JC Boyle Reservoir - Sediment - Standard Analytes

Analyte	Sampling Sites																	
	CDH-S-002(0.0-5)	CDH-S-003(0.0-3.8)	CDH-S-004(0.0-1.3)	CDH-S-004(0.0-6)	CDH-S-004(5.8-9)	CDH-S-005(0.0-0.3)	CDH-S-006A(0.0-0.3)	CDH-S-007(0.0-5)	CDH-S-007(0-5.1)	CDH-S-007(4.2-9.2)	CDH-S-007(9.2-12)	CDH-S-007(10.5-12.0)	CDH-S-007(12-17)	CDH-S-007(17-18.7)	CDH-S-007(0.0-18.7)	CDH-S-008(0.0-1.7)	CDH-S-008(0.0-2.2)	CDH-S-043(0.0-2.0)
Conventionals (units and methods vary, all dry weights except pH and EC)																		
pH (Method 9045)	7.0	6.9	-	7.0	7.1	7.1	6.7	6.8	6.6	7.0	7.0	-	6.9	7.5	-	7.4	-	7.0
EC (umhos/cm, Method 2510B)	110	580	-	360	490	120	150	450	450	420	430	-	590	550	-	110	-	200
Calcium (mg/kg, Method 6010B)	7,500	7,100	-	5,700	5,100	5,900	5,700	5,400	5,200	5,400	5,400	-	5,500	4,800	-	5,400	-	6,100
Magnesium (mg/kg, Method 6010B)	2,500	4,700	-	3,700	3,900	3,400	3,700	3,700	3,600	3,700	3,800	-	4,000	3,400	-	3,400	-	2,900
Ammonia as N (mg/kg, Method 350.1)	62	160	-	140	200	17	10	180	120	190	190	-	290	330	-	27	-	41
Total Nitrogen as N (mg/kg, Method 351.2)	550	1600	-	1,500	1,300	1,300	1,200	1,600	1,500	1,500	1,500	-	1,700	1,900	-	1,100	-	1,100
Total Phosphorus as P (mg/kg, Method 4500P Mod)	210	240	-	120	160	92	110	110	99	130	130	-	260	260	-	120	-	210
Cyanide, WAD (mg/kg, Method 4500CN I)	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	-	<0.5
Total Solids (mg/kg, Method 2540B)	650,000	250,000	-	180,000	210,000	130,000	120,000	210,000	180,000	210,000	200,000	-	240,000	310,000	-	210,000	-	210,000
Total Volatile Solids (mg/kg, Method 2540G)	19,000	31,000	-	25,000	22,000	21,000	18,000	31,000	25,000	31,000	30,000	-	34,000	40,000	-	25,000	-	31,000
TOC (%, Method USGS:N011, T10 USGS:C011, T08)	0.79	6.18	-	7.4	5.18	8.07	7.78	7.29	7.43	7.18	6.95	-	6.55	6.65	-	5.67	-	7.73
Metals & AVS (mg/kg dry weight, Method 6020 unless otherwise noted)																		
Aluminum	20,000	28,000	-	26,000	26,000	23,000	27,000	26,000	26,000	25,000	24,000	-	29,000	22,000	-	28,000	-	30,000
Antimony	<0.31	<0.80	-	<1.2	<0.97	<1.5	<1.7	<0.99	<1.1	<1.0	<0.97	-	<0.84	<0.74	-	<1.0	-	<1.0
Arsenic	4.3	10	-	13	7.7	11	11	11	11	11	11	-	10	9.0	-	15	-	11
Cadmium	<0.16	<0.40	-	<0.59	<0.48	<0.77	<0.84	<0.49	<0.56	<0.51	<0.49	-	<0.42	<0.37	-	<0.50	-	<0.51
Chromium	18	32	-	32	32	26	30	30	34	30	29	-	33	27	-	30	-	38
Copper	9.8	28	-	31	34	23	28	28	22	29	28	-	32	25	-	30	-	27
Iron (Method 6010B)	37,000	8200	-	21,000	26,000	11,000	8400	20,000	20,000	16,000	21,000	-	25,000	23,000	-	33,000	-	15,000
Lead	2.8	10	-	10	10	7.9	25	8.6	8.3	8.4	8.5	-	11	9.1	-	9.0	-	8.6
Mercury (Method 7471A)	<0.063	<0.16	-	<0.24	<0.19	<0.31	<0.34	<0.20	<0.23	<0.20	<0.19	-	<0.17	<0.15	-	<0.20	-	<0.20
Nickel	19	32	-	24	26	21	25	23	25	23	23	-	26	21	-	25	-	27
Selenium	<0.29	<0.73	-	1.5	<0.96	<1.5	<1.6	1.2	<1.1	<0.94	<0.92	-	<0.79	<0.72	-	<0.99	-	<1.0
Silver (Method 6010B)	<2.5	<0.79	-	<3.0	<3.0	<2.4	<1.9	<2.5	<2.8	<2.1	<2.5	-	<2.5	<2.4	-	<3.8	-	<2.0
Zinc	19	47	-	54	48	47	55	52	55	52	49	-	45	47	-	56	-	53
Acid Volatile Sulfides (Method E821/R-91-100)	-	-	-	-	-	-	-	-	-	-	-	26	-	-	57	6.0	-	-
Organics																		
SVOCs: PAHs (ug/kg dry weight, Method 8270D)																		
Acenaphthene	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
Acenaphthylene	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
Anthracene	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
Benzo(a)anthracene	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
Benzo(a)pyrene	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
Benzo(b)fluoranthene	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
Benzo(g,h,i)perylene	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
Benzo(k)fluoranthene	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
4-Bromophenyl phenyl ether	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
Chrysene	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
Dibenzo(a,h)anthracene	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
Fluorene	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
Fluoranthene	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
Indeno(1,2,3-cd)pyrene	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
2-Methyl naphthalane	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
Naphthalene (Method 8260C)	<6.7	<19	<22	<27 T	<23 T	<30 T	<36 T	<24 T	<28	<24 T	<24 T	-	<19 T	<18 T	-	<23 T	<26	<19
Phenanthrene	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
Pyrene	<230 T	<510 T	-	<950	<770	<1,200 T	<1,200	<800 T	<920	<830 T	<790 T	-	<680 T	<610 T	-	<810 T	-	<720 T
Organics																		
PCBs (ug/g dry weight, Method 8082 unless otherwise noted)																		
Aroclor 1016	<0.045	<0.13	-	<0.19	<0.16	<0.24	<0.24	<0.16 T	<0.19	<0.17 T	<0.16 T	-	<0.14 T	<0.12 T	-	<0.16 T	-	<0.13
Aroclor 1221	<0.090	<0.25	-	<0.39	<0.31	<0.49	<0.48	<0.32 T	<0.38	<0.34 T	<0.33 T	-	<0.28 T	<0.24 T	-	<0.32 T	-	<0.26
Aroclor 1232	<0.045	<0.13	-	<0.19	<0.16	<0.24	<0.24	<0.16 T	<0.19	<0.17 T	<0.16 T	-	<0.14 T	<0.12 T	-	<0.16 T	-	<0.13
Aroclor 1242	<0.045	<0.13	-	<0.19	<0.16	<0.24	<0.24	<0.16 T	<0.19	<0.17 T	<0.16 T	-	<0.14 T	<0.12 T	-	<0.16 T	-	<0.13
Aroclor 1248	<0.045	<0.13	-	<0.19	<0.16	<0.24	<0.24	<0.16 T	<0.19	<0.17 T	<0.16 T	-	<0.14 T	<0.12 T	-	<0.16 T	-	<0.13
Aroclor 1254	<0.045	<0.13	-	<0.19	<0.16	<0.24	<0.24	<0.16 T	<0.19	<0.17 T	<0.16 T	-	<0.14 T	<0.12 T	-	<0.16 T	-	<0.13
Aroclor 1260	<0.045	<0.13	-	<0.19	<0.16	<0.24	<0.24	<0.16 T	<0.19	<0.17 T	<0.16 T	-	<0.14 T	<0.12 T	-	<0.16 T	-	<0.13
Aroclor 1268	<0.045	<0.13	-	<0.19	<0.16	<0.24	<0.24	<0.16 T	<0.19	<0.17 T	<0.16 T	-	<0.14 T	<0.12 T	-	<0.16 T	-	<0.13
Total PCBs (pg/g) (Method 1668A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,000 T	10,000 T	-	-

Preliminary Data - Subject to Revision

JC Boyle Reservoir - Sediment - Standard Analytes

Analyte	Sampling Sites																	
	CDH-S-002(0.0-5)	CDH-S-003(0.0-3.8)	CDH-S-004(0.0-1.3)	CDH-S-004(0.0-6)	CDH-S-004(5.8-9)	CDH-S-005(0.0-0.3)	CDH-S-006A(0.0-0.3)	CDH-S-007(0.0-5)	CDH-S-007(0-5.1)	CDH-S-007(4.2-9.2)	CDH-S-007(9.2-12)	CDH-S-007(10.5-12.0)	CDH-S-007(12-17)	CDH-S-007(17-18.7)	CDH-S-007(0.0-18.7)	CDH-S-008(0.0-1.7)	CDH-S-008(0.0-2.2)	CDH-S-043(0.0-2.0)
Organics																		
Pesticides/Herbicides: Organochlorine Pesticides (ug/kg dry weight, Method 8081A unless otherwise noted)																		
Aldrin	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	<3.2 T	<3.8	<3.4 T	<3.3 T	-	<2.8 T	<2.4 T	-	<3.2 T	-	<2.6
Chlordane (Technical)	<4.5	<13	-	<19 T	<16 T	<24 T	<24 T	<16 T	<19	<17 T	<16 T	-	<14 T	<12 T	-	<16 T	-	<13
Chlordane-Alpha	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	<3.2 T	<3.8	<3.4 T	<3.3 T	-	<2.8 T	<2.4 T	-	<3.2 T	-	<2.6
Chlordane-Gamma	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	<3.2 T	<3.8	<3.4 T	<3.3 T	-	<2.8 T	<2.4 T	-	<3.2 T	-	<2.6
4,4'-DDT	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	<3.2 T	<3.8	4.1 T	<3.3 T	-	<2.8 T	<2.4 T	-	<3.2 T	-	<2.6
4,4'-DDD	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	3.7 T	<3.8	<3.4 T	<3.3 T	-	<2.8 T	<2.4 T	-	<3.2 T	-	<2.6
4,4'-DDE	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	3.4 T	<3.8	<3.4 T	<3.3 T	-	<2.8 T	<2.4 T	-	<3.2 T	-	<2.6
2,4'-DDT (ENV by GC-MS Specialty)	<45	<130	-	<190	<160	<240 T	<240	<33 T	<190	<33 T	<33 T	-	<33 T	<33 T	-	<160 T	-	<130
2,4'-DDD (ENV by GC-MS Specialty)	<4.5	<13	-	<19	<16	<24 T	<24	<3.3 T	<19	<3.3 T	<3.3 T	-	<3.3 T	<3.3 T	-	<16 T	-	<13
2,4'-DDE (ENV by GC-MS Specialty)	<4.5	<13	-	<19	<16	<24 T	<24	<3.3 T	<19	<3.3 T	<3.3 T	-	<3.3 T	<3.3 T	-	<16 T	-	<13
Dieldrin	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	3.4 T	<3.8	<3.4 T	<3.3 T	-	<2.8 T	<2.4 T	-	<3.2 T	-	<2.6
Endosulfan I	<0.90	<2.5	-	<3.9 T, L	<3.1 T, L	<4.9 T, L	<4.8 T, L	<3.2 T, L	<3.8	<3.4 T, L	<3.3 T, L	-	<2.8 T, L	<2.4 T, L	-	<3.2 T, L	-	<2.6
Endosulfan II	<0.90	<2.5	-	<3.9 T, L	<3.1 T, L	<4.9 T, L	<4.8 T, L	<3.2 T, L	<3.8	<3.4 T, L	<3.3 T, L	-	<2.8 T, L	<2.4 T, L	-	<3.2 T, L	-	<2.6
Endosulfan Sulfate	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	<3.2 T	<3.8	<3.4 T	<3.3 T	-	<2.8 T	<2.4 T	-	<3.2 T	-	<2.6
Endrin	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	<3.2 T	<3.8	<3.4 T	<3.3 T	-	<2.8 T	<2.4 T	-	<3.2 T	-	<2.6
Endrin Aldehyde	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	<3.2 V, T	<3.8	5.0 T, V	<3.3 T	-	<2.8 T	<2.4 T	-	<3.2 T	-	<2.6
Endrin Ketone	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	<3.2 T	<3.8	<3.4 T	<3.3 T	-	<2.8 T	<2.4 T	-	<3.2 T	-	<2.6
Heptachlor	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	<3.2 T	<3.8	<3.4 T	<3.3 T	-	<2.8 T	<2.4 T	-	<3.2 T	-	<2.6
Heptachlor Epoxide	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	<3.2 V, T	<3.8	<3.4 T, V	<3.3 T	-	<2.8 T	<2.4 T	-	<3.2 T	-	<2.6
HCH - Alpha	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	<3.2 T	<3.8	<3.4 T	<3.3 T	-	<2.8 T	<2.4 T	-	<3.2 T	-	<2.6
HCH - Beta	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	<3.2 T	<3.8	<3.4 T	<3.3 T	-	<2.8 T	<2.4 T	-	<3.2 T	-	<2.6
HCH - Delta	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	6.9 V, T	<3.8	<3.4 T	<3.3 T	-	<2.8 T	5.6 T, V	-	<3.2 T	-	<2.6
HCH - Gamma	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	<3.2 T	<3.8	<3.4 T	<3.3 T	-	<2.8 T	<2.4 T	-	<3.2 T	-	<2.6
Methoxychlor	<0.90	<2.5	-	<3.9 T	<3.1 T	<4.9 T	<4.8 T	4.0 T	3.8	9.7 T	<3.3 T	-	<2.8 T, V	3.7 T, V	-	<3.2 T	-	<2.6
Toxaphene	<45	<130	-	<190 T	<160 T	<240 T	<240 T	<160 T	<190	<170 T	<160 T	-	<140 T	<120 T	-	<160 T	-	<130
Particle Size Fraction (% dry weight)																		
Fines (<0.005 mm)	-	-	-	-	-	-	-	31.8	37.6	35.2	31.5	35.4	31.6	46.3	-	42.3	-	-
Fines (0.005 to 0.075 mm)	-	-	-	-	-	-	-	62.5	52.6	57.3	62.9	58.4	60.1	48.1	-	52.8	-	-
Sand (#200 to #4)	-	-	-	-	-	-	-	5.7	9.8	7.5	5.6	6.2	8.3	5.6	-	4.9	-	-
Gravel (#4 to 3 inch)	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	-	-
Cobbles (3 to 5 inch)	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	-	-
Oversize (> 5 inch)	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	-	-

	CDH-S-002(1.3-2.6)	CDH-S-002(4.4-5)	CDH-S-003(5.1-5.9)	CDH-S-004A(0.0-9.2)	CDH-S-005(0.0-1.3)	CDH-S-006(0.0-1.4)	CDH-S-008(0.0-0.5)	CDH-S-044(0.0-2.9)	CDH-S-045(0.0-1.6)
Particle Size Fraction (% dry weight)									
Fines (<0.005 mm)	5.4	5.2	18.1	41.5	55.6	1.6	44.1	33.3	8.1
Fines (0.005 to 0.075 mm)	9.3	10.3	32.1	54.8	44.4	6.6	53.0	51.4	24.9
Sand (#200 to #4)	85.3	84.5	49.8	3.7	0.0	26.2	2.9	15.3	67.0
Gravel (#4 to 3 inch)	0.0	0.0	0.0	0.0	0.0	65.6	0.0	0.0	0.0
Cobbles (3 to 5 inch)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oversize (> 5 inch)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Qualifiers:
V: result may vary excessively from the true value
H: result may have a high bias
L: result may have a low bias
T: result obtained past the holding time
U: result determined to be an outlier at the time of data validation
J: result is between the reporting limit and lowest calibration level
- : no data
< : not detected at reporting limit shown

Preliminary Data - Subject to Revision