

UPPER MISSISSIPPI RIVER MAIN STEM--Continued
05331580 MISSISSIPPI RIVER AT HASTINGS, MN—Continued
(National Water-Quality Assessment Program)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1936-41, 1943-1977, 1995 to current year.

NASQAN samples previously collected at Mississippi River at Ninninger (station no. 05331570), January 1977 to September 1995.

PERIOD OF DAILY RECORD:

WATER TEMPERATURES.-- 1996 to 1998 (non-winter months).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sample type	Dis-charge, cfs (00060)	Instan- taneous dis- charge, cfs (00061)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unfltrd uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	
OCT 29...	1000	Environmental	4,100	--	739	9.4	80	8.1	601	4.0	8.4	189	
NOV 12...	1230	Environmental	3,300	--	735	19.2	148	8.5	580	3.0	4.3	186	
DEC 18...	0930	Environmental	3,400	--	744	15.8	110	8.4	652	-4.0	.5	200	
JAN 22...	0900	Environmental	2,800	--	748	19.3	135	8.2	707	-19.0	.8	222	
FEB 25...	1000	Environmental	3,300	--	750	14.7	104	7.9	780	4.0	1.4	234	
APR 15...	1300	Environmental	--	11,700	741	17.8	160	8.7	417	21.0	10.8	140	
MAY 25...	1125	Environmental	16,000	--	742	11.8	118	8.0	504	22.0	15.3	162	
JUN 03...	1140	Environmental	34,400	--	756	8.6	89	7.7	502	21.5	17.1	140	
JUL 13...	1030	Environmental	18,600	--	745	8.8	104	7.9	598	30.0	24.6	174	
AUG 13...	1015	Environmental	7,700	--	752	12.8	141	8.1	629	20.0	20.2	199	
19...	0830	Plant material	--	--	--	--	--	--	--	--	--	--	
Date	Bicar- bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon- ate, wat flt incrm. titr., field, mg/L (00452)	Chlor- ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, unfltrd mg/L (00665)	Total nitro- gen, wat unfl- by anal- ysis, mg/L (62855)	Biomass peri- phyton, ashfree drymass g/m2 (49954)	Peri- phyton biomass ash weight, g/m2 (00572)	Peri- phyton biomass dry weight, g/m2 (00573)
OCT 29...	227	2	49.4	41.6	<.04	1.50	.051	.064	.171	2.52	--	--	--
NOV 12...	227	.0	46.8	44.0	<.04	1.43	.046	.053	.32	2.94	--	--	--
DEC 18...	235	4	57.7	52.5	.11	1.73	.096	<.006	.029	2.87	--	--	--
JAN 22...	263	4	53.5	51.3	.14	2.23	.133	<.006	.088	3.00	--	--	--
FEB 25...	285	.0	92.3	44.7	.43	2.12	.081	.070	.121	3.22	--	--	--
APR 15...	153	8	25.4	35.4	<.04	.58	.035	<.006	.21	1.86	--	--	--
MAY 25...	198	.0	32.8	46.4	.06	1.35	.033	.066	.22	2.13	--	--	--
JUN 03...	171	.0	23.3	47.4	.10	7.78	.088	.059	.28	9.52	--	--	--
JUL 13...	212	.0	27.7	61.9	.05	7.01	.041	.086	.21	7.78	--	--	--
AUG 13...	242	.0	34.5	59.9	.07	4.69	.052	.107	.22	5.71	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	25.9	320	345.0

05331580 MISSISSIPPI RIVER AT HASTINGS, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Pheo- phytin a, peri- phyton, mg/m2 (62359)	Chloro- phyll a peri- phyton, chromo- fluoro, mg/m2 (70957)	2,6-Di- ethyl- aniline water fltrd 0.7u GF (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)	alpha- HCH, water, fltrd, ug/L (34253)	alpha- HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atra- zine, water, fltrd, ug/L (39632)	Azin- phos- methyl, water, fltrd 0.7u GF (82686)	Ben- flur- alin, water, fltrd 0.7u GF (82673)	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF (82680)
OCT 29...	--	--	<.006	E.012	<.006	<.005	<.005	97.2	.034	<.050	<.010	<.004	<.041
NOV 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 18...	--	--	<.006	<.006	<.006	<.005	<.005	105	.029	<.050	<.010	<.004	<.041
JAN 22...	--	--	<.006	E.011	.011	<.005	<.005	110	.034	<.050	<.010	<.004	<.041
FEB 25...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 15...	--	--	<.006	E.010	.009	<.005	<.005	105	.031	<.050	<.010	<.004	<.041
MAY 25...	--	--	<.006	E.018	.171	.007	<.005	86.9	.180	<.050	<.010	<.004	<.041
JUN 03...	--	--	<.006	E.037	.566	.026	<.005	99.6	.930	<.050	<.010	<.004	<.041
JUL 13...	--	--	<.006	E.027	.032	<.005	<.005	82.9	.411	<.050	<.010	<.004	<.041
AUG 13...	--	--	<.006	E.032	.016	<.005	<.005	87.9	.189	<.050	<.010	<.004	<.041
AUG 19...	22	55.7	--	--	--	--	--	--	--	--	--	--	--

Date	Carbo- furan, water, fltrd 0.7u GF (82674)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF (82687)	Cyana- zine, water, fltrd, ug/L (04041)	DCPA, water, fltrd 0.7u GF (82682)	Desulf- inyl fipron- il, water, fltrd, ug/L (62170)	Diazi- non, water, fltrd, ug/L (39572)	Diazi- non-d10 surrog, wat flt 0.7u GF percent recovry (91063)	Diel- drin, water, fltrd, ug/L (39381)	Disul- foton, water, fltrd 0.7u GF (82677)	EPTC, water, fltrd 0.7u GF (82668)	Ethal- flur- alin, water, fltrd 0.7u GF (82663)	Etho- prop, water, fltrd 0.7u GF (82672)
OCT 29...	<.020	<.005	<.006	<.018	<.003	<.012	.006	104	<.009	<.02	<.020	<.009	<.005
NOV 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 18...	<.020	<.005	<.006	<.018	<.003	<.012	<.007	129	<.009	<.02	<.004	<.009	<.005
JAN 22...	<.020	<.005	<.006	<.018	<.003	<.012	<.005	120	<.009	<.02	<.004	<.009	<.005
FEB 25...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 15...	<.020	<.005	<.006	<.018	<.003	<.012	<.005	126	<.009	<.02	<.020	<.009	<.005
MAY 25...	<.020	<.005	<.006	<.018	<.003	<.012	E.005	112	<.009	<.02	<.050	<.009	<.005
JUN 03...	<.020	<.005	<.006	<.018	<.003	<.012	<.005	110	<.009	<.02	<.004	<.009	<.005
JUL 13...	<.020	<.005	<.006	<.018	<.003	<.012	.005	94.9	<.009	<.02	<.004	<.009	<.005
AUG 13...	<.020	<.005	<.006	<.018	<.003	<.012	E.002	107	<.009	<.02	<.004	<.009	<.005

UPPER MISSISSIPPI RIVER MAIN STEM--Continued
05331580 MISSISSIPPI RIVER AT HASTINGS, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Desulf- inyl- fipronil amide, wat flt ug/L (62169)	Fipro- nil sulfide water, fltrd, ug/L (62167)	Fipro- nil sulfone water, fltrd, ug/L (62168)	Fipro- nil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)
OCT 29...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.007	<.006	<.003	<.007
NOV 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 18...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.009	<.006	<.003	<.007
JAN 22...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.010	<.006	<.003	<.007
FEB 25...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 15...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.035	<.006	<.003	<.007
MAY 25...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.120	<.006	<.003	<.007
JUN 03...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.376	<.006	<.003	<.007
JUL 13...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.062	<.006	<.003	<.007
AUG 13...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.043	<.006	<.003	<.007
Date	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sim- azine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)
OCT 29...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
NOV 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 18...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
JAN 22...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.20	<.005	<.02	<.034
FEB 25...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 15...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
MAY 25...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
JUN 03...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.006	<.02	<.034
JUL 13...	<.003	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	.009	<.02	<.034
AUG 13...	<.003	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	.005	<.02	<.034

05331580 MISSISSIPPI RIVER AT HASTINGS, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Sus- pended sedi- ment concen- tration mg/L (80154)
OCT 29...	<.02	<.010	<.002	<.009	119
NOV 12...	--	--	--	--	223
DEC 18...	<.02	<.010	<.002	<.009	59
JAN 22...	<.02	<.010	<.002	<.009	76
FEB 25...	--	--	--	--	4
APR 15...	<.02	<.010	<.002	<.009	29
MAY 25...	<.02	<.010	<.002	<.009	42
JUN 03...	<.02	<.010	<.002	<.009	151
JUL 13...	<.02	<.010	<.002	<.009	59
AUG 13...	<.02	<.010	<.002	<.009	34