

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

Record #		105	106	107	485	108	109	110	486		
River Mile		794.5	794.1	793.1	793.1	792.8	792.8	792.8	792.5	792.5	
Location		TRENTON	TRENTON	CANNON RIVER	CANNON RIVER	CANNON RIVER	CANNON RIVER	CANNON RIVER 1	CANNON RIVER	CANNON RIVER	
Year		1981	1981	1982	1989	1978	1978	1994	1974	1989	
System		1	1	1	1	1	1	1	1	1	
Habitat Type		1	1	1	1	1	1	1	1	1	
Pool		4	4	4	4	4	4	4	4	4	
Sam. Gear		1	1	1	1	1	1	1	1	1	
Sam. Depth		10	10	10	10	10	10	10	10	10	
Data Cit.		COE	COE	COE	COE	COE	COE	COE	COE	COE	
CHC'S	ug/kg	a-BHC			< 0.07			< 0.24		< 0.07	
	ug/kg	b-BHC			< 0.15			< 0.24		< 0.15	
	ug/kg	BHC			< 0.22			< 0.24		< 0.22	
	ug/kg	g-BHC (lindane)			< 0.1			< 0.24		< 0.1	
	ug/kg	Heptachlor			< 0.07			< 0.24		< 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	< 0.1	< 0.1	< 0.1	< 0.12	0	0	< 0.48	< 10	< 0.12
	ug/kg	4,4'-DDE	< 0.1	< 0.1	< 0.1	< 0.1	0	0	< 0.48	< 10	< 0.1
	ug/kg	Endrin	< 0.1	< 0.1	< 0.1	< 0.22	0	0	< 0.48	< 10	< 0.22
	ug/kg	Endosulfan II				< 0.24					< 0.25
	ug/kg	4,4'-DDD	< 0.1	< 0.1	< 0.1	< 0.27	0	0	< 0.48	< 10	< 0.27
	ug/kg	Endrinaldehyde				< 0.27					< 0.27
	ug/kg	Sulfan sulfate				< 0.27					< 0.27
ug/kg	4,4'-DDT	< 0.1	< 0.1	1	< 0.31	0	0	< 0.48	< 10	< 0.32	
ug/kg	Methoxychlor				< 0.53					< 0.55	
ug/kg	Endrinetone				< 0.27					< 0.27	
ug/kg	Chlorodane	< 1	< 1	< 1	< 1.45	0	0	< 0.24	< 10	< 1.49	
ug/kg	Toxaphene				< 1.45					< 1.49	
METALS	mg/kg	Ag (silver)									
	mg/kg	Al (aluminum)									
	mg/kg	As (arsenic)	< 1	0	1.2	< 1.05	0	0	1.5	< 0.7	< 1
	mg/kg	B (boron)									
	mg/kg	Ba (barium)	10	10			10	10			
	mg/kg	Be (beryllium)									
	mg/kg	Cd (cadmium)	< 1	< 1	< 0.18	< 1.5	< 10	< 10	< 0.13	< 1	< 1.1
	mg/kg	Cr (chromium)	< 10	< 10	3.5	3.7	< 10	< 10	8.7	17	4.3
	mg/kg	Cu (copper)	< 10	< 10	1.8	2.2	< 10	< 10	3.1	10	< 1.45
	mg/kg	Fe (iron)	2300	2600	4100		1700	2400			
	mg/kg	Hg (mercury)	< 0.01	< 0.01	0.042	< 0.01	0.47	0.66	0.11	0.4	< 0.01
	mg/kg	Mg (magnesium)									
	mg/kg	Mn (manganese)	140	140		201	970	180	308		165
	mg/kg	Mo (molybdenum)									
	mg/kg	Ni (nickel)	< 10	< 10	5	6.8	< 10	< 10	6.4	77	< 5.46
mg/kg	Pb (lead)	< 10	< 10	2	< 0.85	< 10	< 10	7.1	< 6	1.2	
mg/kg	Sb (antimony)										
mg/kg	Se (selenium)				< 0.88					< 0.83	
mg/kg	Sn (tin)										
mg/kg	Sr (strontium)										
mg/kg	Ti (titanium)										
mg/kg	Zn (zinc)	7	10	10	12.8	< 10	10	18.6	15	12	
mg/kg	V (vanadium)										
PCB'S	ug/kg	Aroclor-1006			< 1.45			< 4.8		< 1.49	
	ug/kg	Aroclor-1016									
	ug/kg	Aroclor-1221			< 1.45			< 4.8		< 1.49	
	ug/kg	Aroclor-1232			< 1.45			< 4.8		< 1.49	
	ug/kg	Aroclor-1242			< 1.45			< 4.8		< 1.49	
	ug/kg	Aroclor-1248			< 1.45			< 4.8		< 1.49	
	ug/kg	Aroclor-1254			< 3.03			< 4.8		< 3.1	
	ug/kg	Aroclor-1260			< 3.03			< 4.8		< 3.1	
	ug/kg	Total PCB's	0	0	0		0	0		0	
FINER SIZE PARTICLES	D	coarse	3 in				100	100		100	
			1 1/2	100	100	100	100	100	100		
			3/4	100	100	100	100	100	100		
	N	medium	3/8	100	100	100	100	100	100	100	100
			4	100	100	100	100	100	99.5	100	100
			8	98	98	99	100	100	100	100	100
	S	fine	10			100	100	98	97.7		99.8
			16	93.0	90.0	95.0	99.2			99.0	98.0
			18					97.0	88.0	90.1	
	T	fine	20								
			30	74.0	70.0	72.0	71.8				81.7
			40	60.0	50.0	46.0		69.0	58.0	65.7	90.0
	P	fine	50	40.0	18.0	16.0	71.8				81.7
			60								
			70	23.0	5.0	5.0					
S	fine	80				10.3	8.0	5.0		14.7	
		100	11.0	2.0	2.0	0.6			24.4	2.0	0.4
		140				0.5			22.9		0.6
S	fine	200	5.0	1.0	2.0	0.5	2.0	1.0	22.4	0.0	0.4
		230									
		270	1.0	0.0	2.0	0.4					
S	fine	0.20 mm	0.0	0.0	1.0		1.0	1.0		0.0	
		0.05 mm	0.0	0.0	0.0		0.0	0.0		0.0	
MISC	%	Total Organic Carb			0.47			0.134		0.5	
	mg/kg	Chem Oxy Demand	430	15000	984		1800	2400		2553	
	mg/kg	Kjedahl Nitrogen	215	695	27		200	390		61	
	mg/kg	Total Phosph	--	--	140		37	80		164	
	mg/kg	Oil and Grease	0	0	< 50		0	100		58	
	mg/kg	Cyanide, Total				< 0.6			< 0.07	< 0.61	
	mg/kg	Ammonia				< 0.24				0.9	
	mg/l	Ammonia Elutriate						5.40			
%	Moisture				16.9		24.1		17.8		
%	Total Solids				83.1		75.9		82.2		
%	Volatile Solids				0.7		1.5		0.5		

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

Record #		111	491	492	791.5	791.5	791.5	791.500	791.5		
River Mile		792.5	792.2	791.5	791.5	791.5	791.5	791.500	791.5		
Location		CANNON RIVER 2	CANNON RIVER	REDWING COMM	REDWING COMM	REDWING COMM 1	REDWING COMM 1	REDWING SM BOAT 1	REDWING CH - CT LABS	REDWING CH - STAT	
Year		1994	1982	1989	1989	1994	2002	1994	2008.000	2008	
System		1	1	1	1	1	1	1	1.000	1	
Habitat Type		1	1	2	2	1	1	2	2.000	2	
Pool		4	4	4	4	4	4	4	4.000	4	
Sam. Gear		1	1	1	1	1	1	1	1.000	1	
Sam. Depth		10	10	10	10	10	10	10	10.000	10	
Data Cit.		COE	COE	COE	COE	COE	COE	COE	COE	COE	
CHC'S	ug/kg	a-BHC	< 0.24	< 0.1	< 0.16	< 0.32	< 0.12	< 0.39		<2.4	
	ug/kg	b-BHC	< 0.24	< 0.2	< 0.32	1	<0.12	2.6		<2.4	
	ug/kg	BHC	< 0.24	< 0.3	< 0.48	< 0.32	< 0.12	< 0.39		<2.4	
	ug/kg	g-BHC (lindane)	< 0.24	< 0.14	< 0.21	< 0.32	< 0.12	< 0.39		<2.4	
	ug/kg	Heptachlor	< 0.24	< 0.1	< 0.16	< 0.32	< 0.08	< 0.39		<2.4	
	ug/kg	Aldrin		< 0.14	< 0.21					<2.4	
	ug/kg	Heptachlorepoide		< 0.17	< 0.26		<1.48			<2.4	
	ug/kg	Endosulfan I		< 0.17	< 0.26					<2.4	
	ug/kg	Dieldrin	< 0.48	< 0.1	< 0.17	< 0.26	< 0.65	< 0.12	< 0.79	<3.2	
	ug/kg	4,4'-DDE	< 0.48	< 0.1	< 0.14	< 0.21	< 0.65	0.37	1.5	<3.5	
	ug/kg	Endrin	< 0.48	< 0.1	< 0.3	< 0.48	< 0.65	< 0.12	< 0.79		
	ug/kg	Endosulfan II		< 0.34	< 0.53					<2.4	
	ug/kg	4,4'-DDD	< 0.48	< 0.1	< 0.37	< 0.58	< 0.65	< 0.12	0.93	<3.7	
	ug/kg	Endrinaldehyde		< 0.37	< 0.58					<2.4	
	ug/kg	Sulfan sulfate		< 0.37	< 0.58					<2.4	
ug/kg	4,4'-DDT	< 0.48	< 0.1	< 0.44	< 0.69	< 0.65	0.79	< 0.79	<4.2		
ug/kg	Methoxychlor		< 0.74	< 1.16					<2.4		
ug/kg	Endrinetone		< 0.37	< 0.58					<2.4		
ug/kg	Chlorodane	< 0.24	< 1	< 2.03	< 3.17	< 0.32	< 0.36	< 0.39			
ug/kg	Toxaphene			< 2.03	< 3.17				<50		
METALS	mg/kg	Ag (silver)									
	mg/kg	Al (aluminum)									
	mg/kg	As (arsenic)	1.4	1.3	2.5	2.9	2.8	3.76	4	2.000	
	mg/kg	B (boron)									
	mg/kg	Ba (barium)									
	mg/kg	Be (beryllium)									
	mg/kg	Cd (cadmium)	< 0.11	0.18	< 1.64	2.5	0.74	1.21	1.3	<1.0	<0.68
	mg/kg	Cr (chromium)	5.1	4.6	23.3	51	25.2	17.9	27.5	11.900	16
	mg/kg	Cu (copper)	1.2	2.3	8.3	25	11.6	15.6	17.8	8.600	11
	mg/kg	Fe (iron)		4500							
	mg/kg	Hg (mercury)	< 0.04	0.066	< 0.02	0.13	0.08	0.015	0.14	<0.10	0.044
	mg/kg	Mg (magnesium)									
	mg/kg	Mn (manganese)	234		734	986	781	1040	936	574.000	690
	mg/kg	Mo (molybdenum)									
	mg/kg	Ni (nickel)	4.9	5	8.7	26	13.2	23.8	16.2	29.500	11
mg/kg	Pb (lead)	4	3.4	11.2	24.9	10.5	22.4	19.8	6.600	8.8	
mg/kg	Sb (antimony)										
mg/kg	Se (selenium)			< 1.25	< 1.84						
mg/kg	Sn (tin)										
mg/kg	Sr (strontium)										
mg/kg	Ti (titanium)										
mg/kg	Zn (zinc)	11	14	49.2	114	50.3	64.2	78.3	29.500	40	
mg/kg	V (vanadium)										
PCB'S	ug/kg	Aroclor-1006	< 4.8	< 2.03	< 3.17	< 6.5		< 7.9	<31	<120	
	ug/kg	Aroclor-1016									
	ug/kg	Aroclor-1221	< 4.8	< 2.03	< 3.17	< 6.5		< 7.9			
	ug/kg	Aroclor-1232	< 4.8	< 2.03	< 3.17	< 6.5		< 7.9			
	ug/kg	Aroclor-1242	< 4.8	< 2.03	< 3.17	< 6.5		< 7.9			
	ug/kg	Aroclor-1248	< 4.8	< 2.03	< 3.17	< 6.5		< 7.9	<29	<120	
	ug/kg	Aroclor-1254	< 4.8	< 4.23	< 6.6	< 6.5		41	<10	<120	
	ug/kg	Aroclor-1260	< 4.8	< 4.23	< 6.6	< 6.5		< 7.9	<19	<120	
ug/kg	Total PCB's		0								
FINER & SIZES	D	3 in									
		1 1/2		100							
		3/4		100							
		3/8		100							
		4	100	100	100	100	100	100	100.000	100	
	A	8		100							
		10	98.6		99.9	99.9	99.7	100		100.000	99.9
		16		99.0	99.5	99.4					
		18						99.4			
		20	89.2				99.2		100.0	99.230	99.7
	S	30		91.0	97.9	98.4					
		40	49.7	78.0			97.8		99.7	94.990	98.5
		50		60.0	97.9	98.4		92.8			
		60								86.420	93.0
		70		38.0				81.9			
FINE	80			89.9	97.1				74.720		
	100	0.9	18.0	55.4	88.5	77.9	70.3	99.2	69.150		
	140	0.6		39.6	76.7	69.0	59.4	97.9		68.5	
	200	0.5	11.0	24.9	49.3	64.8	45.0	96.4	44.990	57.9	
	230										
SILTS	270		10.0	17.9	30.2						
	0.20 mm		3.0	14.5	22.5						
	0.05 mm		1.0	9.6	12.1						
MISC	%	Total Organic Car	0.038		4	11.9	1.02	2.2	> 1.6	5900.000	46000
	mg/kg	Chem Oxy Demand		5595							
	mg/kg	Kjedahl Nitrogen		157					1300.000	145	
	mg/kg	Total Phosph		295					730.000	590	
	mg/kg	Oil and Grease		55							
MISC	mg/kg	Cyanide, Total	< 0.06	< 0.9	< 1.4	< 0.09	0.11	< 0.11	< 0.57	< 0.39	
	mg/kg	Ammonia		47.00	86		10		11.000	15	
	mg/l	Ammonia Elutriate	< 0.06			1.10		0.7			
	%	Moisture	15.6	44.4	63	42.7	49.5	53.5	39.000	35.2	
	%	Total Solids	84.4	55.6	37	57.3	50.5	46.5	61.000	64.8	
%	Volatile Solids	0.95	5.4	6.7	5.2	5.41	7.03	0.030	< 0.01		

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

Record #		112	113	489	490		114	115			
River Mile		791.4	791.4	791.2	791.2	791.2	791.0	791.0			
Location		AB&BW		REDWING		REDWING					
Year		REDWING COMM	REDWING HWY BR	REDWING SM BOAT	REDWING SM BOAT	REDWING SBH - CT LABS	REDWING SBH - STAT	REDWING SM BOAT	REDWING SM BOAT		
System		1980	1980	1989	1989	2008	2008	1979	1979		
Habitat Type		1	1	1	1	1	1	1	1		
Pool		2	1	2	2	2	2	2	2		
Sam. Gear		4	4	4	4	4	4	4	4		
Sam. Depth		1	1	1	1	1	1	1	1		
Data Cit.		10	10	10	10	10	10	10	10		
		COE	COE	COE	COE	COE	COE	COE	COE		
CHC'S	ug/kg	a-BHC		< 0.09	< 0.11		<3				
	ug/kg	b-BHC		< 0.19	< 0.21		<3				
	ug/kg	BHC		< 0.28	< 0.32		<3				
	ug/kg	g-BHC (lindane)		< 0.12	< 0.14		<3				
	ug/kg	Heptachlor		< 0.09	< 0.11		<3				
	ug/kg	Aldrin		< 0.12	< 0.14		<3				
	ug/kg	Heptachlorepoxide		< 0.16	< 0.18		<3				
	ug/kg	Endosulfan I		< 0.16	< 0.18		<3				
	ug/kg	Dieldrin	0.92	0	< 0.16	< 0.18	<3.2	<3	1.2	0	
	ug/kg	4,4'-DDE	0.28	0	< 0.12	< 0.14	<3.5	<3	5.3	1.1	
	ug/kg	Endrin	0.24	0	< 0.28	< 0.32		<3	0	0	
	ug/kg	Endosulfan II			< 0.31	< 0.36		<3			
	ug/kg	4,4'-DDD	5.28	0	< 0.34	< 0.39	<3.7	<3	4.2	1.6	
	ug/kg	Endrinaldehyde			< 0.34	< 0.39		<3			
	ug/kg	Sulfan sulfate			< 0.34	< 0.39		<3			
ug/kg	4,4'-DDT	0.56	0	< 0.41	< 0.46	<4.2	<3	1.2	0		
ug/kg	Methoxychlor			< 0.69	< 0.78		<3				
ug/kg	Endrinetone			< 0.34	< 0.39		<3				
ug/kg	Chlorodane	7.1	0	< 1.87	< 2.14		<62	9	0		
ug/kg	Toxaphene			< 1.87	< 2.14		<62				
METALS	mg/kg	Ag (silver)									
	mg/kg	Al (aluminum)									
	mg/kg	As (arsenic)		0	< 1.36	< 1.52	3.1	4.4	3	6	
	mg/kg	B (boron)									
	mg/kg	Ba (barium)		40					150	170	
	mg/kg	Be (beryllium)									
	mg/kg	Cd (cadmium)	4.23	< 10	< 1.49	< 1.67	<1.0	<0.95	< 10	< 10	
	mg/kg	Cr (chromium)	84.7	10	18.1	21.2	18.3	24	40	60	
	mg/kg	Cu (copper)	17.8	< 10	6.8	9.9	16.8	22	30	30	
	mg/kg	Fe (iron)	22900	6100					17000	21000	
	mg/kg	Hg (mercury)	0.035	0	< 0.02	< 0.02	0.1	0.12	0	0	
	mg/kg	Mg (magnesium)									
	mg/kg	Mn (manganese)		550	62.2	7.8	713	860	1200	1200	
	mg/kg	Mo (molybdenum)									
	mg/kg	Ni (nickel)	57.4	< 10	8.8	11.6	12.7	18	20	20	
mg/kg	Pb (lead)	8.08	< 10	11.4	13.4	14.8	23	60	50		
mg/kg	Sb (antimony)										
mg/kg	Se (selenium)			< 1.14	< 1.27						
mg/kg	Sn (tin)										
mg/kg	Sr (strontium)										
mg/kg	Ti (titanium)										
mg/kg	Zn (zinc)	216	30	50.2	59.3	61.1	85	100	110		
mg/kg	V (vanadium)										
PCB'S	ug/kg	Aroclor-1006		< 1.87	< 2.14		<31	<150			
	ug/kg	Aroclor-1016									
	ug/kg	Aroclor-1221		< 1.87	< 2.14						
	ug/kg	Aroclor-1232		< 1.87	< 2.14						
	ug/kg	Aroclor-1242		< 1.87	< 2.14						
	ug/kg	Aroclor-1248		< 1.87	< 2.14		<29	<150			
	ug/kg	Aroclor-1254		< 3.9	< 4.45		<10	<150			
	ug/kg	Aroclor-1260		< 3.9	< 4.45		<19	<150			
	ug/kg	Total PCB's	59.8	0					51	82	
FINE & SIZABLE PARTICLES	D	coarse	3 in	100	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	99.9	100	100	100	100	100
			8	100	84						
			10			99.9	100	100	99.9	100	98
	S	medium	16	100.0	70.0	99.4	99.5				
			18								
			20					95.33	99.7	99.0	98.0
			30			98.4	98.5				
			40		51.0			83.66	98.8	99.0	98.0
	50			98.4	98.5						
	F	fine	60					75.2	96.7		
			70								
80					95.0	95.9	70.41		99.0	96.0	
100			98.0	27.0	46.0	54.9	68.33				
140					30.6	34.2			92.6		
SILT	CLAY	200	96.0	13.0	19.6	23.4	59.67	89.5	98.0	93.0	
		230									
		270			17.2	15.1					
SILT	CLAY	0.20 mm		3.0	11.7	13.0			60.0	65.0	
		0.05 mm	50.0	1.0	8.3	9.0			20.0	29.0	
MISC	%	Total Organic Car		1.42	2.84	14000	93000				
	mg/kg	Chem Oxy Demand	35200	7600				180000	99000		
	mg/kg	Kjedahl Nitrogen	--	1100		2000	813	8400	6800		
	mg/kg	Total Phosph	3140	--		1000	859	1200	1200		
	mg/kg	Oil and Grease	530	0				0	0		
MISC	mg/kg	Cyanide, Total		< 0.84	< 0.95		<0.71	<0.48			
	mg/kg	Ammonia		20	33.0	41	35				
	mg/l	Ammonia Elutriate									
	%	Moisture		40.8	47.4	50.9	48.1				
	%	Total Solids		59.2	52.6	49.1	51.9				
%	Volatile Solids		4.3	5.0	0.0461	<0.01					

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

Record #		488	487	116	333	335					
River Mile		791.0	791.0	791.0	790.9	790.1	790	789.8	786.5	786.0	
Location		AB&BW REDWING SM BOAT	AB&BW REDWING HWY BR	AB&BW REDWING HWY BR	AB. RWB - STAT LABS	AB&BW REDWING HWY BR	BELOW CT LABS	AB&BW REDWING HWY BR	L-Lk Pepin-Bay City 1-1	L-Lk Pepin-Bay City 2-2	
Year		2002	1989	2002	2008	1989	2008	1980	1987	1987	
System		1	1	1	1	1	1	1	1	1	
Habitat Type		2	1	1	1	1	1	1	3	3	
Pool		4	4	4	4	4	4	4	4	4	
Sam. Gear		1	1	1	1	1	1	1	4	4	
Sam. Depth			10		10	10	10	10	76	77-152	
Data Cit.		COE	COE	COE	COE	COE	COE	COE	COE	COE	
C H C L S	ug/kg	a-BHC	<0.12	< 0.07	<0.12	<2	< 0.07		< 5	< 5	
	ug/kg	b-BHC	<0.12	< 0.15	<0.12	<2	< 0.15		< 5	< 5	
	ug/kg	BHC	<0.12	< 0.22	<0.12	<2	< 0.22				
	ug/kg	g-BHC (lindane)	<0.12	< 0.1	<0.12	<2	< 0.1		< 5	< 5	
	ug/kg	Heptachlor	<0.08	< 0.07	<0.08	<2	< 0.07		< 5	< 5	
	ug/kg	Aldrin		< 0.1		<2	< 0.1				
	ug/kg	Heptachlorepoide	<1.48	< 0.12	<1.48	<2	< 0.12				
	ug/kg	Endosulfan I		< 0.12		<2	< 0.12				
	ug/kg	Dieldrin	<0.12	< 0.12	<0.12	<2	< 0.12	<3.2	0.2	< 5	< 5
	ug/kg	4,4'-DDE	1.15	< 0.1	<0.12	<2	< 0.1	<3.5	0	< 5	< 5
	ug/kg	Endrin	<0.12	< 0.22	<0.12	<2	< 0.22		0	< 5	< 5
	ug/kg	Endosulfan II		< 0.25		<2	< 0.25				
	ug/kg	4,4'-DDD	<0.1	< 0.27	<0.12	<2	< 0.27	<3.7	1.5	< 5	< 5
	ug/kg	Endrinaldehyde		< 0.27		<2	< 0.27				
	ug/kg	Sulfan sulfate		< 0.27			< 0.27				
ug/kg	4,4'-DDT	0.98	< 0.32	<0.24	<2	< 0.32	<4.2	0.3	< 5	< 5	
ug/kg	Methoxychlor		< 0.55		<2	< 0.55					
ug/kg	Endrinetone		< 0.27		<2	< 0.27					
ug/kg	Chlorodane	138	< 1.49	<0.36	<42	< 1.49		0	< 5	< 5	
ug/kg	Toxaphene		< 1.49		<42	< 1.49					
M E T A L S	mg/kg	Ag (silver)									
	mg/kg	Al (aluminum)									
	mg/kg	As (arsenic)	4.85	< 0.98	2.29	<1.2	< 1.11	0.79	0	58.2	< 1.2
	mg/kg	B (boron)									
	mg/kg	Ba (barium)							40		
	mg/kg	Be (beryllium)									
	mg/kg	Cd (cadmium)	1.71	< 1.07	0.13	<0.58	< 1.22	<1.0	< 10	< 1.5	< 1.5
	mg/kg	Cr (chromium)	18.3	6.9	4.54	6.5	6.9	4.5	10	< 3.7	< 3.7
	mg/kg	Cu (copper)	26.9	< 1.4	1.15	3.1	2.57	1.5	< 10	15.8	8.9
	mg/kg	Fe (iron)							6900		
	mg/kg	Hg (mercury)	0.027	< 0.01	<0.006	<0.03	< 0.01	<0.10	0	< 0.8	< 0.8
	mg/kg	Mg (magnesium)									
	mg/kg	Mn (manganese)	870	213	162	390	237	424	500	1077.5	721.8
	mg/kg	Mo (molybdenum)									
	mg/kg	Ni (nickel)	27.4	< 5.17	5.19	4.9	6.9	3.9	< 10	< 12.9	27.8
mg/kg	Pb (lead)	33.6	2.3	3.91	4.2	35.2	2.3	< 10	37.2	34.7	
mg/kg	Sb (antimony)										
mg/kg	Se (selenium)		< 0.81			< 0.93					
mg/kg	Sn (tin)										
mg/kg	Sr (strontium)										
mg/kg	Ti (titanium)										
mg/kg	Zn (zinc)	96.3	11.1	9.72	19	21.5	10	40	124.8	111.7	
mg/kg	V (vanadium)										
P C B S	ug/kg	Aroclor-1006		< 1.49		<100	< 1.49	<31			
	ug/kg	Aroclor-1016									
	ug/kg	Aroclor-1221		< 1.49			< 1.49				
	ug/kg	Aroclor-1232		< 1.49			< 1.49				
	ug/kg	Aroclor-1242		< 1.49			< 1.49				
	ug/kg	Aroclor-1248		< 1.49		<100	< 1.49	<29			
	ug/kg	Aroclor-1254		< 3.1		<100	< 3.1	<10			
	ug/kg	Aroclor-1260		< 3.1		<100	< 3.1	<19			
ug/kg	Total PCB's							18	0	0	
F I N E R S I Z E T I C L E P A R T I C L E	D C O A R S E	3 in							100		
		1 1/2							100		
		3/4							100		
		3/8							100		
		4	100	100	100	99.8	100	100	100		
	8							100			
	10	99.9	100	100	99.7	99.9	94.15				
	S A M E D I U M	16		99.3					99.0		
		18	99.7		99.8						
		20				99.3		83.71			
		30		71.7			95.2				
		40				92.5		68.75	68.0		
	50	81.1	71.7	28.6		95.2					
	F I N E	60				50.7		47.44			
		70	75.7		7.3						
80			19.8			49.9	13.53				
100		69.8	1.8	1.0		9.3	6.85	30.0			
140		64.6	1.6	0.3	10.0	7.6			94.3		
P A R T I C L E	200	56.5	1.0	0.3	8.3	7.0	2.79	27.0			
	230										
	270					5.2			75.5		
S I Z E	0.20 mm					4.5		15.0	44.4		
	0.05 mm					3.0		7.0	44.4		
M I S C	%	Total Organic Car	1.5	0.2	0.03	12000	0.9	<1200		4.06	
	mg/kg	Chem Oxy Demand						17000			
	mg/kg	Kjedahl Nitrogen				116	230	1600			
	mg/kg	Total Phosph				251	300	--			
	mg/kg	Oil and Grease						0			
M I S C	mg/kg	Cyanide, Total	<0.10	< 0.64	<0.10	<0.32	< 0.66	<0.42			
	mg/kg	Ammonia	27.0	1.4	<6	7.7	10.8	2.7			
	mg/l	Ammonia Elutriate									
	%	Moisture	53.9	21.5	21	22	24.7	17.4			
	%	Total Solids	46.10	78.5	79	78	75.3	82.6			
%	Volatile Solids	5.62	0.6	0.3	<0.01	1.3	0.0049				

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

Record #		337									
River Mile		785.4 785.4 785.25 785.2 784.82 784.81 784.81 784.7									
Location		L-Lk	Lake Pepin (09-03ENV)		Head of Lake Pepin - (10-4M)	Head of Lake Pepin - (10-5M)	Head of Lake Pepin - (10-5M-2)	Lake Pepin (09-02ENV)			
Year		Pepin-Bay City 4-1	Head of Pepin #2	Pace Labs	Head of Pepin #1	(10-4M)	(10-5M)	(10-5M-2)	Pace Labs		
System		1	1	1	1	1	1	1	1		
Habitat Type		3	1	1	1	1	1	1	1		
Pool		4	4	4	4	4	4	4	4		
Sam. Gear		4	1	1	1	1	1	1	1		
Sam. Depth		76		10		10	10	10	10		
Data Cit.		COE	COE	COE	COE	COE	COE	COE	COE		
CHCIS	ug/kg	a-BHC	< 5	<0.12	<1.0	<0.12			<1.0		
	ug/kg	b-BHC	< 5	<0.12	<1.5	<0.12			<1.4		
	ug/kg	BHC		<0.12	<0.81	<0.12			<0.78		
	ug/kg	g-BHC (lindane)	< 5	<0.12	<0.60	<0.12			<0.58		
	ug/kg	Heptachlor	< 5	<0.08	<0.68	<0.08			<0.66		
	ug/kg	Aldrin			<0.57				<0.55		
	ug/kg	Heptachlorepoide		<1.48	<0.57	<1.48			<0.55		
	ug/kg	Endosulfan I			<0.56				<0.54		
	ug/kg	Dieldrin	< 5	<0.12	<1.5	<0.12			<1.5		
	ug/kg	4,4'-DDE	< 5	<0.12	<1.3	<0.12			<1.2		
	ug/kg	Endrin	< 5	<0.12	<1.2	<0.12			<1.2		
	ug/kg	Endosulfan II			<1.6				<1.5		
	ug/kg	4,4'-DDD	< 5	<0.12	<1.9	<0.12			<1.9		
	ug/kg	Endrinaldehyde			<2.8				<2.7		
	ug/kg	Sulfan sulfate									
	ug/kg	4,4'-DDT	< 5	<0.24	<2.0	<0.24			<1.9		
ug/kg	Methoxychlor			<6.4				<6.2			
ug/kg	Endrinetone			<1.7				<1.6			
ug/kg	Chlorodane	< 5	<0.36		<0.36						
ug/kg	Toxaphene			45.9				<27.9			
METALS	mg/kg	Ag (silver)									
	mg/kg	Al (aluminum)									
	mg/kg	As (arsenic)	19.3	2.16	1.5	0.83			1.5		
	mg/kg	B (boron)									
	mg/kg	Ba (barium)									
	mg/kg	Be (beryllium)									
	mg/kg	Cd (cadmium)	< 1.5	0.14	0.032	0.18			0.047		
	mg/kg	Cr (chromium)	< 3.7	3.76	5.3	3.28			6.1		
	mg/kg	Cu (copper)	22.6	1.4	1.3	1.21			1.6		
	mg/kg	Fe (iron)									
	mg/kg	Hg (mercury)	< 0.8	<0.006	0.017	<0.006			0.019		
	mg/kg	Mg (magnesium)			2240				2540		
	mg/kg	Mn (manganese)	1035.2	138	190	154			151		
	mg/kg	Mo (molybdenum)									
	mg/kg	Ni (nickel)	27.8	4.88	4.3	5.61			4.4		
	mg/kg	Pb (lead)	31.5	4.37	2.7	5.26			2.9		
mg/kg	Sb (antimony)										
mg/kg	Se (selenium)										
mg/kg	Sn (tin)										
mg/kg	Sr (strontium)										
mg/kg	Ti (titanium)										
mg/kg	Zn (zinc)	137.8	10.7	14.1	11.2			15.8			
mg/kg	V (vanadium)										
PCB'S	ug/kg	Aroclor-1006									
	ug/kg	Aroclor-1016			<30.2				<29.3		
	ug/kg	Aroclor-1221			<30.2				<29.3		
	ug/kg	Aroclor-1232			<30.2				<29.3		
	ug/kg	Aroclor-1242			<30.2				<29.3		
	ug/kg	Aroclor-1248			<30.2				<29.3		
	ug/kg	Aroclor-1254			<30.2				<29.3		
	ug/kg	Aroclor-1260			<30.2				<29.3		
	ug/kg	Total PCB's	0		<30.2				<29.3		
FINE & SIZABLE PARTICLES	D	coarse	3 in								
			1 1/2								
			3/4								
			3/8								
			4		100	100	100	100	99.9	100	
			8								
			10		99.5	99.9	99.7	99.4	99.8	99.9	99.8
			16								
	S	medium	16								
			18		98.7		98.3				
			20					95.8	98.8	99.2	
			30								
			40			88.1		82.6	92.4	94.7	97.8
			50		70.5		56.3				
	FINE	fine	60					44.5	70.4	70.7	
			70		39.2		29.3				
80							15.9	28.9	29.9		
100				5.3	10.6	3.1	8	12.6	17.9	20.3	
140			93.8	1.6		1.1					
200				0.4	3.1	0.5	1.9	2.2	2.4	4.4	
SILTS	CLAY	230					1.6	1.8	1.7		
		270	72.2								
		0.20 mm	35.0								
		0.05 mm	35.0								
MISC	%	Total Organic Car	3.03	0.04	894	0.04	0	0	0	1260	
	mg/kg	Chem Oxy Demand									
	mg/kg	Kjedahl Nitrogen									
	mg/kg	Total Phosph									
	mg/kg	Oil and Grease									
	mg/kg	Cyanide, Total		<0.10		<0.10					
	mg/kg	Ammonia									
	mg/l	Ammonia Elutriate									
%	Moisture		22.4	21.7	21.6	21.3	18	18.4	19.2		
%	Total Solids		77.6	82.6	78.4	78.7	82	81.6	81.3		
%	Volatile Solids		0.32	0.42	0.39	0.79	0.62	0.82	1.3		

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

Record #		784.7	784.7	784.7	784.7	784.49	784.49	784.48	784.48	
River Mile		Head of Lake Pepin - (10-6M-1)	Head of Lake Pepin - (10-6M-2)	Head of Lake Pepin - (10-7M-1)	Head of Lake Pepin - (10-7M-2)	Head of Lake Pepin - (10-8M-1)	Head of Lake Pepin - (10-8M-2)	Head of Lake Pepin - (10-9M-1)	Head of Lake Pepin - (10-9M-2)	
Location										
Year		2010	2010	2010	2010	2010	2010	2010	2010	
System		1	1	1	1	1	1	1	1	
Habitat Type		1	1	1	1	1	1	1	1	
Pool		4	4	4	4	4	4	4	4	
Sam. Gear		1	1	1	1	1	1	1	1	
Sam. Depth		10	10	10	10	10	10	10	10	
Data Cit.		COE	COE	COE	COE	COE	COE	COE	COE	
C H C L S	ug/kg	a-BHC								
	ug/kg	b-BHC								
	ug/kg	BHC								
	ug/kg	g-BHC (lindane)								
	ug/kg	Heptachlor								
	ug/kg	Aldrin								
	ug/kg	Heptachlorepoxyde								
	ug/kg	Endosulfan I								
	ug/kg	Dieldrin								
	ug/kg	4,4'-DDE								
	ug/kg	Endrin								
	ug/kg	Endosulfan II								
	ug/kg	4,4'-DDD								
	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)								
	mg/kg	Cr (chromium)								
	mg/kg	Cu (copper)								
	mg/kg	Fe (iron)								
	mg/kg	Hg (mercury)								
	mg/kg	Mg (magnesium)								
	mg/kg	Mn (manganese)								
	mg/kg	Mo (molybdenum)								
	mg/kg	Ni (nickel)								
P C B ' S	ug/kg	Aroclor-1006								
	ug/kg	Aroclor-1016								
	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								
	S I Z E & F I N E S S	D	3 in							
			1 1/2							
			3/4							
			3/8							
			4	100	99.9	99.9	100	100	100	100
		M	8							
10			99.5	99.7	98.5	97.4	99.5	99.13	95.8	97.8
16										
18										
20			98.6	98.6	95.1	92.2	98.5	95.5	89.8	92.9
S		30								
		40	91.8	91.1	92	88.3	95.6	91.7	86.8	90.6
		50								
		60	58	52.8	78.6	71.6	81.1	76.8	81.2	83.4
		70								
F	80	16	13.8	35.2	37.4	40.8	41.6	64.1	57.7	
	100	7.6	7.7	19.3	23.5	23.8	25.6	49.3	41.4	
	140									
	200	1.7	2.1	4.1	6	2.6	4.3	16.3	11	
	230	1.4	1.6	3.2	4	1.9	3.1	11.2	8.1	
P A R T I C L E S I Z E	270									
	0.20 mm									
	0.05 mm									
M I S C	%	Total Organic Car	0	0	0	0	0	28	0	
	mg/kg	Chem Oxy Demand								
	mg/kg	Kjedahl Nitrogen								
	mg/kg	Total Phosph								
	mg/kg	Oil and Grease								
	mg/kg	Cyanide, Total								
	mg/kg	Ammonia								
	mg/l	Ammonia Elutriate								
%	Moisture	19.4	17.8	21	18.7	21.7	21.6	26.2	24.3	
%	Total Solids	80.6	82.2	79	81.3	78.3	78.4	73.8	75.7	
%	Volatile Solids	0.97	0.64	1.12	1.00	0.61	0.75	1.72	1.48	

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

Record #		784.45	784.45	784.38	784.38	784.29	784.26	784.26	784.22
River Mile		Lake Pepin - (10-10M-1)	Lake Pepin - (10-10M-2)	Lake Pepin - (10-11M-1)	Lake Pepin - (10-11M-2)	Lake Pepin (09-01ENV) Pace Labs	Lake Pepin - (10-12M-1)	Lake Pepin - (10-12M-2)	Lake Pepin - (10-13M-1)
Location									
Year		2010	2010	2010	2010	2009	2010	2010	2010
System		1	1	1	1	1	1	1	1
Habitat Type		1	1	1	1	1	1	1	1
Pool		4	4	4	4	4	4	4	4
Sam. Gear		1	1	1	1	1	1	1	1
Sam. Depth		10	10	10	10	10	10	10	10
Data Cit.		COE	COE	COE	COE	COE	COE	COE	COE
C H C I S	ug/kg	a-BHC				<1.4			
	ug/kg	b-BHC				<1.9			
	ug/kg	BHC				1.4			
	ug/kg	g-BHC (lindane)				<0.80			
	ug/kg	Heptachlor				<0.91			
	ug/kg	Aldrin				<0.76			
	ug/kg	Heptachlorepoxyde				1.6			
	ug/kg	Endosulfan I				<0.75			
	ug/kg	Dieldrin	2	1.8	1.8	1.6	3.5	2.1	2.1
	ug/kg	4,4'-DDE	3	2.9	3.4	2.6	8.2	16	13
	ug/kg	Endrin					<1.7		
	ug/kg	Endosulfan II					<2.1		
	ug/kg	4,4'-DDD	2.4	0	0	0	<2.6	0	11
	ug/kg	Endrinaldehyde					<3.7		
	ug/kg	Sulfan sulfate							
ug/kg	4,4'-DDT	5.1	1.2	2.	1.6	3.3	15	15	
ug/kg	Methoxychlor					<8.5			
ug/kg	Endrinetone					<2.3			
ug/kg	Chlorodane								
ug/kg	Toxaphene	0				218			
M E T A L S	mg/kg	Ag (silver)							
	mg/kg	Al (aluminum)							
	mg/kg	As (arsenic)	1.3	1.5	1.8	1.6	6.3	3.2	5.2
	mg/kg	B (boron)							
	mg/kg	Ba (barium)							
	mg/kg	Be (beryllium)							
	mg/kg	Cd (cadmium)	0.087	0.079	0.095	0.15	0.83	1.1	0.78
	mg/kg	Cr (chromium)	8.2	9	9.1	8.7	26.6	20.9	28.4
	mg/kg	Cu (copper)	2.8	3.1	3.6	3.1	23.7	10.5	21.6
	mg/kg	Fe (iron)							
	mg/kg	Hg (mercury)	0.025	0.021	0.031	0.027	0.4	0.11	0.3
	mg/kg	Mg (magnesium)					9310		
	mg/kg	Mn (manganese)	345	345	418	363	768	552	982
	mg/kg	Mo (molybdenum)							
	mg/kg	Ni (nickel)	5	5.2	5.6	5.8	17	8.9	14.1
mg/kg	Pb (lead)	2.2	2.5	4	3.1	35.2	10.5	49.3	
mg/kg	Sb (antimony)								
mg/kg	Se (selenium)								
mg/kg	Sn (tin)								
mg/kg	Sr (strontium)								
mg/kg	Ti (titanium)								
mg/kg	Zn (zinc)	17	17.9	21.5	19.6	102	42.6	82.8	
mg/kg	V (vanadium)								
P C B ' S	ug/kg	Aroclor-1006	0						
	ug/kg	Aroclor-1016					<40.3		
	ug/kg	Aroclor-1221	0				<40.3		
	ug/kg	Aroclor-1232	0				<40.3		
	ug/kg	Aroclor-1242	0				<40.3		
	ug/kg	Aroclor-1248	0				<40.3		
	ug/kg	Aroclor-1254	18	20	14	20	94.1	280	87
	ug/kg	Aroclor-1260	0				<40.3		230
	ug/kg	Total PCB's					94.1		
S I Z E & F I N E S S	D	3 in							
		1 1/2							
		3/4							
		3/8							
		4	100	100	100	99.9	100	100	99.5
	M	8							
		10	97.8	95.3	97.1	98.4	99.8	92.7	87.4
		16							
		18							
		20	93.3	88.8	90.7	94		81.3	63.8
	S	30							
		40	90.8	85.5	87.9	92.2	98.8	74.3	52.4
		50							
		60	83.6	77.3	82	86.9		70.4	46.2
		70							
F	80	61.4	54.6	62.8	63.8		60	42.7	
	100	47	41	49.7	47.2	95.5	53	40.8	
	140								
	200	11.2	9.8	11.7	7.7	85.2	23.9	28.9	
	230	8.2	7	8.5	5.3		16.2	22.3	
P A R T I C L E S I Z E	270								
	0.20 mm								
	0.05 mm								
M I S C	%	Total Organic Car	0	0	0.11	0	20400	0.35	1.6
	mg/kg	Chem Oxy Demand							
	mg/kg	Kjedahl Nitrogen							
	mg/kg	Total Phosph							
	mg/kg	Oil and Grease							
	mg/kg	Cyanide, Total							
	mg/kg	Ammonia							
mg/l	Ammonia Elutriate								
%	Moisture	20.4	24.7	27	23.6	41.4	30.7	41.7	
%	Total Solids	79.6	75.3	73	76.4	58.9	69.3	58.3	
%	Volatile Solids	1.42	2.16	2.16	1.23	5.7	3.11	6.48	

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

Record #		119	120	121	122	338	123			
River Mile		784.22	767.2	785.31	785.3	785.01	785	785.0	784.61	
Location		Lake Pepin - (10-13M-2)	Middle of Lake Pepin	WACOUTA POINT	WACOUTA POINT	WACOUTA POINT	WACOUTA POINT	L-Lk Pepin-Bay City 5-1	WACOUTA POINT	
Year		2010	2002	1978	1978	1974	1974	1987	1978	
System		1	1	1	1	1	1	1	1	
Habitat Type		1	1	1	1	1	1	3	1	
Pool		4	4	4	4	4	4	4	4	
Sam. Gear		1	1	1	1	1	1	4	1	
Sam. Depth		10	10	10	10	10	10	45	10	
Data Cit.		COE	COE	COE	COE	COE	COE	COE	COE	
C H C I S	ug/kg	a-BHC	<0.12					< 5		
	ug/kg	b-BHC	<0.12					< 5		
	ug/kg	BHC	<0.12							
	ug/kg	g-BHC (lindane)	0.77					< 5		
	ug/kg	Heptachlor	<0.08					< 5		
	ug/kg	Aldrin								
	ug/kg	Heptachlorepoxyde	<1.48							
	ug/kg	Endosulfan I								
	ug/kg	Dieldrin	2.5	<0.12	0	0	< 10	< 10	< 5	0
	ug/kg	4,4'-DDE	25	2.24	0	0	< 10	< 10	< 5	0
	ug/kg	Endrin		<0.12	0	0	< 10	< 10	5.9	0
	ug/kg	Endosulfan II								
	ug/kg	4,4'-DDD	0	0.72	0	0	< 10	< 10	< 5	0
	ug/kg	Endrinaldehyde								
	ug/kg	Sulfan sulfate								
ug/kg	4,4'-DDT	16	0.61	0	0	< 10	< 10	< 5	0	
ug/kg	Methoxychlor									
ug/kg	Endrinetone									
ug/kg	Chlorodane		1.52	0	0	< 10	< 10	< 5	0	
ug/kg	Toxaphene									
M E T A L S	mg/kg	Ag (silver)								
	mg/kg	Al (aluminum)								
	mg/kg	As (arsenic)	4.3	6.15	0	0	< 1	< 1	24.5	0
	mg/kg	B (boron)								
	mg/kg	Ba (barium)			0	0				30
	mg/kg	Be (beryllium)								
	mg/kg	Cd (cadmium)	1.6	3.26	< 10	< 10	< 1	< 1	< 1.5	< 10
	mg/kg	Cr (chromium)	35.6	45.9	< 10	< 10	29	30	< 3.7	< 10
	mg/kg	Cu (copper)	18.8	37.8	< 10	< 10	2	5	8.9	< 10
	mg/kg	Fe (iron)			2400	2100				3600
	mg/kg	Hg (mercury)	0.29	0.149	0	0	< 0.1	< 0.1	< 0.8	2.2
	mg/kg	Mg (magnesium)								
	mg/kg	Mn (manganese)	790	2190	130	130			862.7	290
	mg/kg	Mo (molybdenum)								
	mg/kg	Ni (nickel)	13	44.6	< 10	< 10	17	18	< 12.9	< 10
mg/kg	Pb (lead)	27.4	63	20	20	< 9	< 9	30	20	
mg/kg	Sb (antimony)									
mg/kg	Se (selenium)									
mg/kg	Sn (tin)									
mg/kg	Sr (strontium)									
mg/kg	Ti (titanium)									
mg/kg	Zn (zinc)	72.3	163	20	< 10	13	12	116.1	18	
mg/kg	V (vanadium)									
P C B ' S	ug/kg	Aroclor-1006								
	ug/kg	Aroclor-1016								
	ug/kg	Aroclor-1221								
	ug/kg	Aroclor-1232								
	ug/kg	Aroclor-1242								
	ug/kg	Aroclor-1248								
	ug/kg	Aroclor-1254	210							
	ug/kg	Aroclor-1260								
	ug/kg	Total PCB's			1	1	0	0	0	1
S I Z E & F I N E S S	D	3 in			100	100	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	99	99	100	100		100
	8					100	100			
	10	91	88.3	75	80				100	
	A	16					98.0	98.0		
		18		67.8						
		20	71.8		67.0	65.0				100.0
		30								
		40	62.6		16.0	15.0	76.0	76.0		99.0
	50		42.8							
	F	60	57.6							
		70		36.8						
80		53.5		10.0	10.0				67.0	
100		50.7	29.3			5.0	5.0			
140			20.0							
S I L	200	32.9	10.4	8.0	8.0	0.0	0.0		22.0	
	230	25.5								
	270									
C L A	0.20 mm			6.0	7.0	0.0	0.0		8.0	
	0.05 mm			5.0	5.0	0.0	0.0		2.0	
M I S C	%	Total Organic Car	1.1	0.83						
	mg/kg	Chem Oxy Demand			1100	6600	1712	2303	15000	
	mg/kg	Kjedahl Nitrogen			280	320	88	148	1200	
	mg/kg	Total Phosph			84	110	205	225	430	
	mg/kg	Oil and Grease			0	0	149	147	0	
	mg/kg	Cyanide, Total		0.11						
	mg/kg	Ammonia								
	mg/l	Ammonia Elutriate								
%	Moisture	40.2	77.3							
%	Total Solids	59.8	22.7							
%	Volatile Solids	5.29	11							

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

Record #		124	125	617	126	481	482	127			
River Mile		784.6	784.2	780	773	772.8	772.8	772.79	767.3	767.3	
Location		WACOUTA POINT	WACOUTA POINT	L-Lake Pepin Maiden	LAKE CITY SM BOAT	LAKE CITY SM BOAT	LAKE CITY SM BOAT	PEPIN - CT LABS		PEPIN (SPLIT) - CT LABS	
Year		1978	1978	1987	1981	1989	1989	1974	2008	2008	
System		1	1	1	1	1	1	1	1	1	
Habitat Type		1	1	3	2	2	2	1	1	1	
Pool		4	4	4	4	4	4	4	4	4	
Sam. Gear		1	1	3	1	1	1	1	1	1	
Sam. Depth		10	10	45	10	10	10	10	10	10	
Data Cit.		COE	COE	WDNR	COE	COE	COE	COE	COE	COE	
C H C I S	ug/kg	a-BHC				< 0.2	< 0.07				
	ug/kg	b-BHC				< 0.39	< 0.15				
	ug/kg	BHC				< 0.59	< 0.22				
	ug/kg	g-BHC (lindane)				< 0.26	< 0.1				
	ug/kg	Heptachlor				< 0.2	< 0.07				
	ug/kg	Aldrin				< 0.26	< 0.01				
	ug/kg	Heptachlorepoxyde				< 0.33	< 0.12				
	ug/kg	Endosulfan I				< 0.33	< 0.12				
	ug/kg	Dieldrin		< 1		< 0.33	< 0.12	< 10	<3.2	<3.2	
	ug/kg	4,4'-DDE				< 0.26	< 0.1	50	<3.5	<3.5	
	ug/kg	Endrin		< 1		< 0.59	< 0.22	< 10			
	ug/kg	Endosulfan II				< 0.65	< 0.24				
	ug/kg	4,4'-DDD				< 0.72	< 0.27	< 10	<3.7	<3.7	
	ug/kg	Endrinaldehyde				< 0.72	< 0.27				
	ug/kg	Sulfan sulfate				< 0.72	< 0.27				
ug/kg	4,4'-DDT		< 4		< 0.85	< 0.31	< 10	<4.2	<4.2		
ug/kg	Methoxychlor				< 1.44	< 0.53					
ug/kg	Endrinetone				< 0.72	< 0.27					
ug/kg	Chlorodane				< 3.92	< 1.45	< 10				
ug/kg	Toxaphene				< 3.92	< 1.45					
M E T A L S	mg/kg	Ag (silver)									
	mg/kg	Al (aluminum)									
	mg/kg	As (arsenic)	0	3.15		1	3.4	1.7	4	4.5	4.7
	mg/kg	B (boron)									
	mg/kg	Ba (barium)	10			90					
	mg/kg	Be (beryllium)									
	mg/kg	Cd (cadmium)	< 10	4	< 1	2	< 2.98	< 1.24	9	1.2	1.2
	mg/kg	Cr (chromium)	10	63.6		10	31.3	15.7	115	39.4	39.9
	mg/kg	Cu (copper)	< 10	23.5		20	79.8	20.9	58	27.8	29.3
	mg/kg	Fe (iron)	2200	22800		14000					
	mg/kg	Hg (mercury)	1.4	0.077		< 0.01	0.2	< 0.01	5.4	0.17	0.17
	mg/kg	Mg (magnesium)									
	mg/kg	Mn (manganese)	130	879		900	1290	264	2080	2110	
	mg/kg	Mo (molybdenum)									
	mg/kg	Ni (nickel)	< 10	30		20	25.5	14.7	35	25.5	25.8
mg/kg	Pb (lead)	< 10	42	< 10	460	29.7	84	47	33.6	34	
mg/kg	Sb (antimony)										
mg/kg	Se (selenium)					< 2.3	< 0.95				
mg/kg	Sn (tin)										
mg/kg	Sr (strontium)										
mg/kg	Ti (titanium)										
mg/kg	Zn (zinc)	< 10	88.8		78	117	< 0.65	185	127	129	
mg/kg	V (vanadium)										
P C B ' S	ug/kg	Aroclor-1006				< 3.92	< 1.45	<42	<42		
	ug/kg	Aroclor-1016									
	ug/kg	Aroclor-1221				< 3.92	< 1.45				
	ug/kg	Aroclor-1232				< 3.92	< 1.45				
	ug/kg	Aroclor-1242				< 3.92	< 1.45				
	ug/kg	Aroclor-1248				< 3.92	< 1.45	<42	<42		
	ug/kg	Aroclor-1254				< 8.18	< 3.03	<14	<14		
	ug/kg	Aroclor-1260				< 8.18	< 3.03	<28	<28		
	ug/kg	Total PCB's	0	65	0	0			0		
S I Z E & F I N E S S	D	c o a r s e	3 in	100	100						
			1 1/2	100	100		100				
			3/4	100	100		100				
			3/8	100	100		100				
			4	100	100		100	100	85.0	100	100
			8				100				
	10	99				100	79.0	99.6	100		
	S	m e d i u m	16			100	98.9	68.0			
			18								
			20	90.0						97.53	98.59
			30			98.0	95.9	25.2			
			40	41.0		90.0				82.21	78.77
			50			72.0	95.9	25.2			
	F	f i n e	60						69.57	59.46	
			70			52.0					
80			3.0			91.6	4.7		53.06	49.74	
100					35.0	82.7	0.7		49.01	45.78	
P A R T I C L E S I Z E	F I N E	140				78.8	0.7				
		200	1.0	67.0	22.0	70.0	0.4		31.72	29.54	
		230									
P A R T I C L E S I Z E	C L A S S	270			21.0	55.6					
		0.20 mm	0.0		13.0	46.3					
		0.05 mm	0.0	44.0	4.0	31.2					
M I S C	%	Total Organic Car				25.4	0.6	<4600	12000		
	mg/kg	Chem Oxy Demand	2800	89800	110000			113005			
	mg/kg	Kjedahl Nitrogen	410	1690	11300			4121	4400	4700	
	mg/kg	Total Phosph	93	951	--			1769	1200	1400	
	mg/kg	Oil and Grease	0	710	--			2825			
M I S C	mg/kg	Cyanide, Total				< 2.2	< 0.63	<1.6	<1.6		
	mg/kg	Ammonia				232	2.3	160	150		
	mg/l	Ammonia Elutriate									
	%	Moisture				76.9	21.1	78.4	78.7		
	%	Total Solids				23.1	78.9	21.6	21.3		
%	Volatile Solids				12.3	1.6	0.0862	0.0991			

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

Record #		River Mile		128	483	484	129	130	131	132	
Location		PEPIN		PEPIN SM	PEPIN SM	PEPIN SM	MOUTH OF	MOUTH OF	READS	READS	
Year		STAT LAB	(SPLIT) - STAT LAB	BOAT	BOAT	BOAT	CHIP. RIVER	CHIP. RIVER	LANDING	LANDING	
System		2008	2008	1982	1989	1989	1982	1982	1974	1974	
Habitat Type		1	1	1	1	1	1	1	1	1	
Pool		1	1	1	1	1	1	1	1	1	
Sam. Gear		10	10	10	10	10	10	10	10	10	
Sam. Depth		COE	COE	COE	COE	COE	COE	COE	COE	COE	
Data Cit.											
CHC'S	ug/kg	a-BHC	<1.5	<6.9		< 0.07	< 0.09				
	ug/kg	b-BHC	<4.9	<6.9		< 0.15	< 0.18				
	ug/kg	BHC	<2.4	<6.9		< 0.22	< 0.26				
	ug/kg	g-BHC (lindane)	<1.1	<6.9		< 0.1	< 0.12				
	ug/kg	Heptachlor	<0.87	<6.9		< 0.07	< 0.09				
	ug/kg	Aldrin	<2.1	<6.9		< 0.1	< 0.12				
	ug/kg	Heptachlorepoixide	<4.4	<6.9		< 0.12	< 0.15				
	ug/kg	Endosulfan I	<0.3	<6.9		< 0.12	< 0.15				
	ug/kg	Dieldrin	<1.9	<6.9	< 0.1	< 0.12	< 0.15	< 0.1	< 0.1	< 10	< 10
	ug/kg	4,4'-DDE	<2.3	<6.9	< 0.1	< 0.1	< 0.12	< 0.1	< 0.1	< 10	< 10
	ug/kg	Endrin	<2.3	<6.9	< 0.1	< 0.22	< 0.26	< 0.1	< 0.1	< 10	< 10
	ug/kg	Endosulfan II	<2.1	<6.9		< 0.25	< 0.29				
	ug/kg	4,4'-DDD	<1.9	<6.9	< 0.1	< 0.27	< 0.32	2.2	< 0.1	< 10	< 10
	ug/kg	Endrinaldehyde	<3.1	<6.9		< 0.27	< 0.32				
	ug/kg	Sulfan sulfate				< 0.27	< 0.32				
ug/kg	4,4'-DDT	<2.1	<6.9	700	< 0.32	< 0.38	16.7	< 0.1	< 10	< 10	
ug/kg	Methoxychlor	<2.9	<6.9		< 0.55	< 0.65					
ug/kg	Endrinetone	<3.5	<6.9		< 0.27	< 0.32					
ug/kg	Chlorodane	<34	<140	< 1	< 1.49	< 1.76	< 1	< 1	< 10	< 10	
ug/kg	Toxaphene	<120	<140		< 1.49	< 1.76					
METALS	mg/kg	Ag (silver)									
	mg/kg	Al (aluminum)									
	mg/kg	As (arsenic)	4.1	5.2	1.8	< 1.14	< 1.11	1.3	1.1	< 0.9	< 1
	mg/kg	B (boron)									
	mg/kg	Ba (barium)									
	mg/kg	Be (beryllium)									
	mg/kg	Cd (cadmium)	<1.8	<2.1	0.35	< 1.24	< 1.22	< 0.19	< 0.19	< 1	< 1
	mg/kg	Cr (chromium)	36	46	7.1	9.9	7.8	4.8	3.8	8	5
	mg/kg	Cu (copper)	27	35	7.1	8.4	7.9	3.9	2.8	10	7
	mg/kg	Fe (iron)			4900			5100	3800		
	mg/kg	Hg (mercury)	0.17	0.19	0.031	< 0.01	< 0.01	< 0.01	< 0.01	0.3	0.4
	mg/kg	Mg (magnesium)									
	mg/kg	Mn (manganese)	1700	2100		311	268				
	mg/kg	Mo (molybdenum)									
	mg/kg	Ni (nickel)	23	29	6	10.3	9.9	5	5	8	5
mg/kg	Pb (lead)	35	42	11	7.3	7.7	2	2	< 7	< 7	
mg/kg	Sb (antimony)										
mg/kg	Se (selenium)				< 0.95	< 0.93					
mg/kg	Sn (tin)										
mg/kg	Sr (strontium)										
mg/kg	Ti (titanium)										
mg/kg	Zn (zinc)	120	150	28	22.7	27.8	14	13	19	13	
mg/kg	V (vanadium)										
PCB'S	ug/kg	Aroclor-1006	<300	<350		< 1.49	< 1.76				
	ug/kg	Aroclor-1016				< 1.49	< 1.76				
	ug/kg	Aroclor-1221				< 1.49	< 1.76				
	ug/kg	Aroclor-1232				< 1.49	< 1.76				
	ug/kg	Aroclor-1242				< 1.49	< 1.76				
	ug/kg	Aroclor-1248	<300	<300		< 1.49	< 1.76				
	ug/kg	Aroclor-1254	<300	<300		< 3.1	< 3.68				
	ug/kg	Aroclor-1260	<300	<300		< 3.1	< 3.68				
	ug/kg	Total PCB's			0			0	0	0	0
FINER SIZE PARTICLES	D	coarse	3 in							100	
			1 1/2		100		100	100	100		
			3/4		100		100	100	96		
			3/8		98		100	100	89		
			4	100	100	97	100	98	100	84	
	8			95		96	99	74			
	10	100	97.8		97.9						
	S	medium	16		92.0	91.1		93.0	97.0		58.0
			18								
			20	100	84.4						
			30			81.0	67.1		79.0	69.0	
			40	99.9	72.7	65.0		45.0	49.0		4.0
	50			42.0	67.1		11.0	30.0			
	FINE	fine	60	99.7	67.7						
			70					4.0	10.0		
80					27.0						
100					23.7						
140			99.7	64.6	21.0	3.2	3.0	4.0		0.0	
PARSICLE	FINE	200	99.6	64.3	18.0	1.8	2.0	3.0		0.0	
		230									
		270			17.0	1.5	2.0	3.0			
		0.20 mm			9.0	1.4	1.0	1.0		0.0	
		0.05 mm			4.0	1.1	0.0	0.0		0.0	
MISC	%	Total Organic Car	250000	290000		0.7	1.7				
	mg/kg	Chem Oxy Demand			12800		585	1686	772	960	
	mg/kg	Kjedahl Nitrogen	2040	1280	600		26	35	48	44	
	mg/kg	Total Phosph	974	1060	230		94	111	232	227	
	mg/kg	Oil and Grease			205		< 50	< 50	85	60	
	mg/kg	Cyanide, Total	<0.94	<1.1		< 0.63	< 0.68				
	mg/kg	Ammonia	93	120		3.3	10				
	mg/l	Ammonia Elutriate									
	%	Moisture	73.5	77.5		20.8	26.6				
	%	Total Solids	26.5	22.5		79.2	73.4				
%	Volatile Solids	<0.01	<0.01		1.3	1.3					

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

Record #		480	133	134	479	135	136	137				
River Mile		763 762.6	762.5	762.5	762.3	762.1	761.9	760 759.08				
Location		READS LANDING	READS LANDING	READS LANDING	READS LANDING	READS LANDING	READS LANDING	WABASHA SM BOAT	ABOVE CRATS ISLAND			
Year		1989 2008	1980	2002	1980	1989	1980	1981	1974			
System		1 1	1	1	1	1	1	1	1			
Habitat Type		1 1	1	1	1	1	1	2	1			
Pool		4 4	4	4	4	4	4	4	4			
Sam. Gear		1 1	1	1	1	1	1	1	1			
Sam. Depth		10 10	10		10	10	10	10	10			
Data Cit.		COE	COE	COE	COE	COE	COE	COE	COE			
CHC'S	ug/kg	a-BHC	< 0.08		<0.12		< 0.74					
	ug/kg	b-BHC	< 0.15		<0.12		< 1.48					
	ug/kg	BHC	< 0.23		<0.12		< 2.21					
	ug/kg	g-BHC (lindane)	< 0.1		<0.12		< 0.98					
	ug/kg	Heptachlor	< 0.08		<0.08		< 0.74					
	ug/kg	Aldrin	< 0.1				< 0.98					
	ug/kg	Heptachlorepoxide	< 0.13		<1.48		< 1.23					
	ug/kg	Endosulfan I	< 0.13				< 1.23					
	ug/kg	Dieldrin	< 0.13	<3.2	< 0.2	<0.12	0	< 1.23	0	< 10		
	ug/kg	4,4'-DDE	< 0.1	<3.5	< 0.2	0.2	0	< 0.98	0	< 10		
	ug/kg	Endrin	< 0.23		< 0.2	<0.12	0	< 2.21	0	< 10		
	ug/kg	Endosulfan II	< 0.26					< 2.46				
	ug/kg	4,4'-DDD	< 0.28	<3.7	< 0.2	<0.12	0	< 2.71	0	< 10		
	ug/kg	Endrinaldehyde	< 0.28					< 2.71				
	ug/kg	Sulfan sulfate	< 0.28					< 2.71				
	ug/kg	4,4'-DDT	< 0.33	<4.2	< 0.4	<0.24	0	< 3.2	0	< 10		
ug/kg	Methoxychlor	< 0.56					< 5.41					
ug/kg	Endrinetone	< 0.28					< 2.71					
ug/kg	Chlorodane	< 1.54		< 0.4	<0.36	0	< 14.76	0	< 10			
ug/kg	Toxaphene	< 1.54					< 14.76					
METALS	mg/kg	Ag (silver)										
	mg/kg	Al (aluminum)										
	mg/kg	As (arsenic)	1 0.8		0.918	0	1.4	0	< 1	< 0.9		
	mg/kg	B (boron)										
	mg/kg	Ba (barium)				20		10	80			
	mg/kg	Be (beryllium)										
	mg/kg	Cd (cadmium)	< 1.2	<1.0	0.755	0.14	< 10	< 1.1	< 10	1	1	
	mg/kg	Cr (chromium)	5.9 5.6		14.5	4.29	< 10	8.4	< 10	< 10	7	
	mg/kg	Cu (copper)	< 1.6	3.2	1.62	4.78	< 10	2.1	< 10	10	7	
	mg/kg	Fe (iron)			10320		4200		4000	11000		
	mg/kg	Hg (mercury)	< 0.14	<0.10	< 0.01	<0.0057	0	< 0.12	0	< 0.01	1.4	
	mg/kg	Mg (magnesium)										
	mg/kg	Mn (manganese)	292 285			267	240	269	180	920		
	mg/kg	Mo (molybdenum)										
	mg/kg	Ni (nickel)	< 6.2	5	12.8	7.55	< 10	8.44	< 10	< 10	7	
	mg/kg	Pb (lead)	3.1 1.7		2.56	3.45	< 10	0.79	< 10	80	< 7	
mg/kg	Sb (antimony)											
mg/kg	Se (selenium)	< 0.95					< 0.84					
mg/kg	Sn (tin)											
mg/kg	Sr (strontium)											
mg/kg	Ti (titanium)											
mg/kg	Zn (zinc)	15.1 14.4		48	18.9	20	17	40	72	17		
mg/kg	V (vanadium)											
PCB'S	ug/kg	Aroclor-1006	< 1.54	<31			< 14.76					
	ug/kg	Aroclor-1016										
	ug/kg	Aroclor-1221	< 1.54				< 14.76					
	ug/kg	Aroclor-1232	< 1.54				< 14.76					
	ug/kg	Aroclor-1242	< 1.54				< 14.76					
	ug/kg	Aroclor-1248	< 1.54	<29			< 14.76					
	ug/kg	Aroclor-1254	< 3.2	<10			< 30.75					
	ug/kg	Aroclor-1260	< 3.2	<19			< 30.75					
	ug/kg	Total PCB's			0		0		0	0	0	
FINE & SIZES	D	coarse	3 in		100		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	97.52	100	80	100	94.0	98	100	99
			8			98		98		95	100	93
			10	100	90.75		76.1		90.7			
			16			99.8		90.0		91.0	79.5	87.0
	S	medium	18				67.2					
			20		70.47							
			30	98.8					15.8		85.0	
			40		22.08	30.0		17.0		33.0	71.0	12.0
			50	98.8			14.5		15.8		54.0	
			60		0.83							
	F	fine	70				1.9				40.0	
			80	81.8	0.18				0.4			
100			3.2	0.13	2.0	0.2	1.0	0.1	1.0	28.0	0.0	
140			2.0			0.0						
200			1.4	0.08	1.0	0.0	0.0		0.0	21.0	0.0	
230												
S	CL	270	0.7						20.0			
		0.20 mm	0.5		1.0		0.0		0.0	11.0	0.0	
					1.0		0.0		0.0	5.0	0.0	
		0.05 mm										
MISC	%	Total Organic Car	0.18	<1200		0.08		0.009				
	mg/kg	Chem Oxy Demand		527		1600		1300	16000	< 481		
	mg/kg	Kjedahl Nitrogen	36	--		600		460	1280	117		
	mg/kg	Total Phosph	220		672	--		--	--	235		
	mg/kg	Oil and Grease			185		0		0	--	101	
MISC	mg/kg	Cyanide, Total	< 0.68	<0.41		<0.10		< 0.6				
	mg/kg	Ammonia	5.6	<0.71				0.36				
	mg/l	Ammonia Elutriate										
	%	Moisture	26	15		18.9		16.7				
	%	Total Solids	74	85		81.1		83.3				
%	Volatile Solids	0.8	0.005		0.27		0.5					

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

Record #		146	147	706	148	149		150	151			
River Mile		757.5	757.49	757.3	756.8	756.32	756.3 756.2	755.8	754.6			
Location		AB. TEEPEEOTA POINT	AB. TEEPEEOTA POINT	L-Bay Down. of Disposol	GRAND ENCAMPMEN T	GRAND ENCAMPMEN T	GRAND ENCAMPMEN T	GRAND EQUIPTMEN CT LABS	GRAND ENCAMPMEN T	BEEF SLOUGH		
Year		1978	1974	1985	1980	1974	2002 2008	1980	1982			
System		1	1	1	1	1	1 1	1	1			
Habitat Type		1	1	3	1	1	1 1	1	1			
Pool		4	4	4	4	4	4 4	4	4			
Sam. Gear		1	1	2	1	1	1 1	1	1			
Sam. Depth		10	10	10	10	10	10	10	10			
Data Cit.		COE	COE	FWS	COE	COE	COE	COE	COE			
C H C I S	ug/kg	a-BHC		< 10			<0.12					
	ug/kg	b-BHC		< 10			<0.12					
	ug/kg	BHC					0.86					
	ug/kg	g-BHC (lindane)		< 10			<0.12					
	ug/kg	Heptachlor		< 10			<0.08					
	ug/kg	Aldrin										
	ug/kg	Heptachlorepoxyde					<1.48					
	ug/kg	Endosulfan I										
	ug/kg	Dieldrin	0	< 10	< 10	0	< 10	<0.12	<3.2	0 < 0.1		
	ug/kg	4,4'-DDE	0	< 10	< 10	0	< 10	<0.12	<3.5	0 < 0.1		
	ug/kg	Endrin	0	< 10	< 10	0	< 10	<0.12		0 < 0.1		
	ug/kg	Endosulfan II										
	ug/kg	4,4'-DDD	0	< 10	< 10	0	< 10	<0.12	<3.7	0 < 0.1		
	ug/kg	Endrinaldehyde										
	ug/kg	Sulfan sulfate										
ug/kg	4,4'-DDT	0	< 10	10	0	< 10	<0.24	<4.2	0 < 0.1			
ug/kg	Methoxychlor											
ug/kg	Endrin ketone											
ug/kg	Chlorodane	0	< 10	< 10	0	< 10	<0.36		0 < 1			
ug/kg	Toxaphene											
M E T A L S	mg/kg	Ag (silver)		< 0.4								
	mg/kg	Al (aluminum)		11500								
	mg/kg	As (arsenic)	0	0.9	< 7	0	< 0.8	0.732	0.71	0 2		
	mg/kg	B (boron)			5							
	mg/kg	Ba (barium)	30		141	20				20		
	mg/kg	Be (beryllium)			0.65							
	mg/kg	Cd (cadmium)	< 10	1	0.8	< 10	< 1	0.11	<1.0	< 10 < 0.2		
	mg/kg	Cr (chromium)	< 10	6	34	< 10	7	3.62 4.6		< 10 5.9		
	mg/kg	Cu (copper)	< 10	6	26	< 10	10	3.76 3		< 10 3.9		
	mg/kg	Fe (iron)	2300		24500	3400				3400 6200		
	mg/kg	Hg (mercury)	0	0.4	0.06	0	0.4	<0.0056	<0.10	0 < 0.01		
	mg/kg	Mg (magnesium)			5110							
	mg/kg	Mn (manganese)	250		< 866	220		296 487		160		
	mg/kg	Mo (molybdenum)			3							
	mg/kg	Ni (nickel)	< 10	6	22	< 10	5	6.54 4.9		< 10 7		
	mg/kg	Pb (lead)	< 10	< 11	26	< 10	< 7	3.19	1.7	< 10 2		
	mg/kg	Sb (antimony)			< 4							
	mg/kg	Se (selenium)			< 10							
mg/kg	Sn (tin)			< 2								
mg/kg	Sr (strontium)			25.4								
mg/kg	Ti (titanium)			20								
mg/kg	Zn (zinc)	10	16	98.8	14	15	15.1 14.9		12 16			
mg/kg	V (vanadium)			< 25								
P C B ' S	ug/kg	Aroclor-1006						<31				
	ug/kg	Aroclor-1016										
	ug/kg	Aroclor-1221										
	ug/kg	Aroclor-1232										
	ug/kg	Aroclor-1242										
	ug/kg	Aroclor-1248						<29				
	ug/kg	Aroclor-1254						<10				
	ug/kg	Aroclor-1260						<19				
	ug/kg	Total PCB's	0	0	0	0	0		4	0		
P A R T I C L E S	D	c o a r s e	3 in	100	100		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	99	96		100	100	97.3 98.58	100	100	
	S	m e d i u m	8		92		100	98		100	99	
			10	90					95.2 94.71			
			16		82.0		98.0	95.0		95.0	96.0	
			18						87.4			
			20	73.0						73.58		
	F	f i n e	30								59.0	
			40	36.0	28.0		48.0	21.0		29.86	37.0	31.0
			50						9.4			14.0
			60							4.67		
			70						1.1			6.0
S I C L A		80	3.0			1.0	0.0		0.6			
		100		0.0				0.1 0.54		3.0	4.0	
		140						0.0				
		200	0.0	0.0		0.0	0.0	0.0	0.47	1.0	3.0	
		230										
270									2.0			
0.20 mm	0.0	0.0		0.0	0.0			0.0	1.0			
0.05 mm	0.0	0.0		0.0	0.0			0.0	0.0			
M I S C	%	Total Organic Car					0.02	<1200				
	mg/kg	Chem Oxy Demand	2800	< 515		550	< 400		1700 959			
	mg/kg	Kjedahl Nitrogen	200	66		160	13	72	220 29			
	mg/kg	Total Phosph	35	117		--	229	170	-- 147			
	mg/kg	Oil and Grease	0	801		0	756		0 < 50			
	mg/kg	Cyanide, Total						<0.10	<0.43			
	mg/kg	Ammonia							<0.73			
	mg/l	Ammonia Elutriate										
%	Moisture						17.6 17.9					
%	Total Solids						82.4 82.1					
%	Volatile Solids						0.36 0.0032					

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

Record #		455	152	153	154				155	457		
River Mile		754.5	754.4	754.21	754.2	754.2	754.1	754.1	754	754		
Location		ALMA SM BOAT	BEEF SLOUGH	BEEF SLOUGH	BEEF SLOUGH	BEEF SLOUGH - stat lab	ALMA SBH STAT LAB	ALMA SBH CT LABS	BEEF SLOUGH	BEEF SLOUGH		
Year		1989	1982	1978	1978	2008	2008	2008	1974	1989		
System		1	1	1	1	1	1	1	1	1		
Habitat Type		2	1	1	1	1	2	2	1	1		
Pool		4	4	4	4	4	4	4	4	4		
Sam. Gear		1	1	1	1	1	1	1	1	1		
Sam. Depth		10	10	10	10	10	10	10	10	10		
Data Cit.		COE	COE	COE	COE	COE	COE	COE	COE	COE		
CHC'S	ug/kg	a-BHC	< 0.08			<1.9	<3.5			< 0.18		
	ug/kg	b-BHC	< 0.14			<1.9	<3.5			< 0.35		
	ug/kg	BHC	< 0.22			<1.9	<3.5			< 0.53		
	ug/kg	g-BHC (lindane)	< 0.1			<1.9	<3.5			< 0.24		
	ug/kg	Heptachlor	< 0.07			<1.9	<3.5			< 0.18		
	ug/kg	Aldrin	< 0.1			<1.9	<3.5			< 0.24		
	ug/kg	Heptachlorepoxyde	< 0.12			<1.9	<3.5			< 0.3		
	ug/kg	Endosulfan I	< 0.12			<1.9	<3.5			< 0.3		
	ug/kg	Dieldrin	< 0.12	< 0.1	0	0	<1.9	<3.5	<3.2	< 10	< 0.3	
	ug/kg	4,4'-DDE	< 0.1	< 0.1	0	0	<1.9	<3.5	<3.5	10	< 0.24	
	ug/kg	Endrin	< 0.22	< 0.1	0	0	<1.9	<3.5		< 10	< 0.53	
	ug/kg	Endosulfan II	< 0.24				<1.9	<3.5			< 0.59	
	ug/kg	4,4'-DDD	< 0.26	< 0.1	0	0	<1.9	<3.5	<3.7	< 10	< 0.65	
	ug/kg	Endrinaldehyde	< 0.26				<1.9	<3.5			< 0.65	
	ug/kg	Sulfan sulfate	< 0.26								< 0.65	
ug/kg	4,4'-DDT	< 0.31	27	0	0	<1.9	<3.5	<4.2	< 10	< 0.77		
ug/kg	Methoxychlor	< 0.53				<1.9	<3.5			< 1.3		
ug/kg	Endrinetone	< 0.26				<1.9	<3.5			< 0.65		
ug/kg	Chlorodane	< 1.44	< 1	0	0	<38	<73		< 10	< 3.54		
ug/kg	Toxaphene	< 1.44				<38	<73			< 3.54		
METALS	mg/kg	Ag (silver)										
	mg/kg	Al (aluminum)										
	mg/kg	As (arsenic)	1.5	1.5	0	0	<1.2	3.6	2.8	< 0.7	7.9	
	mg/kg	B (boron)										
	mg/kg	Ba (barium)			10	10						
	mg/kg	Be (beryllium)										
	mg/kg	Cd (cadmium)	< 1.2	< 0.2	< 10	< 10	<0.58	<1.1	<1.0	< 1	< 2.7	
	mg/kg	Cr (chromium)	7	4	< 10	< 10	4.6	25	20	23	27	
	mg/kg	Cu (copper)	3.2	3	< 10	< 10	3.5	33	18.9	8	9.4	
	mg/kg	Fe (iron)		4400	2000	2200						
	mg/kg	Hg (mercury)	< 0.12	0.01	0	0	<0.028	0.062	<0.10	0.4	< 0.29	
	mg/kg	Mg (magnesium)										
	mg/kg	Mn (manganese)	376		180	130	360	970	801		1280	
	mg/kg	Mo (molybdenum)										
	mg/kg	Ni (nickel)	6.1	6	< 10	< 10	4.8	19	14.3	17	16	
mg/kg	Pb (lead)	< 0.52	2	< 10	< 10	1.2	16	11.4	28	11.6		
mg/kg	Sb (antimony)											
mg/kg	Se (selenium)	< 0.88								< 2		
mg/kg	Sn (tin)											
mg/kg	Sr (strontium)											
mg/kg	Ti (titanium)											
mg/kg	Zn (zinc)	17	14	12	10	16	75	55.5	17	70.5		
mg/kg	V (vanadium)											
PCB'S	ug/kg	Aroclor-1006	< 1.44			<93	<180	<31		< 3.54		
	ug/kg	Aroclor-1016										
	ug/kg	Aroclor-1221	< 1.44							< 3.54		
	ug/kg	Aroclor-1232	< 1.44							< 3.54		
	ug/kg	Aroclor-1242	< 1.44							< 3.54		
	ug/kg	Aroclor-1248	< 1.44			<93	<180	<29		< 3.54		
	ug/kg	Aroclor-1254	< 3			<93	<180	<10		< 7.38		
	ug/kg	Aroclor-1260	< 3			<93	<180	<19		< 7.38		
ug/kg	Total PCB's		0	0	0				0			
FINER & SIZE	D	coarse	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	99.1	99	100	100	99.2	100	100	100	
	8		99						98			
	10	98.0		99	100	96.4	99.9	100		100		
	S	medium	16	93.7	97.0					95.0	98.6	
			18									
			20			93.0	95.0	76.4	99.8	99.14		
			30	61.9	86.0							97.2
			40		69.0	59.0	46.0	34.5	98.6	95	50.0	
	50	61.9	31.0							97.2		
	FINE	fine	60				5	96	89.86			
			70		10.0							
80			5.7		3.0	2.0			84.94		95.7	
100			0.4	4.0					82.73	4.0	86.9	
140			0.3				0.3	88.6			82.3	
PARS	CLAY	200		3.0	0.0	1.0	0	85	70.31	0.0	50.3	
		230										
		270		3.0							32.6	
S	CLAY	0.20 mm		1.0	0.0	0.0				0.0	25.1	
		0.05 mm		0.0	0.0	0.0				0.0	16.6	
MISC	%	Total Organic Car	0.042			400	85000	12000		14.8		
	mg/kg	Chem Oxy Demand		1713	1800	2000			5867			
	mg/kg	Kjedahl Nitrogen		82	220	170	<91	907	2800	273		
	mg/kg	Total Phosph		184	180	35	177	1480	1600	166		
	mg/kg	Oil and Grease		< 50	0	0				624		
MISC	mg/kg	Cyanide, Total	< 0.63			<0.29	<0.56	<0.80		< 1.5		
	mg/kg	Ammonia	0.31			3.5	24	57		149		
	mg/l	Ammonia Elutriate										
	%	Moisture	20.3			14.7	55	56.3		65.9		
	%	Total Solids	79.7			85.3	45.0	43.7		34.1		
%	Volatile Solids	0.4			<0.01	<0.01	0.0602		8.5			

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

Record #		458	156	456				
River Mile		754	754	754	753.99	753.9		
Location		BEEF SLOUGH	BEEF SLOUGH 1	BEEF SLOUGH 1	ALMA SM BOAT	ALMA SM BOAT		
Year		1989	1994	1994	1979	1989		
System		1	1	1	1	1		
Habitat Type		1	1	1	2	2		
Pool		4	4	4	4	4		
Sam. Gear		1	1	1	1	1		
Sam. Depth		10	10	10	10	10		
Data Cit.		COE	COE	COE	COE	COE		
C H C I S	ug/kg	a-BHC	< 0.17	< 0.24	< 0.25	< 0.08		
	ug/kg	b-BHC	< 0.33	< 0.24	< 0.25	< 0.15		
	ug/kg	BHC	< 0.5	< 0.24	< 0.25	< 0.23		
	ug/kg	g-BHC (lindane)	< 0.22	< 0.24	< 0.25	< 0.1		
	ug/kg	Heptachlor	< 0.17	< 0.24	< 0.25	< 0.08		
	ug/kg	Aldrin	< 0.22			< 0.1		
	ug/kg	Heptachlorepoxyde	< 0.28			< 0.13		
	ug/kg	Endosulfan I	< 0.28			< 0.13		
	ug/kg	Dieldrin	< 0.28	< 0.47	< 0.49	0	< 0.13	
	ug/kg	4,4'-DDE	< 0.22	< 0.47	< 0.49	0	< 0.1	
	ug/kg	Endrin	< 0.5	< 0.47	< 0.49	0	< 0.23	
	ug/kg	Endosulfan II	< 0.55				< 0.25	
	ug/kg	4,4'-DDD	< 0.61	< 0.47	< 0.49	0.3	< 0.28	
	ug/kg	Endrinaldehyde	< 0.61				< 0.28	
	ug/kg	Sulfan sulfate	< 0.61				< 0.28	
	ug/kg	4,4'-DDT	< 0.72	< 0.47	< 0.49	0	< 0.33	
	ug/kg	Methoxychlor	< 1.21				< 0.55	
	ug/kg	Endrinetone	< 0.61				< 0.28	
ug/kg	Chlorodane	< 3.31	< 0.24	< 0.25	1	< 1.5		
ug/kg	Toxaphene	< 3.31				< 1.5		
M E T A L S	mg/kg	Ag (silver)						
	mg/kg	Al (aluminum)						
	mg/kg	As (arsenic)	11.2	1	0.78	0	1.2	
	mg/kg	B (boron)						
	mg/kg	Ba (barium)				70		
	mg/kg	Be (beryllium)						
	mg/kg	Cd (cadmium)	< 2.6	0.37	0.38	< 10	1.1	
	mg/kg	Cr (chromium)	30	6.5	5.2	10	5.1	
	mg/kg	Cu (copper)	17.2	3.9	2.6	10	2.7	
	mg/kg	Fe (iron)				12000		
	mg/kg	Hg (mercury)	< 0.28	< 0.05	< 0.05	0	< 0.12	
	mg/kg	Mg (magnesium)						
	mg/kg	Mn (manganese)	929	291	234	550	223	
	mg/kg	Mo (molybdenum)						
	mg/kg	Ni (nickel)	21.2	6	4.7	20	< 5.7	
	mg/kg	Pb (lead)	16	1.3	1.8	20	< 0.52	
	mg/kg	Sb (antimony)						
	mg/kg	Se (selenium)	< 1.9				< 0.87	
mg/kg	Sn (tin)							
mg/kg	Sr (strontium)							
mg/kg	Ti (titanium)							
mg/kg	Zn (zinc)	85.2	14.6	12.7	40	13.5		
mg/kg	V (vanadium)							
P C B ' S	ug/kg	Aroclor-1006	< 3.31	< 4.7	< 4.9	< 1.5		
	ug/kg	Aroclor-1016						
	ug/kg	Aroclor-1221	< 3.31	< 4.7	< 4.9	< 1.5		
	ug/kg	Aroclor-1232	< 3.31	< 4.7	< 4.9	< 1.5		
	ug/kg	Aroclor-1242	< 3.31	< 4.7	< 4.9	< 1.5		
	ug/kg	Aroclor-1248	< 3.31	< 4.7	< 4.9	< 1.5		
	ug/kg	Aroclor-1254	< 6.9	< 4.7	< 4.9	< 3.13		
	ug/kg	Aroclor-1260	< 6.9	< 4.7	< 4.9	< 3.13		
	ug/kg	Total PCB's				15		
S I Z E & F I N E S S	D	c o a r s e	3 in			100		
			1 1/2			100		
			3/4			100		
			3/8			100		
			4	100	100	100	99.7389	
			8					
	10	100	95.3	100	100	99.1158		
	S	m e d i u m	16	99.7			93.5	
			18					
			20		75.7	99.1	100	
			30	96.8				51.9
			40		29.1	68.8	90.0	
			50	96.8				51.9
	F	f i n e	60					
			70					
			80	86.9			63.0	4.3
			100	78.0	0.7	2.0		0.0
			140	75.8	0.5	1.0		
200			60.2	0.4	0.8	56.0		
P A R T I C L E S I Z E	C L A S S I F I C A T I O N	230						
		270	42.7					
		0.20 mm	32.0			26.0		
		0.05 mm	23.5			7.0		
M I S C	%	Total Organic Car	5.61	0.021		0.009		
	mg/kg	Chem Oxy Demand			48000			
	mg/kg	Kjedahl Nitrogen			6300			
	mg/kg	Total Phosph			1300			
	mg/kg	Oil and Grease			0			
	mg/kg	Cyanide, Total	< 1.4	< 0.06	< 0.07	< 0.62		
	mg/kg	Ammonia	76			0.37		
	mg/l	Ammonia Elutriate		< 0.06	< 0.06			
	%	Moisture	64.1	16	25.5	19.3		
	%	Total Solids	35.9	84	74.5	80.7		
%	Volatile Solids	7.7	1	0.82	0.4			