

Table 11. Contaminant Data for Pool 8 of the Upper Mississippi River

Record #		516	250	251	724	515	252	253	725	254
River Mile		700.3	699.9	699.9	699.8	699.8	694.9	694.7	694.6	694.1
Location		AB&BW LACROSSE RR BR	AB&BW LACROSSE RR BR	AB&BW LACROSSE RR BR	L-Bay @ Lwr End of MN Isl	AB&BW LACROSSE RR BR	SAND SLOUGH	SAND SLOUGH	L-Bay Cnflnc Bluff & Run Sl	SAND SLOUGH
Year		1989	1979	1979	1985	1989	1981	1974	1985	1981
System		1	1	1	1	1	1	1	1	1
Habitat Type		1	1	1	3	1	1	1	3	1
Pool		8	8	8	8	8	8	8	8	8
Sam. Gear		1	1	1	2	1	1	1	2	1
Sam. Depth		10	10	10	10	10	10	10	10	10
Data Cit.		COE	COE	COE	FWS	COE	COE	COE	FWS	COE
C H C ' S	ug/kg	a-BHC	< 0.07		< 10	< 0.07			< 10	
	ug/kg	b-BHC	< 0.14		< 10	< 0.14			< 10	
	ug/kg	BHC	< 0.21			< 0.21				
	ug/kg	g-BHC (lindane)	< 0.09		< 10	< 0.09			< 10	
	ug/kg	Heptachlor	< 0.07		< 10	< 0.07			< 10	
	ug/kg	Aldrin	< 0.09			< 0.09				
	ug/kg	Heptachlorepoxi	< 0.12			< 0.12				
	ug/kg	Endosulfan I	< 0.12			< 0.12				
	ug/kg	Dieldrin	< 0.12	0	< 10	< 0.12	< 0.1	< 10	< 10	< 0.1
	ug/kg	4,4'-DDE	< 0.09	0	< 10	< 0.09	< 0.1	< 10	< 10	< 0.1
	ug/kg	Endrin	< 0.21	0	< 10	< 0.21	< 0.1	< 10	< 10	< 0.1
	ug/kg	Endosulfan II	< 0.23			< 0.24				
	ug/kg	4,4'-DDD	< 0.26	0	< 10	< 0.26	< 0.1	< 10	< 10	< 0.1
	ug/kg	Endrin aldehyde	< 0.26			< 0.26				
	ug/kg	Sulfan sulfate	< 0.26			< 0.26				
	ug/kg	4,4'-DDT	< 0.3	0	< 10	< 0.31	< 0.1	< 10	< 10	< 0.1
	ug/kg	Methoxychlor	< 0.51			< 0.52				
	ug/kg	Endrin ketone	< 0.26			< 0.26				
ug/kg	Chlorodane	< 1.39	0	< 10	< 1.42	< 1	< 10	< 10	< 1	
ug/kg	Toxaphene	< 1.39			< 1.42					
M E T A L S	mg/kg	Ag (silver)			< 0.4				< 0.4	
	mg/kg	Al (aluminum)			4560				10100	
	mg/kg	As (arsenic)	< 0.99	0	0	< 6	< 1.01	2	< 0.7	< 7
	mg/kg	B (boron)			10					10
	mg/kg	Ba (barium)		30	30	69.3		20		139
	mg/kg	Be (beryllium)				0.3				0.7
	mg/kg	Cd (cadmium)	< 1.09	< 10	< 10	< 3	< 1.11	< 1	< 0.9	0.8
	mg/kg	Cr (chromium)	3.7	< 10	< 10	13	2.8	< 10	7	28
	mg/kg	Cu (copper)	2	< 10	< 10	8.4	< 1.45	< 10	5	24
	mg/kg	Fe (iron)		3600	3500	11200		2600		19200
	mg/kg	Hg (mercury)	< 0.01	0	0	0.02	< 0.01	< 0.01	0.4	0.05
	mg/kg	Mg (magnesium)				3900				4000
	mg/kg	Mn (manganese)	24.2	270	250	< 552	170	190		< 556
	mg/kg	Mo (molybdenum)				2				2
	mg/kg	Ni (nickel)	< 5.41	< 10	< 10	11	< 5.52	< 10	7	19
	mg/kg	Pb (lead)	0.8	< 10	< 10	9.66	< 0.83	< 10	< 9	25
	mg/kg	Sb (antimony)				< 4				< 4
	mg/kg	Se (selenium)	< 0.83			< 10	< 0.84			< 10
mg/kg	Sn (tin)				< 2				< 2	
mg/kg	Sr (strontium)				15.1				21.7	
mg/kg	Ti (titanium)				20				20	
mg/kg	Zn (zinc)	14	< 10	10	39.6	8	10	14	87.6	
mg/kg	V (vanadium)				< 8.9				< 14	
P C B ' S	ug/kg	Aroclor-1006				< 1.42				
	ug/kg	Aroclor-1221				< 1.42				
	ug/kg	Aroclor-1232				< 1.42				
	ug/kg	Aroclor-1242				< 1.42				
	ug/kg	Aroclor-1248				< 1.42				
	ug/kg	Aroclor-1254				< 2.95				
	ug/kg	Aroclor-1260				< 2.95				
	ug/kg	Total PCB's		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	100
			1 1/2		100	100			100	100
			3/4		100	100		100	100	100
			3/8		100	100		100	100	100
			4	100	100	98	100	99.8	100	100
			8					99	99	100
	10	97.9	98.0	94.0	98.7	96.7				
	S	M E D I U M	16	86.9			93.4	76.7	92.0	94.0
			18							
			20		78.0	67.0				
			30	39.7			69.5	23.1	56.0	
			40		16.0	12.0			15.0	10.0
			50	39.7			69.5	23.1	6.0	
	T	F I N E	60							
			70						1.0	
			80	2.4	2.0	1.0	14.5	1.8		
			100	0.0			0.5	0.3	0.0	0.0
			140				0.4	0.2		
200				1.0	1.0	0.3	0.2	0.0	0.0	
P A R T I C L E S I Z E	F I N E	230								
		270				0.2	0.2	0.0	0.0	
		0.20 mm		0.0	0.0	0.2	0.1	0.0	0.0	
		0.05 mm		0.0	0.0	0.1		0.0	0.0	
M I S C	%	Total Organic Car	0.012		0.06	0.046				
	mg/kg	Chem Oxy Demand		1000	1300		1300	3073	1400	
	mg/kg	Kjedahl Nitrogen		300	190		296	187	50	
	mg/kg	Total Phosph		280	220			191		
	mg/kg	Oil and Grease								
M I S C	mg/kg	Cyanide, Total	< 0.59			< 0.6				
	mg/kg	Ammonia	< 0.24			0.5				
	mg/l	Ammonia Elutriate								
	%	Moisture	16.1			17.1				
	%	Total Solids	83.9			82.9				
%	Volatile Solids	0.4			0.4					

Table 11. Contaminant Data for Pool 8 of the Upper Mississippi River

Record #		726	255	509	256	257	258	510	728	
River Mile		693.8	692.4	692.3	692.0	692.0	691.9	691.5	691.5	691
R-R Desc										L-Bay
Bank Root		PICAYUNE	PICAYUNE	PICAYUNE	PICAYUNE	PICAYUNE	PICAYUNE	PICAYUNE	PICAYUNE	Lwr Isl/W
Location		R.	ISLAND	ISLAND	ISLAND	ISLAND	ISLAND	ISLAND	ISLAND	Wigwam Sl
Year		1985	1981	1989	1974	1974	2002	1981	1989	1985
System		1	1	1	1	1	1	1	1	1
Habitat Type		3	1	1	1	1	1	1	1	3
Pool		8	8	8	8	8	8	8	8	8
Sam. Gear		2	1	1	1	1	1	1	1	2
Sam. Depth		10	10	10	10	10	10	10	10	10
Data Cit.		FWS	COE	COE	COE	COE	COE	COE	COE	FWS
C H C ' S	ug/kg	a-BHC	< 10	< 0.07		< 0.12		< 0.07	< 10	
	ug/kg	b-BHC	< 10	< 0.15		< 0.12		< 0.15	< 10	
	ug/kg	BHC		< 0.22		< 0.12		< 0.22	< 10	
	ug/kg	g-BHC (lindane)	< 10	< 0.1		< 0.12		< 0.1	< 10	
	ug/kg	Heptachlor	< 10	< 0.07		< 0.08		< 0.07	< 10	
	ug/kg	Aldrin		< 0.1				< 0.1		
	ug/kg	Heptachlorepoxi		< 0.12		< 1.48		< 0.12		
	ug/kg	Endosulfan I		< 0.12				< 0.12		
	ug/kg	Dieldrin	< 10	< 0.1	< 0.12	< 10	< 10	< 0.12	< 0.1	< 10
	ug/kg	4,4'-DDE	< 10	< 0.1	< 0.1	< 10	< 10	< 0.12	< 0.1	< 0.1
	ug/kg	Endrin	< 10	< 0.1	< 0.22	< 10	< 10	< 0.12	< 0.1	< 0.22
	ug/kg	Endosulfan II			< 0.24				< 0.24	
	ug/kg	4,4'-DDD	< 10	< 0.1	< 0.27	< 10	< 10	< 0.12	< 0.1	< 0.27
	ug/kg	Endrin			< 0.27				< 0.27	
	ug/kg	Sulfan sulfate			< 0.27				< 0.27	
	ug/kg	4,4'-DDT	< 10	< 0.1	< 0.31	< 10	< 10	< 0.24	< 0.1	< 0.32
	ug/kg	Methoxychlor			< 0.53				< 0.54	
	ug/kg	Endrin			< 0.27				< 0.27	
ug/kg	Chlorodane	< 10	< 1	< 1.45	< 10	< 10	< 0.36	< 1	< 1.46	
ug/kg	Toxaphene			< 1.45				< 1.46		
M E T A L S	mg/kg	Ag (silver)	< 0.4						< 0.4	
	mg/kg	Al (aluminum)	7460						9030	
	mg/kg	As (arsenic)	< 6	1	< 1.01	< 0.7	< 0.7	0.777	1	< 1
	mg/kg	B (boron)	6							10
	mg/kg	Ba (barium)	120	30					20	142
	mg/kg	Be (beryllium)	0.51							0.61
	mg/kg	Cd (cadmium)	< 0.3	< 1	< 1.1	0.9	< 0.8	< 0.008	< 1	< 1.09
	mg/kg	Cr (chromium)	12	10	4.3	7	6	3.15	10	3.7
	mg/kg	Cu (copper)	11	< 10	< 1.24	5	6	2.09	< 10	3.8
	mg/kg	Fe (iron)	13100	1800					1600	18000
	mg/kg	Hg (mercury)	0.05	< 0.01	< 0.01	< 0.1	0.2	< 0.006	< 0.01	< 0.01
	mg/kg	Mg (magnesium)	6220							4010
	mg/kg	Mn (manganese)	< 961	250	245			219	160	330
	mg/kg	Mo (molybdenum)	2							< 1400
	mg/kg	Ni (nickel)	15	< 10	6.9	7	8	5.38	< 10	5.9
	mg/kg	Pb (lead)	12	< 10	1.2	< 8	< 9	1.6	< 10	0.9
	mg/kg	Sb (antimony)	< 4							< 4
	mg/kg	Se (selenium)	< 10		< 0.84					< 0.83
mg/kg	Sn (tin)	< 2							< 2	
mg/kg	Sr (strontium)	23.6							20.2	
mg/kg	Ti (titanium)	20							20	
mg/kg	Zn (zinc)	52.7	9	11.4	14	15	10.5	7	12.3	
mg/kg	V (vanadium)	< 12							< 14	
P C B ' S	ug/kg	Aroclor-1006		< 1.45					< 1.46	
	ug/kg	Aroclor-1221		< 1.45					< 1.46	
	ug/kg	Aroclor-1232		< 1.45					< 1.46	
	ug/kg	Aroclor-1242		< 1.45					< 1.46	
	ug/kg	Aroclor-1248		< 1.45					< 1.46	
	ug/kg	Aroclor-1254		< 3.03					< 3.05	
	ug/kg	Aroclor-1260		< 3.03					< 3.05	
	ug/kg	Total PCB's	0	0		0	0		0	0
S I Z E	D	3 in			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	100	100	98.2	98	98	100	98.7	100
		8	100	99		94	94		100	99
	A	10		95.8				99.7	96.2	
		16	100	93.0	85.2	77.0	77.0		85.2	98.0
		18						96.3		97.0
		20								
		30	98.0	74.0	29.4				32.9	86.0
		40	93.0	54.0		6.0	6.0			59.0
	S	50	68.0	17.0	29.4			9.4	32.9	12.0
		60								
		70	21.0	4.0				0.7		1.0
		80			0.9				2.1	
		100	4.0	0.0	0.1	0.0	0.0		0.1	0.0
		140								7.0
F	200	1.0	0.0		0.0	0.0			0.0	
	230								4.0	
	270	0.0	0.0						0.0	
	0.20 mm	0.0	0.0		0.0	0.0			0.0	
S	0.05 mm	0.0	0.0		0.0	0.0			0.0	
									0.0	
M I S C	%	Total Organic Car		0.021			0.01	0.021		
	mg/kg	Chem Oxy Demand	1700	770		3378	3306		690	
	mg/kg	Kjedahl Nitrogen	245	145		147	123		1160	
	mg/kg	Total Phosph				190	194			
	mg/kg	Oil and Grease								
	mg/kg	Cyanide, Total			< 0.62			< 0.10		< 0.5
mg/kg	Ammonia			< 0.25					< 0.24	
mg/l	Ammonia Elutriate									
%	Moisture			18.9			20.1		17.5	
%	Total Solids			81.1			79.9		82.2	
%	Volatile Solids			0.4			0.41		0.5	

Table 11. Contaminant Data for Pool 8 of the Upper Mississippi River

Record #		259	511	727	260	261	690.3	262	512	263		
River Mile		690.8	690.8	690.4	690.3	690.3	690.3	690.2	690.0	689.3		
Location		ABOVE BROWNSVIL LE ABOVE BROWNSVIL LE R-Smbay Entr Lk ABOVE BROWNSVIL LE ABOVE BROWNSVIL LE ABOVE BROWNSVIL LE - CT ABOVE BROWNSVIL LE ABOVE BROWNSVIL LE ABOVE BROWNSVIL LE										
Year		1982	1989	1985	1978	1978	2008	1982	1989	1980		
System		1	1	1	1	1	1	1	1	1		
Habitat Type		1	1	3	1	1	1	1	1	1		
Pool		8	8	8	8	8	8	8	8	8		
Sam. Gear		1	1	2	1	1	1	1	1	1		
Sam. Depth		10	10	10	10	10	10	10	10	10		
Data Cit.		COE	COE	FWS	COE	COE	COE	COE	COE	COE		
C H C ' S	ug/kg	a-BHC	< 0.07	< 10					< 0.07			
	ug/kg	b-BHC	< 0.15	< 10					< 0.14			
	ug/kg	BHC	< 0.22						< 0.21			
	ug/kg	g-BHC (lindane)	< 0.1	< 10					< 0.09			
	ug/kg	Heptachlor	< 0.07	< 10					< 0.07			
	ug/kg	Aldrin	< 0.1						< 0.09			
	ug/kg	Heptachlorepoxi	< 0.12						< 0.12			
	ug/kg	Endosulfan I	< 0.12						< 0.12			
	ug/kg	Dieldrin	< 0.1	< 0.12	< 10	0	0	<3.2	< 0.1	< 0.12	0	
	ug/kg	4,4'-DDE	< 0.1	< 0.1	< 10	0	0	<3.5	< 0.1	< 0.09	0	
	ug/kg	Endrin	< 0.1	< 0.22	< 10	0	0		< 0.1	< 0.21	0	
	ug/kg	Endosulfan II	< 0.1	< 0.24	< 10	0	0		< 0.1	< 0.24	0	
	ug/kg	4,4'-DDD	< 0.1	< 0.27	< 10	0	0	<3.7	< 0.1	< 0.26	0	
	ug/kg	Endrinaldehyde		< 0.27						< 0.26		
	ug/kg	Sulfan sulfate		< 0.27						< 0.26		
	ug/kg	4,4'-DDT	< 0.1	< 0.31	< 10	0	0	<4.2	< 0.1	< 0.31	0	
ug/kg	Methoxychlor		< 0.53						< 0.52			
ug/kg	Endrinetone		< 0.27						< 0.26			
ug/kg	Chlorodane	< 1	< 1.45	< 10	0	0		< 1	< 1.42	0		
ug/kg	Toxaphene		< 1.45						< 1.42			
M E T A L S	mg/kg	Ag (silver)		< 0.4								
	mg/kg	Al (aluminum)		5660								
	mg/kg	As (arsenic)	1.9	< 0.97	< 6	0	0	0.64	1.4	< 1	0	
	mg/kg	B (boron)		13								
	mg/kg	Ba (barium)		88.1		10	10				20	
	mg/kg	Be (beryllium)		0.39								
	mg/kg	Cd (cadmium)	< 0.19	< 1.07	< 0.3	< 10	< 10	<1.0	< 0.19	< 1.09	< 10	
	mg/kg	Cr (chromium)	3.7	3	11	< 10	< 10	3	3.8	2.6	< 10	
	mg/kg	Cu (copper)	2.8	2.3	9.7	< 10	< 10	1.7	1.9	1.9	< 10	
	mg/kg	Fe (iron)	5300		11100	1200	1500		4300		2300	
	mg/kg	Hg (mercury)	0.011	< 0.01	0.05	0	0.08	<0.10	0.021	< 0.01	0	
	mg/kg	Mg (magnesium)			5080							
	mg/kg	Mn (manganese)		158	< 537	93	270	281		289	140	
	mg/kg	Mo (molybdenum)			2							
	mg/kg	Ni (nickel)	6	6.3	11	< 100	< 100	3.5	4	< 5.43	< 10	
	mg/kg	Pb (lead)	2	1	11	20	< 100	<1.0	2	1.1	< 10	
mg/kg	Sb (antimony)			< 4								
mg/kg	Se (selenium)		< 0.81	< 10					< 0.83			
mg/kg	Sn (tin)			< 2								
mg/kg	Sr (strontium)			29.3								
mg/kg	Ti (titanium)			20								
mg/kg	Zn (zinc)	12	7.8	44.3	< 10	< 10	7.7	9	11	30		
mg/kg	V (vanadium)			< 9.5								
P C B ' S	ug/kg	Aroclor-1006	< 1.45				<31		< 1.42			
	ug/kg	Aroclor-1221	< 1.45						< 1.42			
	ug/kg	Aroclor-1232	< 1.45						< 1.42			
	ug/kg	Aroclor-1242	< 1.45						< 1.42			
	ug/kg	Aroclor-1248	< 1.45				<29		< 1.42			
	ug/kg	Aroclor-1254	< 3.03				<10		< 2.95			
	ug/kg	Aroclor-1260	< 3.03				<19		< 2.95			
	ug/kg	Total PCB's	0		0	0	0		0		0	
S I Z E	F I N E	C O A R S E	3 in			100	100				100	
			1 1/2			100	100		100		100	
			3/4			100	100		100		100	
			3/8			100	100		100		100	
			4	100	100	100	100	99.72	100	100	100	
			8		97	100	100		100		100	
			10	99.9		98.5	100	98	98.34		98.6	
			16	98.7	90.0					97.0	91.5	100
	S A M E	M E D I U M	18									
			20			99.0	88.0	92.5				
			30	67.3	55.0					63.0	54.6	
			40		27.0	92.6	84.0	48.0	57.35	36.0		81.0
			50	67.3	5.0					16.0	54.6	
			60						11.92			
			70		2.0					6.0		
			80	2.4			3.0	5.0	1.1		6.5	
P A R T I C L E	F I N E	100	0.4	2.0				0.85	3.0	0.5	1.0	
		140	0.2		80.5					0.4		
		200		2.0		0.0	5.0	0.97	2.0	0.3	0.0	
		230						0.63				
		270		1.0	42.1				2.0			
		0.20 mm		1.0	29.0	0.0	0.0		1.0		0.0	
		0.05 mm		0.0	18.5	0.0	0.0		0.0		0.0	
M I S C	%	Total Organic Car	0.02		2.1		<1200		0.032			
	mg/kg	Chem Oxy Demand		779		2200	2400		522	1400		
	mg/kg	Kjedahl Nitrogen		14		79	83	100	17	40		
	mg/kg	Total Phosph		172		60	58	84	271			
	mg/kg	Oil and Grease										
M I S C	mg/kg	Cyanide, Total		< 0.59				0.57	< 0.6			
	mg/kg	Ammonia		< 0.24				<0.71	< 0.24			
	mg/l	Ammonia Elutriate										
	%	Moisture		15.7				15.8	17.3			
	%	Total Solids		84.3				84.2	82.7			
%	Volatile Solids		0.4				0.0028	0.4				

Table 11. Contaminant Data for Pool 8 of the Upper Mississippi River

Record #			759	264	366	265	513	364	365	363	362
River Mile			689.2	688.9	688.6	688.5	688.5	688.4	688.4	688.4	688.4
Location			L-Lower Pool 8 - BROWNSVIL 14	EMP- Island-81 LE		HEAD OF RAFT CHANNEL	HEAD OF RAFT CHANNEL	Wildcat 2	Wildcat 3	Wildcat 1 Dup	Wildcat 1
Year			1983	1980	1988	1980	1989	1988	1988	1988	1988
System			1	1	1	1	1	1	1	1	1
Habitat Type			3	1	3	1	1	3	3	3	3
Pool			8	8	8	8	8	8	8	8	8
Sam. Gear			2	1	1	1	1	1	1	1	1
Sam. Depth			10	10	10	10	10	10	10	10	10
Data Cit.			FWS	COE	COE	COE	COE	COE	COE	COE	FWS
C H C ' S	ug/kg	a-BHC			< 0.003		< 0.73	< 0.003	< 0.003	< 0.004	< 0.004
	ug/kg	b-BHC			< 0.009		< 1.46	< 0.01	< 0.01	< 0.011	< 0.011
	ug/kg	BHC					< 2.2				
	ug/kg	g-BHC (lindane)			< 0.009		< 0.98	< 0.01	< 0.01	< 0.011	< 0.011
	ug/kg	Heptachlor			< 0.009		< 0.73	< 0.01	< 0.01	< 0.011	< 0.011
	ug/kg	Aldrin					< 0.98				
	ug/kg	Heptachlorepoxi					< 1.22				
	ug/kg	Endosulfan I					< 1.22				
	ug/kg	Dieldrin		0	< 0.02	0	< 1.22	< 0.02	< 0.02	< 0.02	< 0.02
	ug/kg	4,4'-DDE		0	< 0.009	0	< 0.98	< 0.01	0.38	0.3	< 0.3
	ug/kg	Endrin		0	< 0.03	0	< 2.2	< 0.02	< 0.03	< 0.04	< 0.03
	ug/kg	Endosulfan II					< 2.44				
	ug/kg	4,4'-DDD		0	< 0.02	0	< 2.68	< 0.02	< 0.02	< 0.02	< 0.02
	ug/kg	Endrin					< 2.68				
	ug/kg	Sulfan sulfate					< 2.68				
ug/kg	4,4'-DDT		0	< 0.04	0	< 3.17	< 0.04	< 0.04	< 0.05	< 0.05	
ug/kg	Methoxychlor					< 5.37					
ug/kg	Endrin					< 2.68					
ug/kg	Chlorodane		0	< 0.23	0	< 14.64	< 0.25	< 0.25	0.08	0.43	
ug/kg	Toxaphene					< 14.64					
M E T A L S	mg/kg	Ag (silver)	1.37					< 1			
	mg/kg	Al (aluminum)	5206					5434			
	mg/kg	As (arsenic)	< 40	0	0.99	0	< 1.03	< 40	0.67	0.96	1.8
	mg/kg	B (boron)	< 5					< 5			
	mg/kg	Ba (barium)	60	20		20		103			
	mg/kg	Be (beryllium)	< 0.1					0.43			
	mg/kg	Cd (cadmium)	0.41	< 10	0.12	< 10	< 1.12	0.27	0.16	< 0.1	0.1
	mg/kg	Cr (chromium)	13.7	< 10	4.4	< 10	< 1.58	12.9	7.1	4.2	6
	mg/kg	Cu (copper)	7.9	< 10	3.3	< 10	< 1.47	9.2	4.8	3.2	4.7
	mg/kg	Fe (iron)	10275	2500		2000		11726			
	mg/kg	Hg (mercury)	< 0.05	0	< 0.01	0	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01
	mg/kg	Mg (magnesium)	5480					2574			
	mg/kg	Mn (manganese)	< 329	170	226	150	156	< 443	134	256	457
	mg/kg	Mo (molybdenum)	2					2			
	mg/kg	Ni (nickel)	10.1	< 10	4.7	< 10	< 5.59	9.6	6.8	4.8	6.4
mg/kg	Pb (lead)	10.4	< 10	9.6	< 10	1.1	7.7	11.8	9	12.5	
mg/kg	Sb (antimony)	< 40					< 40				
mg/kg	Se (selenium)	< 20		< 1		< 0.86	< 20	< 1	< 1	< 1	
mg/kg	Sn (tin)	< 20					< 20				
mg/kg	Sr (strontium)	13.4					10.9				
mg/kg	Ti (titanium)	20					20				
mg/kg	Zn (zinc)	38.4	30	19.8	20	7.5	32.9	25.6	19.2	27	
mg/kg	V (vanadium)	< 38.4					< 32.9				
P C B ' S	ug/kg	Aroclor-1006			< 0.23		< 14.64	< 0.25	< 0.25	< 0.27	< 0.27
	ug/kg	Aroclor-1221					< 14.64				
	ug/kg	Aroclor-1232					< 14.64				
	ug/kg	Aroclor-1242					< 14.64				
	ug/kg	Aroclor-1248					< 14.64				
	ug/kg	Aroclor-1254			< 0.39		< 3.05	< 0.41	< 0.42	< 0.45	< 0.45
	ug/kg	Aroclor-1260			< 0.39		< 3.05	< 0.41	< 0.42	< 0.45	< 0.45
	ug/kg	Total PCB's	0	0		0					
P A R T I C L E S I Z E	D	c o a r s e	3 in					100			
			1 1/2					100			
			3/4					100			
			3/8					100			
			4				100				
	S	m e d i u m	8			100					
			10	99.9		99.76	99.4				
			16		99.0		96.5	100			
			18								
			20								
	F	f i n e	30				85.0				
			40	97.4	81.0	98.1		46.0			
			50				85.0				
			60								
			70								
S I C L A		80				19.6					
		100		0.0		0.8	1.0				
		140	90.2		93.2	0.7					
		200		0.0		0.5	0.0				
		230									
P A R T I C L E S I Z E		270	73.6		60.7	0.3					
		0.20 mm	60.2	0.0	40.7		0.0				
		0.05 mm	36.1	0.0	14.5		0.0				
M I S C	%	Total Organic Car	3.02		2.49	0.098					
	mg/kg	Chem Oxy Demand		1300			1700				
	mg/kg	Kjedahl Nitrogen		90			130				
	mg/kg	Total Phosph									
	mg/kg	Oil and Grease									
	mg/kg	Cyanide, Total					< 0.63				
mg/kg	Ammonia					0.3					
mg/l	Ammonia Elutriate										
%	Moisture					20.0					
%	Total Solids					80.0					
%	Volatile Solids					0.4					

Table 11. Contaminant Data for Pool 8 of the Upper Mississippi River

Record #		266	514	267	758	268	751	269			
River Mile		688.1	688.1	687.9	687.8	687.5	687.3	687.2	687	686.7	
Location		HEAD OF RAFT CHANNEL	HEAD OF RAFT ISLAND - CT LABS	HEAD OF RAFT CHANNEL	HEAD OF RAFT CHANNEL	L-Lower Pool 8 - 13	DEADMANS SLOUGH	L-Lower Pool 8 - 12	DEADMANS SLOUGH	DEADMANS SLOUGH	
Year		1974	2008	1989	1980	1983	1981	1983	2002	1981	
System		1	1	1	1	1	1	1	1	1	
Habitat Type		1	1	1	1	3	1	3	1	1	
Pool		8	8	8	8	8	8	8	8	8	
Sam. Gear		1	1	1	1	2	1	2	1	1	
Sam. Depth		10	10	10	10	10	10	10	10	10	
Data Cit.		COE	COE	COE	COE	FWS	COE	FWS	COE	COE	
C H C ' S	ug/kg	a-BHC		< 0.07				<0.12			
	ug/kg	b-BHC		< 0.15				<0.12			
	ug/kg	BHC		< 0.22				<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	Heptachlorepoxi		< 0.12				<1.48			
	ug/kg	Endosulfan I		< 0.12							
	ug/kg	Dieldrin	< 10	<3.2	< 0.12	0		< 0.1	<0.12	< 0.1	
	ug/kg	4,4'-DDE	< 10	<3.5	< 0.1	0		< 0.1	<0.12	< 0.1	
	ug/kg	Endrin	< 10		< 0.22	0		< 0.1	<0.12	< 0.1	
	ug/kg	Endosulfan II			< 0.24						
	ug/kg	4,4'-DDD	< 10	<3.7	< 0.27	0		< 0.1	<0.12	< 0.1	
	ug/kg	Endrin			< 0.27						
	ug/kg	Sulfan sulfate			< 0.27						
	ug/kg	4,4'-DDT	< 10	<4.2	< 0.31	0		< 0.1	<0.24	< 0.1	
	ug/kg	Methoxychlor			< 0.53						
	ug/kg	Endrin			< 0.27						
ug/kg	Chlorodane	< 10		< 1.45	0		< 1	<0.36	< 1		
ug/kg	Toxaphene			< 1.45							
M E T A L S	mg/kg	Ag (silver)				3.53					
	mg/kg	Al (aluminum)				6707					
	mg/kg	As (arsenic)	< 0.8	0.73	2.9	0	< 40	3	0.68	0.541	3
	mg/kg	B (boron)					< 5				
	mg/kg	Ba (barium)				10	81	10			10
	mg/kg	Be (beryllium)					< 0.1				
	mg/kg	Cd (cadmium)	0.9	<1.0	< 1.11	< 10	0.2	< 1	0.1	0.2	< 1
	mg/kg	Cr (chromium)	106	3.2	3.2	< 10	15.5	< 10	7.5	3.2	< 10
	mg/kg	Cu (copper)	7	1.2	< 1.46	< 10	7.1	< 10	1.9	2.27	< 10
	mg/kg	Fe (iron)				3000	13767	1100			1600
	mg/kg	Hg (mercury)	0.3	<0.10	< 0.01	0	< 0.05	< 0.01	< 0.01	<0.006	< 0.01
	mg/kg	Mg (magnesium)					2047				
	mg/kg	Mn (manganese)		213	203	16	< 353	95	234	127	170
	mg/kg	Mo (molybdenum)					2				
	mg/kg	Ni (nickel)	36	3.2	6.4	< 10	10.6	< 10	5.4	5.17	< 10
	mg/kg	Pb (lead)	< 9	<1.0	1.3	< 10	6	< 10	7.7	2.41	< 10
	mg/kg	Sb (antimony)					< 40				
	mg/kg	Se (selenium)			< 0.84		< 20		< 1		
mg/kg	Sn (tin)					< 20					
mg/kg	Sr (strontium)					11.6					
mg/kg	Ti (titanium)					20					
mg/kg	Zn (zinc)	16	7.6	10.5	20	31.8	7	16.1	10.6	8	
mg/kg	V (vanadium)					< 31.8					
P C B ' S	ug/kg	Aroclor-1006		<31	< 1.45						
	ug/kg	Aroclor-1221			< 1.45						
	ug/kg	Aroclor-1232			< 1.45						
	ug/kg	Aroclor-1242			< 1.45						
	ug/kg	Aroclor-1248		<29	< 1.45						
	ug/kg	Aroclor-1254		<10	< 3.03						
	ug/kg	Aroclor-1260		<19	< 3.03						
	ug/kg	Total PCB's	0			0	0	0	0	0	
P A R T I C L E S I Z E % F I N E R	D	3 in								100	
		1 1/2								100	
		3/4									100
		3/8									100
		4		100						99.4	100
		8									100
	10	99.3	99.16		99.8		99.8		97.2		
	S	16									100
		18								95.3	
		20		92.91							
		30									
		40	97.9	61.67		97.9		97.6		54.2	86.0
		50									
	F	60		15.41							
		70								20.4	
		80		1.99							
		100		1.06						6.5	0.0
		140	96.9			95.9		95.6		3.0	
200			0.77						2.0	0.0	
S I C L A	230		0.35								
	270	94.3			92.8		87.4				
	0.20 mm	60.8			69.7		67.2			0.0	
	0.05 mm	24.2			32.2		29.4			0.0	
M I S C	%	Total Organic Car	5.2	<1300	4.63	3.82		3.74	0.05		
	mg/kg	Chem Oxy Demand								1333	
	mg/kg	Kjedahl Nitrogen		<28						105	
	mg/kg	Total Phosph		140						101	
	mg/kg	Oil and Grease									
	mg/kg	Cyanide, Total		0.87	< 0.61				<0.10		
	mg/kg	Ammonia		<0.76	< 0.24						
	mg/l	Ammonia Elutriate									
%	Moisture		21.4	18.5				19.8			
%	Total Solids		78.6	81.5				80.2			
%	Volatile Solids		0.0021	0.4				0.47			

Table 11. Contaminant Data for Pool 8 of the Upper Mississippi River

Record #		367	368	750	756	757	748	749	755	729	
River Mile		686.4	686.2	686	685.6	685.6	685.4	685.4	684.4	684.2	
Location		EMP- Island-82	EMP- Island-83	L-Lower Pool 8 - 11	L-Lower Pool 8 - 10	L-Lower Pool 8 - 10	L-Lower Pool 8 - 9	L-Lower Pool 8 - 9	L-Lower Pool 8 - 8	L-Bay S Stoddard, 30' RR	
Year		1988	1988	1983	1983	1983	1983	1983	1983	1985	
System		1	1	1	1	1	1	1	1	1	
Habitat Type		3	3	3	3	3	3	3	3	3	
Pool		8	8	8	8	8	8	8	8	8	
Sam. Gear		1	1	2	2	2	2	2	2	2	
Sam. Depth		10	10	10	10	10	10	10	10	10	
Data Cit.		COE	COE	FWS	FWS	FWS	FWS	FWS	FWS	FWS	
CHC'S	ug/kg	a-BHC	< 0.003	< 0.003						< 10	
	ug/kg	b-BHC	< 0.01	< 0.01						< 10	
	ug/kg	BHC									
	ug/kg	g-BHC (lindane)	< 0.01	< 0.01						< 10	
	ug/kg	Heptachlor	< 0.01	< 0.01						< 10	
	ug/kg	Aldrin									
	ug/kg	Heptachlorepoxi									
	ug/kg	Endosulfan I									
	ug/kg	Dieldrin	< 0.02	< 0.02						< 10	
	ug/kg	4,4'-DDE	< 0.01	1.3						< 10	
	ug/kg	Endrin	< 0.03	< 0.03						< 10	
	ug/kg	Endosulfan II									
	ug/kg	4,4'-DDD	< 0.02	1.3						< 10	
	ug/kg	Endrinaldehyde									
	ug/kg	Sulfan sulfate									
	ug/kg	4,4'-DDT	< 0.04	< 0.04						< 10	
ug/kg	Methoxychlor										
ug/kg	Endrinetone										
ug/kg	Chlorodane	< 0.25	< 0.24						< 10		
ug/kg	Toxaphene										
METALS	mg/kg	Ag (silver)			< 1	1.77	< 1	< 1	1.29	1.52	< 0.4
	mg/kg	Al (aluminum)			3350	9027	9360	1965	2709	6840	3680
	mg/kg	As (arsenic)	< 0.12	< 0.1	< 40	< 40	< 40	< 40	< 40	< 40	< 5
	mg/kg	B (boron)			< 5	< 5	< 5	< 5	< 5	< 5	10
	mg/kg	Ba (barium)			35	101	110	26	27	97	69.6
	mg/kg	Be (beryllium)			< 0.1	0.35	0.18	< 0.1	< 0.1	0.3	0.3
	mg/kg	Cd (cadmium)	0.1	0.12	0.29	0.62	0.59	0.28	0.22	0.38	< 0.3
	mg/kg	Cr (chromium)	10.6	5.4	8	21.2	21.6	5.6	6.6	11.1	8
	mg/kg	Cu (copper)	5	2.7	4.3	14	14.8	3.4	3.6	12	6.3
	mg/kg	Fe (iron)			6164	16107	16740	4454	5418	14288	9260
	mg/kg	Hg (mercury)	< 0.01	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05
	mg/kg	Mg (magnesium)			1474	4425	4680	4323	3999	11552	11400
	mg/kg	Mn (manganese)	393	215	< 147	< 407	< 468	< 170	< 181	< 821	< 758
	mg/kg	Mo (molybdenum)			2	2	2	2	2	2	2
	mg/kg	Ni (nickel)	7.6	4.6	5.9	14.5	14.6	5	6.3	14.7	6.6
	mg/kg	Pb (lead)	11.4	7.3	5.5	17.5	18	4.6	4.4	24.3	12
mg/kg	Sb (antimony)			< 40	< 40	< 40	< 40	< 40	< 40	< 4	
mg/kg	Se (selenium)	< 1	< 1	< 20	< 20	< 20	< 20	< 20	< 20	< 10	
mg/kg	Sn (tin)			< 20	< 20	< 20	< 20	< 20	< 20	< 2	
mg/kg	Sr (strontium)			7.8	17.7	18	8.9	10.1	16.7	17.8	
mg/kg	Ti (titanium)			20	20	20	20	20	20	20	
mg/kg	Zn (zinc)	29.6	17.2	21.4	65.5	66.6	18.3	19.4	88.2	45.9	
mg/kg	V (vanadium)			< 21.4	< 65.5	< 66.6	< 18.3	< 19.4	< 88.2	< 8.1	
PCB'S	ug/kg	Aroclor-1006	< 0.25	< 0.24							
	ug/kg	Aroclor-1221									
	ug/kg	Aroclor-1232									
	ug/kg	Aroclor-1242									
	ug/kg	Aroclor-1248									
	ug/kg	Aroclor-1254	< 0.41	24							
	ug/kg	Aroclor-1260	< 0.41	< 0.4							
	ug/kg	Total PCB's			0	0	0	0	0	0	0
PARTICLE SIZE & FINE	SAND	COARSE	3 in								
			1 1/2								
			3/4								
			3/8								
			4								
	SAND	MEDIUM	8								
			10								
			16								
			18								
			20								
	FINE	FINE	30								
			40								
			50								
			60								
70											
SILT CLAY	FINE	80									
		100									
		140									
		200									
MISC		%	Total Organic Car								
		mg/kg	Chem Oxy Demand								
		mg/kg	Kjedahl Nitrogen								
		mg/kg	Total Phosph								
		mg/kg	Oil and Grease								
MISC		mg/kg	Cyanide, Total								
		mg/kg	Ammonia								
		mg/l	Ammonia Elutriate								
		%	Moisture								
		%	Total Solids								
%	Volatile Solids										

Table 11. Contaminant Data for Pool 8 of the Upper Mississippi River

	Record #	5500	5501		
	River Mile	685.8	685.8		
	Location	Islands project 45 C	Islands project 46 C		
	Year	1994	1994		
	System	1	1		
	Habitat Type	3	3		
	Pool	8	8		
	Sam. Gear	4	4		
	Sam. Depth	177	180		
	Data Cit.	COE	COE		
C H C ' S	ug/kg	a-BHC	< 1.0	< 1.0	
	ug/kg	b-BHC	< 1.0	< 1.0	
	ug/kg	BHC	< 1.0	< 1.0	
	ug/kg	g-BHC (lindane)	< 1.0	< 1.0	
	ug/kg	Heptachlor	< 1.0	< 1.0	
	ug/kg	Aldrin	< 1.0	< 1.0	
	ug/kg	Heptachlorepoxi			
	ug/kg	Endosulfan I			
	ug/kg	Dieldrin	< 1.0	< 1.0	
	ug/kg	4,4'-DDE	< 1.0	< 1.0	
	ug/kg	Endrin	< 1.0	< 1.0	
	ug/kg	Endosulfan II			
	ug/kg	4,4'-DDD	< 1.0	< 1.0	
	ug/kg	Endrinaldehyde			
	ug/kg	Sulfan sulfate			
	M E T A L S	mg/kg	Ag (silver)		
mg/kg		Al (aluminum)			
mg/kg		As (arsenic)			
mg/kg		B (boron)			
mg/kg		Ba (barium)			
mg/kg		Be (beryllium)			
mg/kg		Cd (cadmium)	< 0.13	< 0.13	
mg/kg		Cr (chromium)	11.1	14.2	
mg/kg		Cu (copper)	3.21	6.87	
mg/kg		Fe (iron)			
mg/kg		Hg (mercury)	0.01	0.014	
mg/kg		Mg (magnesium)			
mg/kg		Mn (manganese)	348	155	
mg/kg		Mo (molybdenum)			
mg/kg		Ni (nickel)	9.41	12.1	
mg/kg		Pb (lead)	2.8	4.6	
mg/kg	Sb (antimony)				
mg/kg	Se (selenium)				
mg/kg	Sn (tin)				
mg/kg	Sr (strontium)				
mg/kg	Ti (titanium)				
mg/kg	Zn (zinc)	20.5	21.5		
mg/kg	V (vanadium)				
P C B ' S	ug/kg	Aroclor-1006	< 10	< 10	
	ug/kg	Aroclor-1221	< 10	< 10	
	ug/kg	Aroclor-1232	< 10	< 10	
	ug/kg	Aroclor-1242	< 10	< 10	
	ug/kg	Aroclor-1248	< 10	< 10	
	ug/kg	Aroclor-1254	< 10	< 10	
	ug/kg	Aroclor-1260	< 10	< 10	
	ug/kg	Total PCB's			
P A R T I C L E S I Z E % F I N E R	S I Z E	S I Z E	3 in		
			1 1/2		
	S I Z E	S I Z E	3/4		
			3/8		
			4		
			8		
			10	100	96.5
			16		
	S I Z E	S I Z E	18		
			20	98.5	88.7
			30		
			40	87.2	58.8
			50		
			60		
	S I Z E	S I Z E	70		
			80		
100			43.7	17.3	
140			21.6	11.5	
200			17.2	9.3	
230					
S I Z E	S I Z E	270			
		0.20 mm			
		0.05 mm			
M I S C	%	Total Organic Car			
	mg/kg	Chem Oxy Demand			
	mg/kg	Kjedahl Nitrogen			
	mg/kg	Total Phosph			
	mg/kg	Oil and Grease			
	mg/kg	Cyanide, Total	< 0.05	< 0.05	
	mg/kg	Ammonia			
	mg/l	Ammonia Elutriate	0.71	0.64	
	%	Moisture	20.4	20.5	
	%	Total Solids	79.7	80.1	
%	Volatile Solids	0.85	1.6		