



## WATER QUALITY DATA

## MISCELLANEOUS SITES--Continued

## TROPIC STATE INDICATOR PROJECT--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ANC BICAR- BONATE IT FIELD MG/L AS HCO3 (00450)	ANC CAR- BONATE IT FIELD MG/L AS CO3 (00447)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70954)	Data base number	
482731092574701 KABETOGAMA LAKE NEAR GRAVE ISLAND NEAR RAY, MN (LAT 48 27 31N LONG 092 57 47W)														
OCT 2001														
02...	--	--	--	--	--	--	--	--	--	.039	<.1	<.1	01	
16...	--	--	--	--	--	--	--	--	--	.038	--	--	01	
17...	--	--	--	--	--	--	--	--	--	.044	1.9	<.1	01	
MAY 2002														
03...	--	--	--	--	--	--	--	--	--	--	--	--	01	
14...	60	0	<.015	.43	.49	.037	<.002	.007	<.007	.025	2.2	<.1	01	
30...	--	--	--	--	--	--	--	--	--	--	1.9	<.1	01	
JUN														
12...	--	--	--	--	--	--	--	--	--	.023	--	--	01	
26...	--	--	--	--	--	--	--	--	--	.015	1.5	.1	01	
JUL														
09...	--	--	--	--	--	--	--	--	--	.022	--	--	01	
23...	--	--	--	--	--	--	--	--	--	.028	--	--	01	
AUG														
06...	--	--	--	--	--	--	--	--	--	.060	26.5	<.1	01	
21...	--	--	.022	.46	.76	<.013	<.002	.020	.012	.064	7.6	<.1	01	
21...	--	--	--	--	--	--	--	--	--	--	--	--	77	
SEP														
05...	--	--	--	--	--	--	--	--	--	.082	--	--	01	
17...	--	--	--	--	--	--	--	--	--	.051	--	--	01	
30...	--	--	--	--	--	--	--	--	--	.080	--	--	01	
483012093035001 KABETOGAMA LAKE AT CEMETARY ISLAND NEAR RAY, MN (LAT 48 30 12N LONG 093 03 50W)														
OCT 2001														
02...	--	--	--	--	--	--	--	--	--	.063	7.0	<.1	01	
17...	--	--	--	--	--	--	--	--	--	.049	2.1	<.1	01	
MAY 2002														
14...	55	0	<.015	.38	.52	<.013	<.002	.006	<.007	.017	6.6	<.1	01	
30...	--	--	--	--	--	--	--	--	--	--	.7	<.1	01	
JUN														
12...	--	--	--	--	--	--	--	--	--	.081	--	--	01	
26...	--	--	--	--	--	--	--	--	--	.019	2.5	.3	01	
JUL														
09...	--	--	--	--	--	--	--	--	--	.026	--	--	01	
23...	--	--	--	--	--	--	--	--	--	.071	--	--	01	
AUG														
06...	--	--	--	--	--	--	--	--	--	.077	23.7	<.1	01	
21...	57	0	.015	.46	.69	<.013	<.002	.024	.014	.087	4.9	<.1	01	
SEP														
05...	--	--	--	--	--	--	--	--	--	.062	--	--	01	
17...	--	--	--	--	--	--	--	--	--	.058	--	--	01	
30...	--	--	--	--	--	--	--	--	--	.041	--	--	01	
483511093092801 RAINY LAKE AT BLACK BAY NARROWS NR INT FALLS MN (LAT 48 35 38N LONG 093 09 13W)														
OCT 2001														
01...	--	--	--	--	--	--	--	--	--	.042	4.8	.2	01	
16...	--	--	--	--	--	--	--	--	--	.053	5.5	<.1	01	

WATER QUALITY DATA

MISCELLANEOUS SITES--Continued

TROPHIC STATE INDICATOR PROJECT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Sample type	Medium code	DEPTH BOT TOM AT SAMPLE LOC- ATION, (FEET) (81903)	DEPTH TO BOT. FROM SURFACE AT SAMP LOC. METERS (82903)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT OF SATUR- ATION) (00301)	PH WATER WHOLE FIELD ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3 (00419)	
483511093092801 RAINY LAKE AT BLACK BAY NARROWS NR INT FALLS MN (LAT 48 35 38N LONG 093 09 13W)													
MAY 2002													
13...	1330	ENVIRONMENTAL		--	--	.90	--	11.9	109	7.8	103	11.3	39
28...	1010	ENVIRONMENTAL		--	--	1.20	--	6.6	61	7.7	108	14.5	--
JUN													
11...	1115	ENVIRONMENTAL		--	--	1.00	--	--	--	7.5	66	13.9	--
24...	1145	ENVIRONMENTAL		--	--	1.00	--	8.3	91	8.2	81	20.5	--
JUL													
08...	1108	ENVIRONMENTAL		--	--	1.50	--	6.9	80	7.5	107	22.5	--
22...	1015	ENVIRONMENTAL		--	--	1.00	--	10.3	123	7.5	103	24.3	--
AUG													
05...	0935	ENVIRONMENTAL		--	--	.75	--	8.9	100	8.2	93	20.7	--
20...	1300	ENVIRONMENTAL		3.40	--	.70	--	8.6	93	8.1	96	17.6	46
SEP													
04...	1050	ENVIRONMENTAL		--	3.40	.50	--	8.4	92	7.9	79	19.6	--
16...	1045	ENVIRONMENTAL		--	3.10	1.00	--	8.9	94	7.9	62	17.5	--
483341093111501 RAINY LK AT BLACK BAY (WEST) NR INTERNATIONAL FLLS (LAT 48 32 30N LONG 093 11 15W)													
OCT 2001													
01...	0940	ENVIRONMENTAL		--	--	--	--	--	--	--	--	--	--
16...	1000	ENVIRONMENTAL		--	--	--	--	--	--	--	--	--	--
MAY 2002													
13...	1120	ENVIRONMENTAL		--	--	.70	--	10.7	98	7.3	129	11.7	51
28...	0855	ENVIRONMENTAL		--	--	2.20	--	5.5	56	7.6	113	15.6	--
JUN													
11...	0950	ENVIRONMENTAL		--	--	.50	--	--	--	7.9	107	15.8	--
24...	0915	ENVIRONMENTAL		--	--	.75	--	10.5	119	7.8	109	20.1	--
JUL													
08...	1003	ENVIRONMENTAL		--	--	.50	--	6.5	7	7.4	96	21.6	--
22...	0905	ENVIRONMENTAL		--	--	.75	--	9.3	111	7.2	102	23.6	--
AUG													
05...	1007	ENVIRONMENTAL		--	--	.75	--	9.5	106	8.4	93	20.7	--
20...	1330	ENVIRONMENTAL		2.20	--	.60	734	8.7	95	8.2	96	17.9	46
SEP													
04...	0950	ENVIRONMENTAL		--	2.30	.75	--	8.1	87	7.8	88	19.3	--
16...	0950	ENVIRONMENTAL		--	2.20	.50	--	9.2	96	8.1	84	17.4	--
483304093062701 RAINY LAKE AT BLACK BAY NR INT FALLS MN (LAT 48 33 04N LONG 093 06 27W)													
OCT 2001													
01...	0905	ENVIRONMENTAL		--	--	--	--	--	--	--	--	--	--
16...	0917	ENVIRONMENTAL		--	--	--	--	--	--	--	--	--	--
MAY 2002													
13...	1145	ENVIRONMENTAL		--	--	.55	--	11.6	103	7.5	104	10.3	42
28...	0925	ENVIRONMENTAL		--	--	1.30	--	6.2	60	7.7	101	13.8	--
JUN													
11...	1015	ENVIRONMENTAL		--	--	1.00	--	--	--	7.5	98	15.4	--
24...	1000	ENVIRONMENTAL		--	--	1.50	--	7.7	84	8.2	42	19.7	--
JUL													
08...	1030	ENVIRONMENTAL		--	--	1.75	--	8.9	101	7.9	92	21.8	--
22...	0930	ENVIRONMENTAL		--	--	.50	--	11.2	132	7.7	100	24.0	--
AUG													
05...	1022	ENVIRONMENTAL		--	--	1.00	--	9.2	103	8.2	93	20.9	--
20...	1415	ENVIRONMENTAL		2.00	--	.60	731	8.9	99	8.2	95	18.7	45
SEP													
04...	1020	ENVIRONMENTAL		--	2.00	.75	--	7.8	85	7.9	89	19.4	--
16...	1010	ENVIRONMENTAL		--	1.90	1.00	--	8.0	83	7.9	84	17.2	--

## WATER QUALITY DATA

## MISCELLANEOUS SITES--Continued

## TROPIC STATE INDICATOR PROJECT--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ANC BICAR- BONATE IT FIELD MG/L AS HCO3 (00450)	ANC CAR- BONATE IT FIELD MG/L AS CO3 (00447)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC DIS- (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70954)	Data base number	
483511093092801 RAINY LAKE AT BLACK BAY NARROWS NR INT FALLS MN (LAT 48 35 38N LONG 093 09 13W)														
MAY 2002														
13...	48	0	<.015	.45	.69	<.013	E.002	.010	<.007	.035	8.0	<.1	01	
28...	--	--	--	--	--	--	--	--	--	.034	2.0	<.1	01	
JUN														
11...	--	--	--	--	--	--	--	--	--	.026	--	--	01	
24...	--	--	--	--	--	--	--	--	--	.035	3.3	.2	01	
JUL														
08...	--	--	--	--	--	--	--	--	--	.043	--	--	01	
22...	--	--	--	--	--	--	--	--	--	.064	--	--	01	
AUG														
05...	--	--	--	--	--	--	--	--	--	.052	5.6	1.1	01	
20...	56	0	.023	.62	.89	.060	.004	.032	.016	.078	4.3	.5	01	
SEP														
04...	--	--	--	--	--	--	--	--	--	.051	--	--	01	
16...	--	--	--	--	--	--	--	--	--	.032	--	--	01	
483341093111501 RAINY LK AT BLACK BAY (WEST) NR INTERNATIONAL FLLS (LAT 48 32 30N LONG 093 11 15W)														
OCT 2001														
01...	--	--	--	--	--	--	--	--	--	.043	5.9	.2	01	
16...	--	--	--	--	--	--	--	--	--	.044	5.6	E.1	01	
MAY 2002														
13...	62	0	<.015	.65	.87	<.013	.003	.015	<.007	.044	3.0	<.1	01	
28...	--	--	--	--	--	--	--	--	--	--	1.2	<.1	01	
JUN														
11...	--	--	--	--	--	--	--	--	--	.034	--	--	01	
24...	--	--	--	--	--	--	--	--	--	.035	1.6	.1	01	
JUL														
08...	--	--	--	--	--	--	--	--	--	.068	--	--	01	
22...	--	--	--	--	--	--	--	--	--	.086	--	--	01	
AUG														
05...	--	--	--	--	--	--	--	--	--	.058	9.7	1.4	01	
20...	57	0	E.013	.56	.72	.064	.003	.027	.013	.064	--	--	01	
SEP														
04...	--	--	--	--	--	--	--	--	--	.053	--	--	01	
16...	--	--	--	--	--	--	--	--	--	.068	--	--	01	
483304093062701 RAINY LAKE AT BLACK BAY NR INT FALLS MN (LAT 48 33 04N LONG 093 06 27W)														
OCT 2001														
01...	--	--	--	--	--	--	--	--	--	.049	6.5	.2	01	
16...	--	--	--	--	--	--	--	--	--	.048	5.4	E.1	01	
MAY 2002														
13...	51	0	<.015	.48	.72	<.013	E.002	.011	<.007	.056	7.4	<.1	01	
28...	--	--	--	--	--	--	--	--	--	.035	1.5	<.1	01	
JUN														
11...	--	--	--	--	--	--	--	--	--	.029	--	--	01	
24...	--	--	--	--	--	--	--	--	--	.030	1.8	.2	01	
JUL														
08...	--	--	--	--	--	--	--	--	--	.031	--	--	01	
22...	--	--	--	--	--	--	--	--	--	.101	--	--	01	
AUG														
05...	--	--	--	--	--	--	--	--	--	.067	6.9	<.1	01	
20...	55	0	E.009	.54	.78	.057	.003	.021	.007	.060	7.8	<.1	01	
SEP														
04...	--	--	--	--	--	--	--	--	--	.104	--	--	01	
16...	--	--	--	--	--	--	--	--	--	.075	--	--	01	



## WATER QUALITY DATA

## MISCELLANEOUS SITES--Continued

## TROPIC STATE INDICATOR PROJECT--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ANC BICAR- BONATE IT FIELD MG/L AS HCO3 (00450)	ANC CAR- BONATE IT FIELD MG/L AS CO3 (00447)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70954)	Data base number	
482607092511701 KABETOGAMA LK AT MOUTH OF MEADWOOD BAY NR RAY MN (LAT 48 26 07N LONG 092 51 17W)														
OCT 2001														
02...	--	--	--	--	--	--	--	--	--	.037	2.8	<.1	01	
17...	--	--	--	--	--	--	--	--	--	.046	2.8	<.1	01	
MAY 2002														
03...	--	--	--	--	--	--	--	--	--	--	--	--	01	
14...	55	0	<.015	.37	.48	.035	E.002	.007	<.007	.025	2.7	<.1	01	
30...	--	--	--	--	--	--	--	--	--	--	2.5	<.1	01	
JUN														
12...	--	--	--	--	--	--	--	--	--	.017	--	--	01	
26...	--	--	--	--	--	--	--	--	--	.018	1.5	.1	01	
JUL														
09...	--	--	--	--	--	--	--	--	--	.028	--	--	01	
23...	--	--	--	--	--	--	--	--	--	.025	--	--	01	
AUG														
06...	--	--	--	--	--	--	--	--	--	.033	4.9	<.1	01	
21...	50	0	<.015	.44	.78	<.013	<.002	.018	.007	.053	22.1	<.1	01	
SEP														
05...	--	--	--	--	--	--	--	--	--	.043	--	--	01	
17...	--	--	--	--	--	--	--	--	--	.063	--	--	01	
30...	--	--	--	--	--	--	--	--	--	.049	--	--	01	
482616092372201 NAMAKAN LAKE NEAR RAY, MN (LAT 48 26 16N LONG 092 37 22W)														
MAY 2002														
14...	--	--	<.015	<.10	<.10	<.013	<.002	<.004	<.007	<.004	--	--	77	
14...	19	0	E.014	.33	.38	.092	E.002	.005	<.007	.014	2.1	<.1	01	
AUG														
21...	20	0	E.009	.33	.53	.055	E.002	.005	<.007	.028	1.9	<.1	01	
482226092283301 SANDPOINT LK BL HARRISON NARROWS NR CRANE LK, MN (LAT 48 22 26N LONG 092 28 33W)														
MAY 2002														
14...	28	0	<.015	.47	.49	.143	.004	.012	<.007	.020	1.0	<.1	01	
AUG														
21...	27	0	E.011	.44	.50	.052	.003	.009	<.007	.012	3.0	<.1	01	
483622092560701 RAINY LK AT BRULE NARROWS NR INTERNINL FALLS, MN (LAT 48 36 22N LONG 092 56 07W)														
MAY 2002														
13...	18	0	<.015	.29	.39	.087	<.002	.005	<.007	.012	--	--	77	
13...	19	0	<.015	.32	.37	.087	E.002	.005	<.007	.011	1.1	<.01	01	
AUG														
20...	19	0	<.015	.34	.37	.094	E.002	.006	<.007	.038	1.2	<.1	01	