

Table 10. Contaminant Data for Pool 7 of the Upper Mississippi River

Record #		229	230	231	232	717	233	524	234		
River Mile		714.1	713.9	713.9	712.7	712.7	712.6	712.0	711.6		
Location		LOWER APPROACH L/D 6	LOWER APPROACH L/D 6	LOWER L/D 6 - CT LABS	HEAD OF RICHMOND IS.	HEAD OF RICHMOND IS.	Entr @ Lwr end Isl	RICHMOND ISLAND	RICHMOND ISLAND	RICHMOND ISLAND	
Year		1981	1981	2008	1979	1979	1985	1980	1989	1974	
System		1	1	1	1	1	1	1	1	1	
Habitat Type		1	1	1	1	1	3	1	1	1	
Pool		7	7	7	7	7	7	7	7	7	
Sam. Gear		1	1	1	1	1	2	1	1	1	
Sam. Depth		10	10	10	10	10	10	10	10	10	
Data Cit.		COE	COE	COE	COE	COE	FWS	COE	COE	COE	
C H C L S	ug/kg	a-BHC					< 10	< 0.07			
	ug/kg	b-BHC					< 10	< 0.14			
	ug/kg	BHC						< 0.21			
	ug/kg	g-BHC (lindane)					< 10	< 0.09			
	ug/kg	Heptachlor					< 10	< 0.07			
	ug/kg	Aldrin						< 0.09			
	ug/kg	Heptachlorepoxyde						< 0.12			
	ug/kg	Endosulfan I						< 0.12			
	ug/kg	Dieldrin	< 0.1	< 0.1	<3.2	0	0	< 10	< 0.12	< 10	
	ug/kg	4,4'-DDE	< 0.1	< 0.1	<3.5	0	0	< 10	< 0.09	< 10	
	ug/kg	Endrin	< 0.1	< 0.1		0	0	< 10	< 0.21	< 10	
	ug/kg	Endosulfan II							< 0.24		
	ug/kg	4,4'-DDD	< 0.1	< 0.1	<3.7	0	0	< 10	< 0.26	< 10	
	ug/kg	Endrinaldehyde							< 0.26		
	ug/kg	Sulfan sulfate							< 0.26		
ug/kg	4,4'-DDT	< 0.1	< 0.1	<4.2	0	0	< 10	< 0.31	< 10		
ug/kg	Methoxychlor							< 0.52			
ug/kg	Endrinetone							< 0.26			
ug/kg	Chlorodane	< 1	< 1		0	0	< 10	< 1.42	< 10		
ug/kg	Toxaphene							< 1.42			
M E T A L S	mg/kg	Ag (silver)					< 0.4				
	mg/kg	Al (aluminum)					7830				
	mg/kg	As (arsenic)	0	0	0.91	1	0	< 6	0	1.2	< 0.9
	mg/kg	B (boron)						< 4			
	mg/kg	Ba (barium)	20	30		30	20	108	10		
	mg/kg	Be (beryllium)						0.45			
	mg/kg	Cd (cadmium)	< 1	< 1	<1.0	< 10	< 10	0.5	< 10	< 1.1	< 1
	mg/kg	Cr (chromium)	< 10	< 10	6	< 10	< 10	20	< 10	3.3	7
	mg/kg	Cu (copper)	< 10	< 10	4.2	< 10	< 10	13	< 10	< 1.44	5
	mg/kg	Fe (iron)	3100	3400		4600	3200	17900	2400		
	mg/kg	Hg (mercury)	< 0.01	< 0.01	<0.10	0	0	0.14	0	< 0.01	0.2
	mg/kg	Mg (magnesium)						4020			
	mg/kg	Mn (manganese)	280	310	359	220	150	< 783	270	809	
	mg/kg	Mo (molybdenum)						2			
	mg/kg	Ni (nickel)	< 10	< 10	5.7	< 10	< 10	14	< 10	< 5.5	9
mg/kg	Pb (lead)	< 10	< 10	<1.0	< 10	< 10	16	< 10	1.1	< 9	
mg/kg	Sb (antimony)						< 4				
mg/kg	Se (selenium)						< 10		< 0.84		
mg/kg	Sn (tin)						< 2				
mg/kg	Sr (strontium)						20.4				
mg/kg	Ti (titanium)						20				
mg/kg	Zn (zinc)	10	10	13.2	10	< 10	59.4	13	12.2	16	
mg/kg	V (vanadium)						< 15				
P C B ' S	ug/kg	Aroclor-1006			<31				< 1.42		
	ug/kg	Aroclor-1221							< 1.42		
	ug/kg	Aroclor-1232							< 1.42		
	ug/kg	Aroclor-1242							< 1.42		
	ug/kg	Aroclor-1248			<29				< 1.42		
	ug/kg	Aroclor-1254			<10				< 2.95		
	ug/kg	Aroclor-1260			<19				< 2.95		
	ug/kg	Total PCB's	0	0		0	0	0	0	0	
P A R T I C L E S I Z E % F I N E N E S S	D	3 in				100	100		100	100	
		1 1/2	100	100		100	100		100	100	
		3/4	100	100		100	100		100	100	
		3/8	100	100		100	100		100	100	
		4	99	100	100	99	100		98	99.2	98
	S	8	96	99					95		93
		10			94.43	90	100			96.9	
		16			85.0	93.0			63.0	90.5	81.0
		18									
		20			74.43	61.0	89.0				
	F	30	46.0	54.0						53.9	
		40	18.0	23.0	29.61	16.0	52.0		20.0		11.0
		50	3.0	4.0						53.9	
		60			5.18						
		70	1.0	1.0							
Y	80			3.31	2.0	3.0			4.7		
	100	0.0	0.0	3.19				0.0	0.3	0.0	
	140								0.3		
	200	0.0	0.0	2.98	1.0	1.0		0.0		0.0	
	230			2.96							
C L A	270	0.0	0.0								
	0.20 mm	0.0	0.0		0.0	0.0		0.0		0.0	
	0.05 mm	0.0	0.0		0.0	0.0		0.0		0.0	
M I S C	%	Total Organic Carb			<1200				0.045		
	mg/kg	Chem Oxy Demand	1400	1300		1700	1200		1500	< 461	
	mg/kg	Kjedahl Nitrogen	146	250	<27	120	320		90	11	
	mg/kg	Total Phosph			180	170	62			209	
	mg/kg	Oil and Grease									
	mg/kg	Cyanide, Total			0.56					< 0.6	
	mg/kg	Ammonia			<0.72					< 0.24	
	mg/l	Ammonia Elutriate									
%	Moisture			17.2					16.5		
%	Total Solids			82.8					83.5		
%	Volatile Solids			0.0054					0.4		

Table 10. Contaminant Data for Pool 7 of the Upper Mississippi River

Record #		235	523	236	237	718	238	239	240	522		
River Mile		711.5	711.4	710.6	710.3	709.7	709.1	709.0	709.0	709.0		
Location		RICHMOND ISLAND	RICHMOND ISLAND	BELOW QUEENS BLUFF	BELOW QUEENS BLUFF	Dwn Shingle Cr	WINTERS LANDING	WINTERS LANDING	WINTERS LANDING	WINTERS LANDING		
Year		1980	1989	1981	1981	1985	1981	1974	1974	1989		
System		1	1	1	1	1	1	1	1	1		
Habitat Type		1	1	1	1	3	1	1	1	1		
Pool		7	7	7	7	7	7	7	7	7		
Sam. Gear		1	1	1	1	2	1	1	1	1		
Sam. Depth		10	10	10	10	10	10	10	10	10		
Data Cit.		COE	COE	COE	COE	FWS	COE	COE	COE	COE		
C H C S	ug/kg	a-BHC	< 0.07			< 10				< 0.07		
	ug/kg	b-BHC	< 0.14			< 10				< 0.14		
	ug/kg	BHC	< 0.21							< 0.21		
	ug/kg	g-BHC (lindane)	< 0.1			< 10				< 0.1		
	ug/kg	Heptachlor	< 0.07			< 10				< 0.07		
	ug/kg	Aldrin	< 0.1							< 0.1		
	ug/kg	Heptachlorepoxyde	< 0.12							< 0.12		
	ug/kg	Endosulfan I	< 0.12							< 0.12		
	ug/kg	Dieldrin	0 < 0.12	< 0.1	< 0.1	< 10	< 0.1	< 10	< 10	< 0.12		
	ug/kg	4,4'-DDE	0 < 0.1	< 0.1	< 0.1	< 10	< 0.1	< 10	< 10	< 0.1		
	ug/kg	Endrin	0 < 0.21	< 0.1	< 0.1	< 10	< 0.1	< 10	< 10	< 0.21		
	ug/kg	Endosulfan II	< 0.24							< 0.24		
	ug/kg	4,4'-DDD	0 < 0.26	< 0.1	< 0.1	< 10	< 0.1	< 10	< 10	< 0.26		
	ug/kg	Endrinaldehyde	< 0.26							< 0.26		
	ug/kg	Sulfan sulfat	< 0.26							< 0.26		
	ug/kg	4,4'-DDT	0 < 0.31	< 0.1	< 0.1	< 10	< 0.1	< 10	< 10	< 0.31		
	ug/kg	Methoxychlor	< 0.52							< 0.52		
	ug/kg	Endrinetone	< 0.26							< 0.26		
ug/kg	Chlorodane	0 < 1.43	< 1	< 1	< 10	< 1	< 10	< 10	< 1.43			
ug/kg	Toxaphene	< 1.43							< 1.43			
M E T A L S	mg/kg	Ag (silver)				< 0.4						
	mg/kg	Al (aluminum)				12400						
	mg/kg	As (arsenic)	0	< 1	0	0	< 7	0	< 0.9	< 0.8	1.4	
	mg/kg	B (boron)					5					
	mg/kg	Ba (barium)	10		20	20	153	40				
	mg/kg	Be (beryllium)					0.72					
	mg/kg	Cd (cadmium)	< 10	< 1.1	< 1	< 1	0.5	< 1	< 0.9	1	< 1.1	
	mg/kg	Cr (chromium)	< 10	3.3	< 10	< 10	24	< 10	7	8	3.5	
	mg/kg	Cu (copper)	< 10	1.9	< 10	< 10	17	< 10	4	5	< 1.44	
	mg/kg	Fe (iron)	2300		3500	2500	22200	4000				
	mg/kg	Hg (mercury)	0	< 0.01	< 0.01	< 0.01	0.17	< 0.01	0.3	0.4	< 0.01	
	mg/kg	Mg (magnesium)					3520					
	mg/kg	Mn (manganese)	230	234	280	200	< 476	370			248	
	mg/kg	Mo (molybdenum)					3					
	mg/kg	Ni (nickel)	< 10	< 5.48	10	< 10	20	10	7	5	< 5.49	
	mg/kg	Pb (lead)	< 10	0.9	< 10	< 10	17	< 10	< 9	10	0.9	
	mg/kg	Sb (antimony)					< 4					
	mg/kg	Se (selenium)		< 0.84			< 10				< 0.84	
mg/kg	Sn (tin)					< 2						
mg/kg	Sr (strontium)					21.1						
mg/kg	Ti (titanium)					20						
mg/kg	Zn (zinc)	17	13	10	8	88.2	12	16	15	12.2		
mg/kg	V (vanadium)					< 21						
P C B ' S	ug/kg	Aroclor-1006	< 1.43							< 1.43		
	ug/kg	Aroclor-1221	< 1.43							< 1.43		
	ug/kg	Aroclor-1232	< 1.43							< 1.43		
	ug/kg	Aroclor-1242	< 1.43							< 1.43		
	ug/kg	Aroclor-1248	< 1.43							< 1.43		
	ug/kg	Aroclor-1254	< 2.98							< 2.98		
	ug/kg	Aroclor-1260	< 2.98							< 2.98		
	ug/kg	Total PCB's	0		0	0	0	0	0	0		
S I Z E % F I N E R	D	c o a r s e	3 in	100					100	100		
			1 1/2	100		100	100		100	100		
			3/4	100		100	100		100	100		
			3/8	100		100	100		100	100		
			4	100	100	98	100		100	100	100	99.5
			8	95		97	100		94	95	95	
	S	m e i m	10		99.4						98.4	
			16	77.0	94.1	95.0	98.0		81.0	81.0	81.0	93.5
			18									
			20									
			30		55.6	74.0	85.0		46.0			62.9
			40	2.0		41.0	63.0		25.0	12.0	12.0	
	F	f i n e	50		55.6	11.0	17.0		6.0			62.9
			60									
			70			2.0	2.0		1.0			
			80		3.7							4.3
			100	0.0	0.3	0.0	0.0		0.0	0.0	0.0	0.0
			140									
P A R S I C L A	Y	200	0.0		0.0	0.0		0.0	0.0	0.0		
		230										
		270			0.0	0.0		0.0				
		0.20 mm	0.0		0.0	0.0		0.0	0.0	0.0		
0.05 mm	0.0		0.0	0.0		0.0	0.0	0.0				
M I S C	%	Total Organic Car		0.017						0.026		
	mg/kg	Chem Oxy Demand	1500		1100	1500		1300	1417	418		
	mg/kg	Kjedahl Nitrogen	120		171	147		217	145	123		
	mg/kg	Total Phosph						207	205			
	mg/kg	Oil and Grease										
	mg/kg	Cyanide, Total		< 0.6						< 0.61		
	mg/kg	Ammonia		< 0.24						< 0.55		
	mg/l	Ammonia Elutriate										
%	Moisture		16.5							18.1		
%	Total Solids		83.5							81.9		
%	Volatile Solids		0.4							0.4		

Table 10. Contaminant Data for Pool 7 of the Upper Mississippi River

Record #		241	242	243	521	611	614	616	615	
River Mile		708.5	708.5	708	708.0	708.0	707	707	707	
Location		WINTERS LANDING	WINTERS LANDING	WINTERS LANDING	WINTERS LANDING	WINTERS LANDING	Halfway Ck. Ab.RD.	Halfway Ck. Bw.RD.	Halfway Ck. Bw.RD.	Halfway Ck. Bw.RD.
Year		1978	1978	1981	1989	2002	1984	1984	1984	1984
System		1	1	1	1	1	1	1	1	1
Habitat Type		1	1	1	1	1	3	3	3	3
Pool		7	7	7	7	7	7	7	7	7
Sam. Gear		1	1	1	1	1	3	3	3	3
Sam. Depth		10	10	10	10	10	10	10	10	10
Data Cit.		COE	COE	COE	COE	COE	WDNR	WDNR	WDNR	WDNR
C H C L S	ug/kg	a-BHC			< 0.07	<0.12				
	ug/kg	b-BHC			< 0.14	<0.12				
	ug/kg	BHC			< 0.21	<0.12				
	ug/kg	g-BHC (lindane)			< 0.1	<0.12				
	ug/kg	Heptachlor			< 0.07	<0.08				
	ug/kg	Aldrin			< 0.1					
	ug/kg	Heptachlorepoxyde			< 0.12	<1.48				
	ug/kg	Endosulfan I			< 0.12					
	ug/kg	Dieldrin	0	0	< 0.1	< 0.12	<0.12			
	ug/kg	4,4'-DDE	0	0	< 0.1	< 0.1	<0.12			
	ug/kg	Endrin	0	0	< 0.1	< 0.21	<0.12			
	ug/kg	Endosulfan II			< 0.24					
	ug/kg	4,4'-DDD	0	0	< 0.1	< 0.26	<0.12			
	ug/kg	Endrinaldehyde			< 0.26					
	ug/kg	Sulfan sulfate			< 0.26					
ug/kg	4,4'-DDT	0	0	< 0.1	< 0.31	<0.24				
ug/kg	Methoxychlor			< 0.52						
ug/kg	Endrinetone			< 0.26						
ug/kg	Chlorodane	0	0	< 1	< 1.43	<0.36				
ug/kg	Toxaphene			< 1.43						
M E T A L S	mg/kg	Ag (silver)					20000	13000	13000	18000
	mg/kg	Al (aluminum)								
	mg/kg	As (arsenic)	0	0	0	< 1.01	0.752			
	mg/kg	B (boron)								
	mg/kg	Ba (barium)	30	10	10					
	mg/kg	Be (beryllium)								
	mg/kg	Cd (cadmium)	< 10	< 10	< 1	< 1.1	0.1	< 1	< 1	< 1
	mg/kg	Cr (chromium)	< 10	< 10	< 10	2.99	3.91	47	38	38
	mg/kg	Cu (copper)	< 10	< 10	< 10	< 1.44	3.18	26	25	26
	mg/kg	Fe (iron)	2200	2500	4500					
	mg/kg	Hg (mercury)	0	0	< 0.01	< 0.01	<0.006	0.1	< 0.1	< 0.1
	mg/kg	Mg (magnesium)								
	mg/kg	Mn (manganese)	29	24	280	255	258			
	mg/kg	Mo (molybdenum)								
	mg/kg	Ni (nickel)	< 10	< 10	< 10	< 5.5	6.65	33	30	30
mg/kg	Pb (lead)	10	< 10	< 10	1.1	0.68	19	28	38	
mg/kg	Sb (antimony)									
mg/kg	Se (selenium)				< 0.84					
mg/kg	Sn (tin)									
mg/kg	Sr (strontium)									
mg/kg	Ti (titanium)									
mg/kg	Zn (zinc)	10	10	13	11.7	13.6	110	98	93	
mg/kg	V (vanadium)									
P C B ' S	ug/kg	Aroclor-1006			< 1.43					
	ug/kg	Aroclor-1221			< 1.43					
	ug/kg	Aroclor-1232			< 1.43					
	ug/kg	Aroclor-1242			< 1.43					
	ug/kg	Aroclor-1248			< 1.43					
	ug/kg	Aroclor-1254			< 2.98					
	ug/kg	Aroclor-1260			< 2.98					
	ug/kg	Total PCB's	0	0	0			0	0	0
P A R T I C L E S I Z E	%	D I S T R I B U T I O N	3 in	100	100					
			1 1/2	100	100	100				
			3/4	100	100	100				
			3/8	100	100	100				
			4	100	100	100	98.6	99.3		
			8			100				
			10	98	98		96.4	97.0		
			16				97.0	90.6		
			18						87.4	
			20	87.0	85.0					
			30				71.0	66.2		
			40	53.0	36.0		42.0			
			50				9.0	66.2	7.7	
			60							
			70				1.0		0.9	
80	5.0	2.0			12.0					
100				0.0	0.1					
140										
200	1.0	0.0	0.0							
230										
270				0.0						
0.20 mm	0.0	0.0	0.0							
0.05 mm	0.0	0.0	0.0							
M I S C	%	Total Organic Car			0.025	<0.01				
	mg/kg	Chem Oxy Demand	1800	1200	1200					
	mg/kg	Kjedahl Nitrogen	180	210	230					
	mg/kg	Total Phosph	180	190						
	mg/kg	Oil and Grease								
	mg/kg	Cyanide, Total				< 0.59	<0.10			
	mg/kg	Ammonia				< 0.24				
	mg/l	Ammonia Elutriate								
	%	Moisture				15.8	16.7			
	%	Total Solids				84.2	83.3			
%	Volatile Solids				0.5	17.0				

Table 10. Contaminant Data for Pool 7 of the Upper Mississippi River

Record #		613	612	610	766	719	244	520	245	519
River Mile		707	707	707.0	706.8	706.8	706.5	706.4	706.3	706.1
Location		Halfway Ck.	Halfway Ck.	Halfway Ck.	L-Lk Onalaska celery-4	L-Bay Is Across Dakota	DAKOTA	DAKOTA	DAKOTA	DAKOTA
Year		1984	1984	1984	1983	1985	1980	1989	1974	1989
System		1	1	1	1	1	1	1	1	1
Habitat Type		3	3	3	3	3	1	1	1	1
Pool		7	7	7	7	7	7	7	7	7
Sam. Gear		3	3	3	2	2	1	1	1	1
Sam. Depth		10	10	10	10	10	10	10	10	10
Data Cit.		WDNR	WDNR	WDNR	FWS	FWS	COE	COE	COE	COE
C H C ' S	ug/kg	a-BHC				< 10		< 0.07		< 0.07
	ug/kg	b-BHC				< 10		< 0.14		< 0.14
	ug/kg	BHC						< 0.21		< 0.21
	ug/kg	g-BHC (lindane)				< 10		< 0.09		< 0.09
	ug/kg	Heptachlor				< 10		< 0.07		< 0.07
	ug/kg	Aldrin						< 0.09		< 0.09
	ug/kg	Heptachlorepoxyde						< 0.12		< 0.12
	ug/kg	Endosulfan I						< 0.12		< 0.12
	ug/kg	Dieldrin				< 10	0	< 0.12	< 10	< 0.12
	ug/kg	4,4'-DDE				< 10	0	< 0.09	< 10	< 0.09
	ug/kg	Endrin				< 10	0	< 0.21	< 10	< 0.21
	ug/kg	Endosulfan II						< 0.24		< 0.24
	ug/kg	4,4'-DDD				< 10	0	< 0.26	< 10	< 0.26
	ug/kg	Endrinaldehyde						< 0.26		< 0.26
	ug/kg	Sulfan sulfete						< 0.26		< 0.26
ug/kg	4,4'-DDT				< 10	0	< 0.31	< 10	< 0.31	
ug/kg	Methoxychlor						< 0.52		< 0.52	
ug/kg	Endrinetone						< 0.26		< 0.26	
ug/kg	Chlorodane				< 10	0	< 1.42	< 10	< 1.42	
ug/kg	Toxaphene						< 1.42		< 1.42	
M E T A L S	mg/kg	Ag (silver)				7.6	< 0.4			
	mg/kg	Al (aluminum)	21000	17000	12000	8360	5490			
	mg/kg	As (arsenic)				< 40	< 6	0	1.6	< 0.9
	mg/kg	B (boron)				< 5	6			
	mg/kg	Ba (barium)				99	105	10		
	mg/kg	Be (beryllium)				0.3	0.4			
	mg/kg	Cd (cadmium)	< 1	< 1	< 1	0.26	< 0.3	< 10	< 1.1	< 0.9
	mg/kg	Cr (chromium)	48	42	29	16.7	14	< 10	3.3	7
	mg/kg	Cu (copper)	28	25	19	7.6	11	< 10	< 1.44	5
	mg/kg	Fe (iron)				18240	13800	2400		
	mg/kg	Hg (mercury)	< 0.1	0.1	< 0.1	< 0.05	0.22	0	< 0.01	0.1
	mg/kg	Mg (magnesium)				2128	3240			
	mg/kg	Mn (manganese)				< 654	< 956	120	229	260
	mg/kg	Mo (molybdenum)				2	2			
	mg/kg	Ni (nickel)	29	33	23	11.4	13	< 10	< 5.48	5
mg/kg	Pb (lead)	19	19	21	6.4	12	< 10	1.1	9	
mg/kg	Sb (antimony)				< 40	< 4				
mg/kg	Se (selenium)				< 20	< 10		< 0.84	< 0.8	
mg/kg	Sn (tin)				< 20	< 2				
mg/kg	Sr (strontium)				12.5	15.7				
mg/kg	Ti (titanium)				20	20				
mg/kg	Zn (zinc)	100	96	76	38	50.1	11	10.7	14	
mg/kg	V (vanadium)				< 38	< 10				
P C B ' S	ug/kg	Aroclor-1006						< 1.42		< 1.42
	ug/kg	Aroclor-1221						< 1.42		< 1.42
	ug/kg	Aroclor-1232						< 1.42		< 1.42
	ug/kg	Aroclor-1242						< 1.42		< 1.42
	ug/kg	Aroclor-1248						< 1.42		< 1.42
	ug/kg	Aroclor-1254						< 2.95		< 2.95
	ug/kg	Aroclor-1260						< 2.95		< 2.95
	ug/kg	Total PCB's	0	0	0	0	0	0	0	0
S I Z E % F I N E S T I C L E	D	C O A R S E	3 in					100		100
			1 1/2					100		100
			3/4					100		100
			3/8					100		100
			4					100	97.7	100
			8					100		96
			10						95.4	
			16					99.0	83.5	87.0
			18							
			20							
	S	M E I M	30					58.0	30.3	
			40							11.0
			50						30.3	
			60							
			70							
F	I N E	80						1.4		
		100					1.0	0.1	0.0	
		140						0.0	0.0	
		200					0.0	0.0	0.0	
		230								
P A R S I C L A	S I Z E	270								
		0.20 mm					0.0		0.0	
		0.05 mm					0.0		0.0	
M I S C	%	Total Organic Car						0.061		0.02
	mg/kg	Chem Oxy Demand					460		444	
	mg/kg	Kjedahl Nitrogen					70		112	
	mg/kg	Total Phosph							200	
	mg/kg	Oil and Grease								
	mg/kg	Cyanide, Total						< 0.59		< 0.6
	mg/kg	Ammonia						< 0.24		< 0.24
	mg/l	Ammonia Elutriate								
	%	Moisture						15.6		16.0
	%	Total Solids						84.4		84.0
%	Volatile Solids						0.5		0.4	

Table 10. Contaminant Data for Pool 7 of the Upper Mississippi River

Record #		246	720	247	518	765	721	332	331	327	
River Mile		706.0	706	705.4	705.1	705	705	705	705.0	705	
Location		DAKOTA	L-Entrnc Black R. Chute	HEAD OF DRESBACH CUT	HEAD OF DRESBACH CUT	L-Lk Onalaska celery 3	Hd Dresbach Isl	Onalaska Rosebud 2	Onalaska 3-Rosebud 3	Onalaska 3-Rosebud 2	
Year		1980	1985	1980	1989	1983	1985	1987	1987	1987	
System		1	1	1	1	1	1	1	1	1	
Habitat Type		1	3	1	1	3	3	3	3	3	
Pool		7	7	7	7	7	7	7	7	7	
Sam. Gear		1	2	1	1	2	2	4	4	4	
Sam. Depth		10	10	10	10	10	10	60-120	60	60-120	
Data Cit.		COE	FWS	COE	COE	FWS	FWS	COE	COE	COE	
C H C L S	ug/kg	a-BHC	< 10		< 0.07		< 10	< 5	< 5	< 5	
	ug/kg	b-BHC	< 10		< 0.14		< 10	< 5	< 5	< 5	
	ug/kg	BHC			< 0.21						
	ug/kg	g-BHC (lindane)	< 10		< 0.09		< 10	< 5	< 5	< 5	
	ug/kg	Heptachlor	< 10		< 0.07		< 10	< 5	< 5	< 5	
	ug/kg	Aldrin			< 0.09						
	ug/kg	Heptachlorepoide			< 0.12						
	ug/kg	Endosulfan I			< 0.12						
	ug/kg	Dieldrin	0	< 10	0	< 0.12		< 10	< 5	< 5	
	ug/kg	4,4'-DDE	0	< 10	0	< 0.09		< 10	< 5	< 5	
	ug/kg	Endrin	0	< 10	0	< 0.21		< 10	< 5	< 5	
	ug/kg	Endosulfan II			< 0.23						
	ug/kg	4,4'-DDD	0	< 10	0	< 0.26		< 10	< 5	< 5	
	ug/kg	Endrinaldehyde			< 0.26						
	ug/kg	Sulfan sulfate			< 0.26						
	ug/kg	4,4'-DDT	0	< 10	0	< 0.3		< 10	< 5	< 5	
	ug/kg	Methoxychlor			< 0.51						
	ug/kg	Endrinketone			< 0.26						
ug/kg	Chlorodane	0	< 10	0	< 1.39		< 10	< 5	< 5		
ug/kg	Toxaphene			< 1.39							
M E T A L S	mg/kg	Ag (silver)	< 0.5			1.48	< 0.4				
	mg/kg	Al (aluminum)	16100			5624	5520				
	mg/kg	As (arsenic)	0	< 8	0	< 1	< 40	< 6	5.2	< 2.2	
	mg/kg	B (boron)		5			< 5	13			
	mg/kg	Ba (barium)	20	246	50		87	85			
	mg/kg	Be (beryllium)		0.91			0.3	0.37			
	mg/kg	Cd (cadmium)	< 10	0.5	< 10	< 1.09	0.31	0.4	5.8	5.8	
	mg/kg	Cr (chromium)	< 10	31	< 10	2.8	11.4	14	20.2	20.2	
	mg/kg	Cu (copper)	< 10	23	< 10	1.5	7	11	11.5	11.5	
	mg/kg	Fe (iron)	3400	27900	3800		8584	12600			
	mg/kg	Hg (mercury)	0	0.15	0	< 0.01	< 0.05	0.07	< 0.6	< 0.6	
	mg/kg	Mg (magnesium)		3800			1332	4990			
	mg/kg	Mn (manganese)	240	< 760	450	282	< 141	< 745	4.5	4.5	
	mg/kg	Mo (molybdenum)		3			2	2			
	mg/kg	Ni (nickel)	10	24	10	< 5.43	8	13	< 25	< 25	
	mg/kg	Pb (lead)	10	22	10	1.07	5.5	14	17.4	12	
	mg/kg	Sb (antimony)		< 4			< 40	< 4			
	mg/kg	Se (selenium)		< 10		< 0.83	< 20	< 10			
mg/kg	Sn (tin)		< 3			< 20	< 2				
mg/kg	Sr (strontium)		26.7			8.1	16.7				
mg/kg	Ti (titanium)		20			20	20				
mg/kg	Zn (zinc)	2.1	109	11	10.7	34	51.8	11	8.4		
mg/kg	V (vanadium)		< 25			< 34	< 9.4				
P C B ' S	ug/kg	Aroclor-1006			< 1.39						
	ug/kg	Aroclor-1221			< 1.39						
	ug/kg	Aroclor-1232			< 1.39						
	ug/kg	Aroclor-1242			< 1.39						
	ug/kg	Aroclor-1248			< 1.39						
	ug/kg	Aroclor-1254			< 2.9						
	ug/kg	Aroclor-1260			< 2.9						
	ug/kg	Total PCB's	0	0	0		0	0	0	0	
P A R T I C L E	D I A M E T E R	C O O R S E	3 in		100	100					
			1 1/2		100	100					
			3/4		100	100					
			3/8		100	100					
			4		100	100	98.7				
			8		100	100					
	S I Z E	S I M E T E R	16		100	96.0	83.5		92.1	93.76	89.9
			18								
			20								
			30				34.6				
			40	100		44.0			57.1	81.9	41.1
			50				34.6				
T I C K L E	F I N E	60									
		70									
		80				1.8					
		100	97.0		0.0	0.0					
		140						53.5	73.2	27.6	
		200									
P A R T I C L E	S I Z E	230		38.0	0.0						
		270						42.1	49.9	19.5	
		0.20 mm	0.0		0.0			24.8	21.7	12.4	
		0.05 mm	0.0		0.0			24.8	21.8	12.4	
M I S C	%	Total Organic Car			0.03			5.92	7.95	8.48	
	mg/kg	Chem Oxy Demand	1000		1100						
	mg/kg	Kjedahl Nitrogen	440		250						
	mg/kg	Total Phosph									
	mg/kg	Oil and Grease									
	mg/kg	Cyanide, Total			< 0.6						
	mg/kg	Ammonia			< 0.24						
	mg/l	Ammonia Elutriate									
%	Moisture			16.4							
%	Total Solids			83.6							
%	Volatile Solids			0.6							

Table 10. Contaminant Data for Pool 7 of the Upper Mississippi River

Record #		322	330	323	326	329	324	325	328	248
River Mile		705	705	705	705	705	705	705	705	704.9
Location		Onalaska Rosebud 1	Onalaska Rosebud 2/3	Onalaska Rosebud 2	Onalaska Rosebud 1	Onalaska Rosebud 2	Onalaska Rosebud b	Onalaska Rosebud a	Onalaska Rosebud b	HEAD OF DRESBACH CUT
Year		1987	1987	1987	1987	1988	1988	1988	1988	1974
System		1	1	1	1	1	1	1	1	1
Habitat Type		3	3	3	3	3	3	3	3	1
Pool		7	7	7	7	7	7	7	7	7
Sam. Gear		4	4	4	4	4	4	4	4	1
Sam. Depth		60	120	60-120	60	60-120	76	76-120	60	10
Data Cit.		COE	COE	COE	COE	COE	COE	COE	COE	COE
C H C L S	ug/kg	a-BHC	< 5	< 5	< 5	< 5	< 4.8	< 4.8	< 4.8	< 4.8
	ug/kg	b-BHC	< 5	< 5	< 5	< 5	< 4.8	< 4.8	< 4.8	< 4.8
	ug/kg	BHC								
	ug/kg	g-BHC (lindane)	< 5	< 5	< 5	< 5	< 4.8	< 4.8	< 4.8	< 4.8
	ug/kg	Heptachlor	< 5	< 5	< 5	< 5	< 2.2	< 2.2	< 2.2	< 2.2
	ug/kg	Aldrin								
	ug/kg	Heptachlorepoxyde								
	ug/kg	Endosulfan I								
	ug/kg	Dieldrin	< 5	< 5	< 5	< 5	< 4	< 4	< 4	< 4
	ug/kg	4,4'-DDE	< 5	< 5	< 5	< 5	< 5.8	< 5.8	< 5.8	< 5.8
	ug/kg	Endrin	< 5	< 5	< 5	< 5	< 13	< 13	< 13	< 13
	ug/kg	Endosulfan II								
	ug/kg	4,4'-DDD	< 5	< 5	< 5	< 5	< 13	< 13	< 13	< 13
	ug/kg	Endrinaldehyde								
	ug/kg	Sulfan sulfate								
	ug/kg	4,4'-DDT	< 5	< 5	< 5	< 5	< 8.7	< 8.7	< 8.7	< 8.7
ug/kg	Methoxychlor									
ug/kg	Endrinetone									
ug/kg	Chlorodane	< 5	< 5	< 5	< 5	< 12	< 12	< 12	< 12	
ug/kg	Toxaphene									
M E T A L S	mg/kg	Ag (silver)								
	mg/kg	Al (aluminum)								
	mg/kg	As (arsenic)	< 2.2	< 2.2	< 2.2	< 2.2	0.06	0.89	0.15	0.82
	mg/kg	B (boron)								
	mg/kg	Ba (barium)								
	mg/kg	Be (beryllium)								
	mg/kg	Cd (cadmium)	< 3.1	5.8	5.8	12.3	0.33	0.48	0.35	0.43
	mg/kg	Cr (chromium)	30.9	20.2	20.2	30.9	6	11	16	9
	mg/kg	Cu (copper)	18.2	18.2	11.5	25	3.6	5.4	6.4	5.1
	mg/kg	Fe (iron)								
	mg/kg	Hg (mercury)	< 0.6	< 0.6	< 0.6	< 0.6	< 0.02	< 0.02	< 0.02	< 0.02
	mg/kg	Mg (magnesium)								
	mg/kg	Mn (manganese)	1171.8	744.2	312.2	1208.3	28	150	18	80
	mg/kg	Mo (molybdenum)								
	mg/kg	Ni (nickel)	54.5	54.5	< 25	100	6.3	9.9	9.6	9.6
	mg/kg	Pb (lead)	10.6	22.9	13.8	14	< 2.5	8.4	5.3	21
mg/kg	Sb (antimony)									
mg/kg	Se (selenium)									
mg/kg	Sn (tin)									
mg/kg	Sr (strontium)									
mg/kg	Ti (titanium)									
mg/kg	Zn (zinc)	90.1	44.1	23.7	105.4	6	28	15	23	
mg/kg	V (vanadium)									
P C B ' S	ug/kg	Aroclor-1006								
	ug/kg	Aroclor-1221								
	ug/kg	Aroclor-1232								
	ug/kg	Aroclor-1242								
	ug/kg	Aroclor-1248								
	ug/kg	Aroclor-1254								
	ug/kg	Aroclor-1260								
	ug/kg	Total PCB's	0	0	0	0	0	0	0	0
S I Z E % F I N E R	D	C O A R S E	3 in							100
			1 1/2							100
			3/4							100
			3/8							100
			4							100
			8							94
			10	92.9		90.9				
			16							77.0
	S	I M E	18							
			20							
			30							
			40	66.8		54.8				10.0
			50							
			60							
			70							
			80							
100							0.0			
P A R T I C L E S I Z E	F I N E	140	62.1		43.0					
		200							0.0	
		230								
		270		36.0		32.5				
P A R T I C L E S I Z E	C L A	0.20 mm							0.0	
		0.05 mm							0.0	
M I S C	%	Total Organic Car		9.09		15.29				
	mg/kg	Chem Oxy Demand							475	
	mg/kg	Kjedahl Nitrogen							108	
	mg/kg	Total Phosph							375	
	mg/kg	Oil and Grease								
	mg/kg	Cyanide, Total								
	mg/kg	Ammonia								
	mg/l	Ammonia Elutriate								
%	Moisture									
%	Total Solids									
%	Volatile Solids									

Table 10. Contaminant Data for Pool 7 of the Upper Mississippi River

Record #		764	249	763	760	517	701	702	703	704	
River Mile		704.4	704.3	704.2	704.2	704.2	704	704	704	704	
Location		L-Lk Onalaska celery-2	HEAD OF DRESBACH CUT	L-Lk Onalaska celery-1	L-Lk Onalaska celery-5	HEAD OF DRESBACH CUT	Onalaska Rosebud Isl	L-Lake Onalaska Halfway	L-Lake Onalaska Halfway	Onalaska Rosebud Isl	
Year		1983	1980	1983	1983	1989	1984	1984	1984	1984	
System		1	1	1	1	1	1	1	1	1	
Habitat Type		3	1	3	3	1	3	3	3	3	
Pool		7	7	7	7	7	7	7	7	7	
Sam. Gear		2	1	2	2	1	2	2	2	2	
Sam. Depth		10	10	10	10	10	10	10	10	10	
Data Cit.		FWS	COE	FWS	FWS	COE	FWS	FWS	FWS	FWS	
C H C ' S	ug/kg	a-BHC				< 0.07					
	ug/kg	b-BHC				< 0.14					
	ug/kg	BHC				< 0.22					
	ug/kg	g-BHC (lindane)				< 0.1					
	ug/kg	Heptachlor				< 0.07					
	ug/kg	Aldrin				< 0.1					
	ug/kg	Heptachlorepoxyde				< 0.12					
	ug/kg	Endosulfan I				< 0.12					
	ug/kg	Dieldrin		0		< 0.12					
	ug/kg	4,4'-DDE		0		< 0.1					
	ug/kg	Endrin		0		< 0.22					
	ug/kg	Endosulfan II				< 0.24					
	ug/kg	4,4'-DDD		0		< 0.26					
	ug/kg	Endrinaldehyde				< 0.26					
	ug/kg	Sulfan sulfates				< 0.26					
ug/kg	4,4'-DDT		0		< 0.31						
ug/kg	Methoxychlor				< 0.53						
ug/kg	Endrin ketone				< 0.26						
ug/kg	Chlorodane		0		< 1.44						
ug/kg	Toxaphene				< 1.44						
M E T A L S	mg/kg	Ag (silver)	< 1		< 1	1.8	< 1	< 1	< 1	< 1	
	mg/kg	Al (aluminum)	1182		19872	6660	11000	6440	5730	15900	
	mg/kg	As (arsenic)	< 40	0	< 40	< 40	2.2	< 40	< 40	< 40	
	mg/kg	B (boron)	< 5		< 5	< 5	4	4	4	7	
	mg/kg	Ba (barium)	15	30	251	104	195	82	82	215	
	mg/kg	Be (beryllium)	< 0.1		0.86	0.36	0.82	0.41	0.41	1	
	mg/kg	Cd (cadmium)	0.15	< 10	0.66	0.58	< 1.08	0.61	0.23	0.21	0.44
	mg/kg	Cr (chromium)	3.9	< 10	28.8	16.6	5.5	18	11	10	24
	mg/kg	Cu (copper)	< 1	< 10	25.9	12.2	2.3	19	10	10	23
	mg/kg	Fe (iron)	3152	2400	34560	15120	27000	13400	13300	36900	
	mg/kg	Hg (mercury)	< 0.05	0	< 0.05	< 0.05	< 0.01	0.05	0.05	0.05	0.05
	mg/kg	Mg (magnesium)	374		4896	3060	3460	2940	2850	6080	
	mg/kg	Mn (manganese)	< 77	230	< 950	< 486	403	< 1340	< 718	< 711	< 2070
	mg/kg	Mo (molybdenum)	2		2	2	3	2	2	2	3
	mg/kg	Ni (nickel)	2	10	27.1	13	5.4	20	11	11	24
	mg/kg	Pb (lead)	2.4	10	26.8	13.1	1.1	27	12	11	32
	mg/kg	Sb (antimony)	< 40		< 40	< 40	< 40	< 40	< 40	< 40	< 40
mg/kg	Se (selenium)	< 20		< 20	< 20	< 0.82	< 20	< 20	< 20	< 20	
mg/kg	Sn (tin)	< 20		< 20	< 20	< 20	< 20	< 20	< 20	< 20	
mg/kg	Sr (strontium)	3.9		43.2	14.2	30	15	15	39		
mg/kg	Ti (titanium)	20		20	20	20	20	20	20		
mg/kg	Zn (zinc)	8.7	9.4	100.8	50.4	15.8	78	43	42	94	
mg/kg	V (vanadium)	< 8.7		< 100.8	< 50.4	26	< 15	< 15	< 15	33	
P C B ' S	ug/kg	Aroclor-1006				< 1.44					
	ug/kg	Aroclor-1221				< 1.44					
	ug/kg	Aroclor-1232				< 1.44					
	ug/kg	Aroclor-1242				< 1.44					
	ug/kg	Aroclor-1248				< 1.44					
	ug/kg	Aroclor-1254				< 3					
	ug/kg	Aroclor-1260				< 3					
	ug/kg	Total PCB's	0	0	0	0	0	0	0	0	
P A R T I C L E S I Z E % F I N E R	D	C O A R S E	3 in		100						
			1 1/2		100						
			3/4		100						
			3/8		100						
			4		100		99.6				
			8		100						
	S	I M E I M	10		100		96.1				
			16		99.0		75.9				
			18								
			20								
			30				28.8				
			40	63.0							
F I N E	F I N E	50				28.8					
		60									
		70									
		80				2.2					
		100		0.0		0.0					
		140									
P A R T I C L E S I Z E	C L A	200		0.0							
		230									
		270									
		0.20 mm		0.0							
		0.05 mm		0.0							
M I S C	%	Total Organic Car				0.039					
	mg/kg	Chem Oxy Demand		750							
	mg/kg	Kjedahl Nitrogen		1210							
	mg/kg	Total Phosph									
	mg/kg	Oil and Grease									
	mg/kg	Cyanide, Total				< 0.61					
	mg/kg	Ammonia				< 0.24					
mg/l	Ammonia Elutriate										
%	Moisture				17.8						
%	Total Solids				82.2						
%	Volatile Solids				0.5						

Table 10. Contaminant Data for Pool 7 of the Upper Mississippi River

Record #		700	722	723	762	761		
River Mile		704	704	703.8	703.5	703.3		
Location		Onalaska Rosebud Isl	Onalaska Rosebud Isl	Confluenc e 1/2 mi. Cr.	L-Lk Onalaska celery-7	L-Lk Onalaska celery-6		
Year		1984	1985	1985	1983	1983		
System		1	1	1	1	1		
Habitat Type		3	3	3	3	3		
Pool		7	7	7	7	7		
Sam. Gear		2	2	2	2	2		
Sam. Depth		10	10	10	10	10		
Data Cit.		FWS	FWS	FWS	FWS COE	FWS		
C H C L S	ug/kg	a-BHC	< 10	< 10	< 0.12			
	ug/kg	b-BHC	< 10	< 10	< 0.12			
	ug/kg	BHC			< 0.12			
	ug/kg	g-BHC (lindane)	< 10	< 10	< 0.12			
	ug/kg	Heptachlor	< 10	< 10	< 0.08			
	ug/kg	Aldrin						
	ug/kg	Heptachlorepoxyde			< 1.48			
	ug/kg	Endosulfan I						
	ug/kg	Dieldrin	< 10	< 10	< 0.12			
	ug/kg	4,4'-DDE	< 10	< 10	< 0.12			
	ug/kg	Endrin	< 10	< 10	< 0.12			
	ug/kg	Endosulfan II						
	ug/kg	4,4'-DDD	< 10	< 10	< 0.12			
	ug/kg	Endrinaldehyde						
	ug/kg	Sulfan sulfat						
ug/kg	4,4'-DDT	< 10	< 10	< 0.24				
ug/kg	Methoxychlor							
ug/kg	Endrinetone							
ug/kg	Chlorodane	< 10	< 10	< 0.36				
ug/kg	Toxaphene							
M E T A L S	mg/kg	Ag (silver)	< 1	< 0.5	< 0.5	3.04	1.51	
	mg/kg	Al (aluminum)	13200	13100	12900	8360	9664	
	mg/kg	As (arsenic)	< 40	< 8	< 8	< 40	1.55	< 40
	mg/kg	B (boron)	7	6	7	< 5		< 5
	mg/kg	Ba (barium)	203	159	189	108		149
	mg/kg	Be (beryllium)	0.96	0.74	0.81	< 0.1		0.45
	mg/kg	Cd (cadmium)	0.42	0.4	< 0.3	0.35	0.11	0.39
	mg/kg	Cr (chromium)	20	21	23	16.7	3.98	22.6
	mg/kg	Cu (copper)	22	23	23	9	2.74	16.6
	mg/kg	Fe (iron)	34300	27700	27700	15048		21140
	mg/kg	Hg (mercury)	0.05	0.07	0.14	< 0.05	< 0.006	< 0.05
	mg/kg	Mg (magnesium)	5830	4180	4450	1976		3020
	mg/kg	Mn (manganese)	< 2010	< 2030	< 1970	< 304	347	< 544
	mg/kg	Mo (molybdenum)	3	3	3	2		2
	mg/kg	Ni (nickel)	22	19	20	11.4	6.93	13.7
	mg/kg	Pb (lead)	30	20	23	9.9	1.87	9.1
	mg/kg	Sb (antimony)	< 40	< 4	< 4	< 40		< 40
	mg/kg	Se (selenium)	< 20	< 10	< 10	< 20		< 20
mg/kg	Sn (tin)	< 20	< 2	< 2	< 20		< 20	
mg/kg	Sr (strontium)	38	53	27.2	14		16.6	
mg/kg	Ti (titanium)	20	20	20	20		20	
mg/kg	Zn (zinc)	86	85.1	88.3	42.6	13.3	57.4	
mg/kg	V (vanadium)	29	< 26	< 18	< 42.6		< 57.4	
P C B ' S	ug/kg	Aroclor-1006						
	ug/kg	Aroclor-1221						
	ug/kg	Aroclor-1232						
	ug/kg	Aroclor-1242						
	ug/kg	Aroclor-1248						
	ug/kg	Aroclor-1254						
	ug/kg	Aroclor-1260						
	ug/kg	Total PCB's	0	0	0	0		0
P A R T I C L E S I Z E % F I N E R	S I Z E	D	3 in					
			1 1/2					
			3/4					
			3/8					
			4			99.5		
			8			98.3		
	S I Z E	A	16					
			18					
			20			88.8		
			30					
			40					
			50			4.2		
T I C L E	F I N E	60						
		70				0.5		
		80						
		100						
		140						
		200						
P A R T I C L E S I Z E	C L A	230						
		270						
		0.20 mm						
		0.05 mm						
M I S C	%	Total Organic Car			0.02			
	mg/kg	Chem Oxy Demand						
	mg/kg	Kjedahl Nitrogen						
	mg/kg	Total Phosph						
	mg/kg	Oil and Grease						
	mg/kg	Cyanide, Total			< 0.10			
	mg/kg	Ammonia						
	mg/l	Ammonia Elutriate						
	%	Moisture			16.4			
	%	Total Solids			83.6			
%	Volatile Solids			16.8				