980**

NOTE: Shaded and bold values represent detected concentrations.
RL = average reporting limit
J = compound was detected, but below the reporting limit (value is estimated)
U = compound was analyzed, but not detected