

Water Quality at Miscellaneous Sites

VOYAGEURS NATIONAL PARK WATER QUALITY

Trophic Indicator Sites

MISCELLANEOUS STATION ANALYSES

| Date | Time | Sample type | Trans- parency Secchi disc, meters (00078) | Dis- solved oxygen, mg/L (00300) | Dis- solved oxygen, percent of sat- uration (00301) | pH, water, unfiltrd field, std (00400) | Specif. conduc- tance, wat unf uS/cm (00095) | Temper- ature, water, deg C (00010) | Alka- linity, wat flt fxd end lab, mg/L as CaCO ₃ (00421) | Alka- linity, wat flt inc tit field, mg/L as CaCO ₃ (39086) | Bicar- bonate, wat flt fixed end pt, lab, mg/L (29805) |
|------|------|-------------|---|--|---|---|---|---|---|---|---|
|------|------|-------------|---|--|---|---|---|---|---|---|---|

483511093092801 RAINY LAKE AT BLACK BAY NARROWS NR INT FALLS MN (LAT 48°35'38"N LONG 093°09'13"W)

| | | | | | | | | | | | |
|----------|------|---------------|------|------|-----|-----|-----|------|----|----|----|
| OCT 2002 | | | | | | | | | | | |
| 02... | 1115 | Environmental | 0.75 | 6.1 | 58 | 7.3 | 66 | 11.4 | -- | -- | -- |
| 15... | 1530 | Environmental | 0.80 | 12.0 | 96 | 7.6 | 58 | 5.5 | -- | -- | -- |
| MAY 2003 | | | | | | | | | | | |
| 13... | 1125 | Environmental | 0.70 | 10.7 | 103 | 7.8 | 86 | 13.8 | -- | 26 | -- |
| 28... | 1105 | Environmental | 0.90 | 10.3 | 100 | 7.3 | 55 | 14.5 | -- | 22 | -- |
| JUN | | | | | | | | | | | |
| 09... | 1230 | Environmental | 0.90 | 7.3 | 77 | -- | 79 | 18.0 | 42 | -- | 51 |
| 23... | 1330 | Environmental | 0.90 | 9.2 | 101 | 7.6 | 61 | 19.5 | 25 | -- | 30 |
| JUL | | | | | | | | | | | |
| 07... | 1300 | Environmental | 0.50 | 8.4 | 94 | 7.9 | 103 | 21.3 | 42 | -- | 51 |
| 21... | 1320 | Environmental | 0.90 | 7.7 | 90 | 7.8 | 79 | 22.7 | 29 | -- | 35 |
| AUG | | | | | | | | | | | |
| 04... | 1010 | Environmental | 0.90 | 7.7 | 88 | 8.3 | 78 | 22.6 | 26 | -- | 31 |
| 18... | 1400 | Environmental | 0.70 | 8.5 | 101 | 8.5 | 73 | 24.3 | 25 | -- | 30 |
| SEP | | | | | | | | | | | |
| 02... | 0945 | Environmental | 0.30 | 7.3 | 76 | 7.1 | 97 | 18.0 | 36 | -- | 44 |
| 15... | 0940 | Environmental | 0.80 | 7.4 | 77 | 7.1 | 61 | 17.5 | -- | 20 | -- |
| 28... | 1100 | Environmental | 0.25 | 9.9 | 86 | 7.4 | 70 | 8.8 | -- | 24 | -- |

483012093035001 KABETOGAMA LAKE AT CEMETARY ISLAND NEAR RAY, MN (LAT 48°30'12"N LONG 093°03'50"W)

| | | | | | | | | | | | |
|----------|------|---------------|------|------|-----|-----|-----|------|----|----|----|
| OCT 2002 | | | | | | | | | | | |
| 16... | 1000 | Environmental | 4.00 | 10.0 | 84 | 7.6 | 64 | 8.0 | -- | -- | -- |
| MAY 2003 | | | | | | | | | | | |
| 14... | 0945 | Environmental | 1.70 | 10.6 | 100 | 8.0 | 106 | 12.7 | -- | 34 | -- |
| 29... | 0945 | Environmental | 1.70 | 10.2 | 103 | 7.4 | 92 | 15.6 | -- | 42 | -- |
| JUN | | | | | | | | | | | |
| 10... | 0930 | Environmental | 2.60 | 8.9 | 94 | 7.4 | 93 | 17.6 | 38 | -- | 47 |
| 24... | 1100 | Environmental | 3.80 | 8.6 | 97 | 7.9 | 95 | 21.1 | 39 | -- | 48 |
| JUL | | | | | | | | | | | |
| 08... | 1515 | Environmental | 3.00 | 8.3 | 90 | 7.8 | 100 | 19.8 | 41 | -- | 51 |
| 22... | 1110 | Environmental | 2.30 | 8.7 | 99 | 8.1 | 101 | 21.4 | 39 | -- | 48 |
| AUG | | | | | | | | | | | |
| 05... | 0925 | Environmental | 2.80 | 8.7 | 102 | 8.8 | 101 | 22.9 | 41 | -- | 50 |
| 19... | 1035 | Environmental | 1.50 | 8.2 | 99 | 9.1 | 103 | 25.0 | 43 | -- | 52 |
| SEP | | | | | | | | | | | |
| 03... | 0920 | Environmental | 1.50 | 8.3 | 90 | 8.0 | 101 | 19.6 | 42 | -- | 51 |
| 17... | 0940 | Environmental | 2.40 | 5.9 | 64 | 6.8 | 102 | 19.0 | -- | 41 | -- |
| 29... | 0930 | Environmental | 3.10 | 8.0 | 75 | 7.1 | 99 | 12.6 | -- | 38 | -- |

483341093111501 RAINY LK AT BLACK BAY (WEST) NR INTERNATIONAL FLLS (LAT 48°32'30"N LONG 093°11'15"W)

| | | | | | | | | | | | |
|----------|------|---------------|------|------|-----|-----|-----|------|----|----|----|
| OCT 2002 | | | | | | | | | | | |
| 02... | 1140 | Environmental | 0.75 | 4.8 | 44 | 7.3 | 72 | 10.9 | -- | -- | -- |
| 15... | 1430 | Environmental | 0.75 | 11.6 | 91 | 7.0 | 61 | 5.5 | -- | -- | -- |
| MAY 2003 | | | | | | | | | | | |
| 13... | 1025 | Environmental | 0.60 | 10.3 | 97 | 7.7 | 98 | 13.0 | -- | 33 | -- |
| 28... | 0945 | Environmental | -- | 8.4 | 88 | 7.2 | 85 | 18.1 | -- | 38 | -- |
| JUN | | | | | | | | | | | |
| 09... | 0905 | Environmental | 0.40 | 7.5 | 81 | -- | 91 | 19.6 | 42 | -- | 51 |
| 23... | 1045 | Environmental | 0.45 | 7.3 | 85 | 7.3 | 98 | 22.6 | 39 | -- | 48 |
| JUL | | | | | | | | | | | |
| 07... | 1130 | Environmental | 0.10 | 7.9 | 86 | 7.5 | 157 | 20.6 | 60 | -- | 74 |
| 21... | 1025 | Environmental | 0.30 | 6.9 | 78 | 7.2 | 114 | 22.0 | 42 | -- | 52 |
| AUG | | | | | | | | | | | |
| 04... | 0945 | Environmental | 0.30 | 9.2 | 109 | 8.8 | 108 | 23.8 | 44 | -- | 54 |
| 18... | 1420 | Environmental | 0.20 | 9.3 | 118 | 9.1 | 115 | 27.3 | 46 | -- | 56 |
| SEP | | | | | | | | | | | |
| 02... | 0925 | Environmental | 0.20 | 6.6 | 71 | 6.4 | 109 | 18.9 | 44 | -- | 53 |

WATER QUALITY DATA

VOYAGEURS NATIONAL PARK WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES

| Date | Bicarbonate, wat flt incrm. titr., field, mg/L (00453) | Carbonate, wat flt fixed end pt, lab, mg/L (29808) | Carbonate, wat flt incrm. titr., field, mg/L (00452) | Ammonia + org-N, water, mg/L as N (00623) | Ammonia + org-N, water, mg/L as N (00625) | Ammonia water, mg/L as N (00608) | Nitrite + nitrate water, mg/L as N (00631) | Nitrite water, mg/L as N (00613) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, fltrd, mg/L (00666) | Phosphorus, water, unfltrd mg/L (00665) | Chlorophyll a phytoplankton, fluoro, ug/L (70953) | Chlorophyll b phytoplankton, fluoro, ug/L (70954) |
|------|--|--|--|---|---|----------------------------------|--|----------------------------------|---|--|---|---|---|
|------|--|--|--|---|---|----------------------------------|--|----------------------------------|---|--|---|---|---|

483511093092801 RAINY LAKE AT BLACK BAY NARROWS NR INT FALLS MN (LAT 48°35'38"N LONG 093°09'13"W)

| | | | | | | | | | | | | | |
|----------|----|-----|-----|------|------|--------|-------|-------|--------|-------|-------|------|------|
| OCT 2002 | | | | | | | | | | | | | |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.048 | 12.9 | <0.1 |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.042 | 2.4 | <0.1 |
| MAY 2003 | | | | | | | | | | | | | |
| 13... | 32 | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | 0.047 | 3.3 | <0.1 |
| 28... | 27 | -- | 0.0 | 0.35 | 0.49 | <0.015 | 0.025 | E.002 | <0.007 | 0.006 | 0.026 | -- | -- |
| JUN | | | | | | | | | | | | | |
| 09... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.038 | -- | -- |
| 23... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.038 | 3.6 | 0.2 |
| JUL | | | | | | | | | | | | | |
| 07... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.071 | -- | -- |
| 21... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.045 | 3.5 | <0.1 |
| AUG | | | | | | | | | | | | | |
| 04... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.046 | -- | -- |
| 18... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.043 | E8.9 | <0.1 |
| SEP | | | | | | | | | | | | | |
| 02... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.079 | E2.2 | <0.1 |
| 15... | 24 | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | 0.042 | E4.4 | E.1 |
| 28... | 29 | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

483012093035001 KABETOGAMA LAKE AT CEMETARY ISLAND NEAR RAY, MN (LAT 48°30'12"N LONG 093°03'50"W)

| | | | | | | | | | | | | | |
|----------|----|-----|-----|------|------|--------|--------|--------|--------|-------|-------|-------|------|
| OCT 2002 | | | | | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.032 | 1.5 | <0.1 |
| MAY 2003 | | | | | | | | | | | | | |
| 14... | 42 | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | 0.024 | 1.7 | <0.1 |
| 29... | 51 | -- | 0.0 | 0.39 | 0.54 | <0.015 | <0.022 | <0.002 | <0.007 | 0.004 | -- | -- | -- |
| JUN | | | | | | | | | | | | | |
| 10... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.014 | -- | -- |
| 24... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.019 | 2.3 | <0.1 |
| JUL | | | | | | | | | | | | | |
| 08... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.024 | -- | -- |
| 22... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.021 | 3.1 | <0.1 |
| AUG | | | | | | | | | | | | | |
| 05... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.018 | -- | -- |
| 19... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.035 | E13.0 | <0.1 |
| SEP | | | | | | | | | | | | | |
| 03... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.054 | 20.6 | <0.1 |
| 17... | 50 | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | 0.050 | E7.6 | <0.1 |
| 29... | 47 | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

483341093111501 RAINY LK AT BLACK BAY (WEST) NR INTERNATIONAL FLLS (LAT 48°32'30"N LONG 093°11'15"W)

| | | | | | | | | | | | | | | |
|----------|----|-----|-----|------|------|-------|----|-------|-------|--------|-------|-------|------|------|
| OCT 2002 | | | | | | | | | | | | | | |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.045 | 3.4 | <0.1 | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.062 | 3.0 | <0.1 | |
| MAY 2003 | | | | | | | | | | | | | | |
| 13... | 40 | -- | 0.0 | -- | -- | -- | -- | E.013 | E.002 | <0.007 | 0.011 | 0.052 | 3.2 | <0.1 |
| 28... | 46 | -- | 0.0 | 0.47 | 0.65 | 0.019 | -- | -- | -- | -- | 0.046 | -- | -- | |
| JUN | | | | | | | | | | | | | | |
| 09... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.071 | -- | -- | |
| 23... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.060 | 2.6 | 0.2 | |
| JUL | | | | | | | | | | | | | | |
| 07... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.23 | -- | -- | |
| 21... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.088 | 13.5 | <0.1 | |
| AUG | | | | | | | | | | | | | | |
| 04... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.072 | -- | -- | |
| 18... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.095 | E12.8 | <0.1 | |
| SEP | | | | | | | | | | | | | | |
| 02... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.096 | E3.8 | <0.1 | |

VOYAGEURS NATIONAL PARK WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES

| Date | Time | Sample type | Trans- parency Secchi disc, meters (00078) | Dis- solved oxygen, mg/L (00300) | Dis- solved oxygen, percent of sat- uration (00301) | pH, unfltrd field, std units (00400) | Specif. conduc- tance, wat unf uS/cm 25 deg C (00095) | Temper- ature, water, deg C (00010) | Alka- linity, wat flt fxd end lab, mg/L as CaCO ₃ (00421) | Alka- linity, wat flt inc tit field, mg/L as CaCO ₃ (39086) | Bicar- bonate, wat flt fixed end pt, lab, mg/L (29805) | Bicar- bonate, wat flt incr., titr., field, mg/L (00453) |
|--|-------|---------------|---|--|---|---|---|---|---|---|---|---|
| 483341093111501 RAINY LK AT BLACK BAY (WEST) NR INTERNATIONAL FLLS (LAT 48°32'30"N LONG 093°11'15"W) | | | | | | | | | | | | |
| SEP 2003 | | | | | | | | | | | | |
| 15... | 0925 | Environmental | 0.20 | 7.0 | 72 | 6.5 | 103 | 17.1 | -- | 38 | -- | 46 |
| 28... | 1045 | Environmental | 0.10 | 9.6 | 81 | 6.7 | 94 | 8.0 | -- | 35 | -- | 43 |
| 482607092511701 KABETOGAMA LK AT MOUTH OF MEADWOOD BAY NR RAY MN (LAT 48°26'07"N LONG 092°51'17"W) | | | | | | | | | | | | |
| OCT 2002 | | | | | | | | | | | | |
| MAY 2003 | 16... | 1125 | Environmental | 2.75 | 10.1 | 89 | 7.7 | 57 | 9.9 | -- | -- | -- |
| JUN | 14... | 1100 | Environmental | 2.00 | 12.2 | 107 | 7.4 | 105 | 9.9 | -- | 35 | -- |
| | 29... | 1120 | Environmental | 108 | 11.9 | 120 | 8.0 | 90 | 15.7 | -- | 40 | -- |
| JUL | 10... | 1050 | Environmental | 2.60 | 9.7 | 100 | -- | 85 | 17.2 | 28 | -- | 34 |
| | 24... | 1315 | Environmental | 3.70 | 8.1 | 88 | 7.7 | 86 | 19.1 | 28 | -- | 34 |
| AUG | 08... | 1415 | Environmental | 3.20 | 8.4 | 84 | 7.7 | 86 | 20.6 | 32 | -- | 40 |
| | 22... | 1236 | Environmental | 2.60 | 8.2 | 93 | 8.3 | 95 | 22.1 | 38 | -- | 46 |
| SEP | 05... | 1020 | Environmental | 2.70 | 8.5 | 99 | 8.8 | 98 | 23.3 | 40 | -- | 48 |
| | 19... | 1200 | Environmental | 1.80 | 8.8 | 107 | 9.2 | 99 | 25.3 | 39 | -- | 48 |
| 482731092574701 KABETOGAMA LAKE NEAR GRAVE ISLAND NEAR RAY, MN (LAT 48°27'31"N LONG 092°57'47"W) | | | | | | | | | | | | |
| OCT 2002 | | | | | | | | | | | | |
| MAY 2003 | 16... | 1035 | Environmental | 3.25 | 10.2 | 89 | 7.6 | 65 | 9.6 | -- | -- | -- |
| JUN | 14... | 1020 | Environmental | 1.70 | 11.6 | 107 | 7.8 | 108 | 11.8 | -- | 35 | -- |
| | 29... | 1040 | Environmental | 1.70 | 11.6 | 113 | 7.5 | 92 | 13.9 | -- | 41 | -- |
| JUL | 10... | 1010 | Environmental | 2.80 | 9.6 | 99 | -- | 92 | 17.0 | 37 | -- | 45 |
| | 24... | 1140 | Environmental | -- | 9.0 | 102 | 8.2 | 93 | 21.5 | 54 | -- | 65 |
| AUG | 08... | 1440 | Environmental | 2.70 | 8.0 | 87 | 7.6 | 97 | 19.5 | 40 | -- | 49 |
| | 22... | 1142 | Environmental | 2.60 | 8.5 | 96 | 8.4 | 98 | 21.6 | 39 | -- | 48 |
| SEP | 05... | 0955 | Environmental | 2.90 | 9.2 | 108 | 9.0 | 98 | 23.4 | 39 | -- | 47 |
| | 19... | 1120 | Environmental | 1.80 | 8.8 | 108 | 9.2 | 101 | 25.6 | 40 | -- | 48 |
| | 03... | 1000 | Environmental | 1.80 | 7.1 | 78 | 7.7 | 100 | 20.0 | 40 | -- | 49 |
| | 17... | 1040 | Environmental | 2.90 | 7.1 | 77 | 7.4 | 100 | 19.2 | -- | 40 | -- |
| | 29... | 1015 | Environmental | 3.00 | 8.8 | 84 | 7.5 | 99 | 13.5 | -- | 39 | -- |
| 483304093062701 RAINY LAKE AT BLACK BAY NR INT FALLS MN (LAT 48°33'04"N LONG 093°06'27"W) | | | | | | | | | | | | |
| OCT 2002 | | | | | | | | | | | | |
| MAY 2003 | 02... | 1200 | Environmental | 0.75 | 3.9 | 36 | 7.3 | 72 | 11.9 | -- | -- | -- |
| | 15... | 1500 | Environmental | 0.50 | 11.0 | 89 | 7.5 | 61 | 6.1 | -- | -- | -- |
| JUN | 13... | 1055 | Environmental | 0.60 | 10.1 | 97 | 7.7 | 100 | 13.9 | -- | 35 | -- |
| | 28... | 1025 | Environmental | 0.30 | 8.7 | 93 | 7.4 | 85 | 18.0 | -- | 39 | -- |
| | 09... | 1200 | Environmental | 0.70 | 4.5 | 40 | -- | 86 | 17.4 | 34 | -- | 42 |

WATER QUALITY DATA

VOYAGEURS NATIONAL PARK WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES

| Date | Carbonate, wat flt fixed end pt, lab, mg/L (29808) | Carbon- ate, wat flt incr. titr., field, mg/L (00452) | Ammonia + org-N, water, fltrd, mg/L as N | Ammonia + org-N, water, unfltrd, mg/L as N | Ammonia water, fltrd, mg/L as N | Nitrite nitrate water, fltrd, mg/L as N | Nitrite water, fltrd, mg/L as N | Ortho- phosphate, water, fltrd, mg/L as P | Phos- phorus, water, fltrd, mg/L as P | Phos- phorus, water, unfltrd, mg/L as P | Chloro- phyll a phyto- plank- ton, fluoro, ug/L (70953) | Chloro- phyll b phyto- plank- ton, fluoro, ug/L (70954) |
|------|--|--|--|--|---|--|---|--|--|--|--|--|
|------|--|--|--|--|---|--|---|--|--|--|--|--|

483341093111501 RAINY LK AT BLACK BAY (WEST) NR INTERNATIONAL FLLS (LAT 48°32'30"N LONG 093°11'15"W)

SEP 2003

| | | | | | | | | | | | | | |
|-------|----|-----|----|----|----|----|----|----|----|----|-------|------|-----|
| 15... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.099 | E3.1 | E.1 |
| 28... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

482607092511701 KABETOGAMA LK AT MOUTH OF MEADWOOD BAY NR RAY MN (LAT 48°26'07"N LONG 092°51'17"W)

OCT 2002

| | | | | | | | | | | | | | |
|-------|-----|-----|------|------|--------|--------|--------|--------|--------|----|-------|------|------|
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.035 | 2.7 | <0.1 |
| MAY | | | | | | | | | | | | | |
| 2003 | | | | | | | | | | | | | |
| 14... | -- | 0.0 | -- | 0.64 | <0.015 | -- | <0.022 | -- | <0.002 | -- | 0.016 | 2.7 | <0.1 |
| 29... | -- | 0.0 | 0.39 | 0.64 | <0.015 | <0.022 | <0.002 | <0.007 | 0.010 | -- | -- | -- | -- |
| JUN | | | | | | | | | | | | | |
| 10... | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.013 | -- | -- |
| 24... | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.018 | 1.3 | <0.1 |
| JUL | | | | | | | | | | | | | |
| 08... | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.015 | -- | -- |
| 22... | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.018 | 4.1 | <0.1 |
| AUG | | | | | | | | | | | | | |
| 05... | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.017 | -- | -- |
| 19... | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.027 | E8.9 | <0.1 |
| SEP | | | | | | | | | | | | | |
| 03... | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.053 | E7.5 | <0.1 |
| 17... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.042 | E7.8 | <0.1 |
| 29... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

482731092574701 KABETOGAMA LAKE NEAR GRAVE ISLAND NEAR RAY, MN (LAT 48°27'31"N LONG 092°57'47"W)

OCT 2002

| | | | | | | | | | | | | | |
|-------|-----|-----|------|------|--------|--------|--------|--------|--------|----|-------|------|------|
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.038 | 4.5 | <0.1 |
| MAY | | | | | | | | | | | | | |
| 2003 | | | | | | | | | | | | | |
| 14... | -- | 0.0 | -- | 0.57 | <0.015 | -- | <0.022 | -- | <0.002 | -- | 0.020 | 2.1 | <0.1 |
| 29... | -- | 0.0 | 0.39 | 0.57 | <0.015 | <0.022 | <0.002 | <0.007 | E.004 | -- | -- | -- | -- |
| JUN | | | | | | | | | | | | | |
| 10... | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.012 | -- | -- |
| 24... | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.014 | 2.1 | 0.1 |
| JUL | | | | | | | | | | | | | |
| 08... | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.021 | -- | -- |
| 22... | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.027 | 4.2 | <0.1 |
| AUG | | | | | | | | | | | | | |
| 05... | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.021 | -- | -- |
| 19... | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.033 | E6.5 | <0.1 |
| SEP | | | | | | | | | | | | | |
| 03... | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.051 | E3.4 | <0.1 |
| 17... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.042 | E9.9 | <0.1 |
| 29... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

483304093062701 RAINY LAKE AT BLACK BAY NR INT FALLS MN (LAT 48°33'04"N LONG 093°06'27"W)

OCT 2002

| | | | | | | | | | | | | | |
|-------|-----|-----|------|-----|-------|-------|-------|--------|-------|----|-------|-----|------|
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.050 | 3.5 | <0.1 |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.101 | 2.8 | <0.1 |
| MAY | | | | | | | | | | | | | |
| 2003 | | | | | | | | | | | | | |
| 13... | -- | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | 0.069 | 4.1 | <0.1 |
| 28... | -- | 0.0 | 0.44 | 1.1 | E.008 | E.014 | E.002 | <0.007 | 0.010 | -- | 0.076 | -- | -- |
| JUN | | | | | | | | | | | | | |
| 09... | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.049 | -- | -- |

VOYAGEURS NATIONAL PARK WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES

| Date | Time | Sample type | Trans- parency Secchi disc, meters (00078) | Dis- solved oxygen, mg/L (00300) | Dis- solved oxygen, percent of sat- uration (00301) | pH, water, unflrd field, std units (00400) | Specif. conduc- tance, wat unf us/cm 25 deg C (00095) | Temper- ature, water, deg C (00010) | Alka- linity, wat flt fxd end lab, mg/L as CaCO ₃ (00421) | Alka- linity, wat flt inc tit field, mg/L as CaCO ₃ (39086) | Bicar- bonate, wat flt fixed end pt, lab, mg/L (29805) | Bicar- bonate, wat flt incr., titr., field, mg/L (00453) |
|------|------|-------------|---|--|---|--|---|---|---|---|---|---|
|------|------|-------------|---|--|---|--|---|---|---|---|---|---|

483622092560701 RAINY LK AT BRULE NARROWS NR INTERNTNL FALLS, MN (LAT 48°36'22"N LONG 092°56'07"W)

| | | | | | | | | | | | | |
|-------------|------|---------------|------|------|-----|-----|----|------|----|----|----|----|
| MAY 2003 | | | | | | | | | | | | |
| 13... | 1213 | Environmental | 2.20 | 12.1 | 104 | 6.6 | 52 | 10.5 | 12 | -- | 15 | -- |
| 28... | 0800 | Blank | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 28... | 1240 | Environmental | 2.20 | 12.1 | 116 | 7.1 | 47 | 13.4 | -- | 16 | -- | 20 |
| JUN | | | | | | | | | | | | |
| 09... | 1310 | Environmental | 2.00 | 9.8 | 100 | -- | 44 | 15.9 | -- | -- | -- | -- |
| 23... | 1415 | Environmental | 2.80 | 9.3 | 100 | 7.5 | 46 | 19.0 | 14 | -- | 18 | -- |
| JUL | | | | | | | | | | | | |
| 21... | 1400 | Environmental | 2.20 | 8.3 | 93 | 7.7 | 48 | 21.0 | 15 | -- | 18 | -- |
| AUG | | | | | | | | | | | | |
| 04... | 1050 | Environmental | 2.50 | 7.8 | 89 | 7.3 | 47 | 22.1 | 14 | -- | 17 | -- |
| 18... | 1200 | Environmental | 2.30 | 7.7 | 91 | 6.8 | 48 | 23.7 | 14 | -- | 17 | -- |
| SEP | | | | | | | | | | | | |
| 02... | 1022 | Environmental | 2.50 | 7.8 | 85 | 6.5 | 48 | 19.2 | 15 | -- | 18 | -- |
| 15... | 1030 | Environmental | 3.00 | 7.2 | 77 | 7.1 | 48 | 18.3 | -- | 14 | -- | 17 |
| 28... | 1140 | Environmental | 3.00 | 9.2 | 86 | 6.9 | 48 | 12.1 | -- | 15 | -- | 19 |

482616092372201 NAMAKAN LAKE NEAR RAY, MN (LAT 48°26'16"N LONG 092°37'22"W)

| | | | | | | | | | | | | |
|-------------|------|---------------|------|------|-------|-----|----|------|----|----|----|----|
| MAY 2003 | | | | | | | | | | | | |
| 14... | 1205 | Environmental | 3.00 | 12.0 | 96 | 7.1 | 55 | 5.9 | 14 | -- | 16 | -- |
| 29... | 1455 | Environmental | -- | 12.4 | 117 | 7.0 | 46 | 16.0 | -- | 16 | -- | 20 |
| JUN | | | | | | | | | | | | |
| 10... | 1145 | Environmental | -- | 10.4 | 107 | 7.4 | 46 | 16.7 | 12 | -- | 15 | -- |
| 24... | 1555 | Environmental | 3.50 | 9.2 | 102 | 7.6 | 46 | 20.1 | 14 | -- | 17 | -- |
| JUL | | | | | | | | | | | | |
| 22... | 1340 | Environmental | 3.00 | 8.2 | 94 | 7.9 | 48 | 21.9 | 14 | -- | 16 | -- |
| AUG | | | | | | | | | | | | |
| 05... | 1100 | Environmental | 4.00 | 7.4 | 87 | 7.2 | 47 | 23.3 | 14 | -- | 17 | -- |
| 19... | 1330 | Environmental | 3.00 | 7.7 | 93 | 7.3 | 48 | 25.3 | 13 | -- | 16 | -- |
| SEP | | | | | | | | | | | | |
| 19... | 1005 | Environmental | 4.10 | 8.0 | 85 | 6.7 | 48 | 18.2 | 15 | -- | 18 | -- |
| 29... | 1230 | Environmental | 3.50 | 9.0 | 8,600 | 7.1 | 49 | 13.6 | 14 | -- | 17 | -- |

482226092283301 SANDPOINT LK BL HARRISON NARROWS NR CRANE LK, MN (LAT 48°22'26"N LONG 092°28'33"W)

| | | | | | | | | | | | | |
|-------------|------|---------------|------|------|-----|-----|----|------|----|----|----|----|
| MAY 2003 | | | | | | | | | | | | |
| 14... | 1305 | Environmental | 2.20 | 11.7 | 98 | 7.2 | 76 | 7.6 | 18 | -- | 22 | -- |
| 29... | 1340 | Environmental | 1.90 | 11.5 | 113 | 7.3 | 66 | 14.8 | -- | 21 | -- | 25 |
| JUN | | | | | | | | | | | | |
| 10... | 1320 | Environmental | 2.20 | 10.2 | 107 | 7.1 | 66 | 2.2 | 20 | -- | 24 | -- |
| 24... | 1425 | Environmental | 2.90 | 8.8 | 98 | 7.6 | 67 | 20.6 | 20 | -- | 24 | -- |
| JUL | | | | | | | | | | | | |
| 23... | 1135 | Environmental | 2.95 | 8.0 | 92 | 7.5 | 71 | 22.0 | 19 | -- | 24 | -- |
| AUG | | | | | | | | | | | | |
| 05... | 1155 | Environmental | 3.30 | 7.7 | 90 | 7.5 | 72 | 23.6 | 20 | -- | 24 | -- |
| 19... | 1430 | Environmental | 2.50 | 7.7 | 93 | 7.7 | 73 | 25.2 | 20 | -- | 25 | -- |
| SEP | | | | | | | | | | | | |
| 19... | 1145 | Environmental | 3.30 | -- | -- | -- | -- | -- | 20 | -- | 24 | -- |
| 29... | 1330 | Environmental | 3.10 | 9.4 | 90 | 7.1 | 72 | 13.3 | 20 | -- | 24 | -- |

WATER QUALITY DATA

VOYAGEURS NATIONAL PARK WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES

483622092560701 RAINY LK AT BRULE NARROWS NR INTERNTNL FALLS, MN (LAT 48°36'22"N LONG 092°56'07"W)

MAY 2003

482616092372201 NAMAKAN LAKE NEAR RAY, MN (LAT 48°26'16"N LONG 092°37'22"W)

MAY 2003

482226092283301 SANDPOINT LK BL HARRISON NARROWS NR CRANE LK. MN (LAT 48°22'26"N LONG 092°28'33"W)

MAY 2003

WATER QUALITY DATA

321

GLACIAL RIDGE WATER QUALITY

MISCELLANEOUS STATION ANALYSES

| Date | Time | Sample type | Instantaneous discharge, cfs (00061) | Barometric pressure, mm Hg (00025) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | pH, water, unfltrd lab, std units (00403) | Specific conductance, wat unf lab, uS/cm 25 deg C (90095) | Specific conductance, wat unf lab, uS/cm 25 deg C (90095) | Temperature, water, deg C (00010) | Calcium water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) |
|---|------|---------------|--------------------------------------|------------------------------------|--------------------------------|---|---|---|---|-----------------------------------|------------------------------------|---------------------------------------|
| 05078470 JUDICIAL DITCH 64 NEAR MENTOR, MN (SW4) (LAT 47°44'16"N LONG 096°12'08"W) | | | | | | | | | | | | |
| OCT 2002 16... | 1745 | Environmental | -- | 737 | 12.3 | 8.2 | -- | -- | 584 | 3.9 | -- | -- |
| NOV 26... | 1220 | Environmental | 0.55 | 747 | 11.0 | 8.0 | 7.7 | 700 | 730 | 0.0 | 102 | 38.1 |
| JAN 2003 08... | 1330 | Environmental | 0.10 | 724 | 11.8 | 7.9 | -- | -- | 592 | 0.0 | -- | -- |
| APR 01... | 1540 | Environmental | 0.90 | 730 | 11.2 | 7.9 | 8.0 | 418 | 424 | 5.0 | 48.4 | 20.5 |
| MAY 01... | 0830 | Environmental | 2.6 | 736 | 8.3 | 7.8 | 8.0 | 609 | 638 | 8.2 | 83.2 | 37.0 |
| JUN 04... | 1030 | Environmental | 1.5 | 734 | 9.4 | 8.0 | 8.1 | 644 | 668 | 16.7 | 82.3 | 38.4 |
| | 1350 | Environmental | 17 | 731 | 6.7 | 7.8 | 7.9 | 506 | 525 | 18.8 | 59.2 | 29.2 |
| JUL 02... | 1250 | Environmental | 6.2 | 727 | 5.3 | 7.6 | 7.9 | 558 | 599 | 24.8 | 71.3 | 33.9 |
| AUG 05... | 1230 | Environmental | 0.06 | 734 | 8.3 | 8.0 | 8.0 | 508 | 532 | 21.6 | 63.2 | 31.5 |
| SEP 03... | 0930 | Environmental | 0.01 | 737 | 7.8 | 7.6 | 8.0 | 528 | 567 | 15.4 | 60.0 | 30.5 |
| | 0820 | Environmental | 0.02 | 741 | 10.0 | 7.6 | 8.1 | 522 | 560 | 5.2 | 70.2 | 32.6 |
| 05078520 CYR CREEK NEAR MARCOUX CORNERS, MN (SW5) (LAT 47°48'12"N LONG 096°16'35"W) | | | | | | | | | | | | |
| OCT 2002 16... | 1705 | Environmental | -- | 737 | 10.5 | 8.2 | -- | -- | 704 | 4.3 | -- | -- |
| NOV 26... | 1030 | Environmental | 0.17 | 750 | 11.7 | 8.0 | 7.8 | 752 | 797 | 0.3 | 100 | 43.7 |
| JAN 2003 08... | 1120 | Environmental | 0.06 | 726 | 5.5 | 7.9 | -- | -- | 948 | 0.4 | -- | -- |
| APR 01... | 1320 | Environmental | 1.1 | 732 | 11.1 | 7.8 | 7.9 | 654 | 668 | 5.8 | 72.3 | 35.8 |
| | 1040 | Environmental | 1.0 | 736 | 10.1 | 8.0 | 8.1 | 670 | 706 | 10.7 | 78.1 | 42.9 |
| JUN 04... | 0830 | Environmental | 0.44 | 736 | 7.0 | 7.8 | 8.0 | 664 | 691 | 17.1 | 73.3 | 41.4 |
| | 1105 | Environmental | 17 | 734 | 7.8 | 7.8 | 7.8 | 534 | 550 | 17.3 | 54.6 | 31.5 |
| JUL 02... | 1100 | Environmental | 0.99 | 728 | 5.2 | 7.7 | 7.9 | 656 | 698 | 23.5 | 75.5 | 38.7 |
| 05078730 COUNTY DITCH 140 NEAR BENOIT, MN (SW1) LAT 47°41'15"N LONG 096°22'23"W) | | | | | | | | | | | | |
| OCT 2002 16... | 1545 | Environmental | -- | 736 | 11.5 | 8.2 | -- | -- | 1,130 | 7.4 | -- | -- |
| NOV 25... | 1550 | Environmental | 0.09 | 742 | 18.0 | 8.2 | 7.9 | 750 | 784 | 0.0 | 90.6 | 45.6 |
| | 1551 | Replicate | 0.08 | 742 | 18.0 | 8.2 | 7.9 | 746 | 784 | 0.0 | 91.3 | 46.1 |
| APR 2003 01... | 0820 | Environmental | 1.4 | 732 | 10.3 | 7.7 | 7.8 | 430 | 420 | 0.1 | 44.7 | 22.6 |
| | 1550 | Environmental | 0.23 | 740 | 17.3 | 8.4 | 8.4 | 817 | 836 | 15.9 | 86.2 | 52.3 |
| JUN 03... | 1120 | Environmental | 0.09 | 737 | 8.7 | 7.9 | 7.8 | 910 | 935 | 17.4 | 74.1 | 60.8 |
| | 1650 | Environmental | 8.8 | 733 | 7.7 | 7.8 | 7.9 | 731 | 762 | 21.4 | 66.3 | 46.9 |
| JUL 01... | 1400 | Environmental | 21 | 734 | 10.7 | 8.3 | 8.3 | 605 | 641 | 24.8 | 70.8 | 37.4 |
| AUG 05... | 0800 | Environmental | 0.01 | 736 | 1.4 | 7.5 | 7.7 | 1,210 | 1,190 | 20.1 | 82.0 | 82.6 |

WATER QUALITY DATA

GLACIAL RIDGE WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES

| Date | Potassium, water, fltrd, mg/L (00935) | Sodium, water, fltrd, mg/L (00930) | Alka-linity, wat flt inc tit field, mg/L as CaCO ₃ (39086) | Bicar-bonate, wat flt inerm. titr., field, mg/L (00453) | Carbon-ate, wat flt inerm. titr., field, mg/L (00452) | Chlor-ide, wat fltrd, mg/L (00940) | Fluor-ide, wat fltrd, mg/L (00950) | Sulfate water, fltrd, mg/L (00945) | Ammonia + org-N, water, fltrd, mg/L as N (00623) | Ammonia + org-N, water, unfltrd, mg/L as N (00625) | 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) |
|---|---------------------------------------|------------------------------------|---|---|---|------------------------------------|------------------------------------|------------------------------------|--|--|---|---|---|
| 05078470 JUDICIAL DITCH 64 NEAR MENTOR, MN (SW4) (LAT 47°44'16"N LONG 096°12'08"W) | | | | | | | | | | | | | |
| OCT 2002 16... | -- | -- | -- | -- | -- | -- | -- | -- | 0.80 | 0.83 | <0.04 | 0.10 | E.007 |
| NOV 26... | 3.30 | 7.57 | -- | -- | -- | 7.05 | -- | 26.8 | 0.53 | 0.56 | 0.06 | 0.40 | 0.016 |
| JAN 2003 08... | -- | -- | 304 | 371 | -- | -- | -- | -- | 0.62 | 0.57 | 0.26 | 0.27 | <0.008 |
| APR 01... | 10.8 | 5.51 | 173 | 211 | -- | 9.51 | 0.14 | 27.7 | 0.79 | 0.94 | <0.04 | E.05 | E.005 |
| MAY 01... | 5.15 | 9.05 | 302 | 368 | -- | 8.07 | -- | 28.4 | 0.81 | 0.83 | <0.04 | <0.12 | <0.008 |
| JUN 04... | 2.98 | 7.79 | 322 | 393 | -- | 4.91 | -- | 18.6 | 1.2 | 1.3 | <0.04 | <0.06 | E.004 |
| | 2.80 | 8.01 | 251 | 306 | -- | 6.04 | -- | 20.2 | 1.3 | 1.3 | <0.04 | <0.06 | <0.008 |
| JUL 02... | 3.18 | 6.30 | 304 | 371 | -- | 5.12 | -- | 12.0 | 1.5 | 1.4 | <0.04 | <0.06 | <0.008 |
| AUG 05... | 2.31 | 6.59 | 253 | 309 | -- | 6.37 | -- | 13.4 | 0.88 | 0.94 | <0.04 | E.04 | <0.008 |
| SEP 03... | 3.11 | 5.78 | 253 | 309 | -- | 9.48 | -- | 32.0 | 0.66 | 0.81 | <0.04 | <0.06 | <0.008 |
| | 3.40 | 6.38 | 238 | 290 | -- | 10.0 | -- | 46.2 | 0.46 | 0.55 | <0.04 | <0.06 | <0.008 |
| 05078520 CYR CREEK NEAR MARCOUX CORNERS, MN (SW5) (LAT 47°48'12"N LONG 096°16'35"W) | | | | | | | | | | | | | |
| OCT 2002 16... | -- | -- | -- | -- | -- | -- | -- | -- | 0.58 | 0.65 | -- | <0.06 | -- |
| NOV 26... | 3.67 | 14.6 | -- | -- | -- | 16.0 | -- | 47.0 | 0.52 | 0.53 | E.04 | 0.73 | 0.027 |
| JAN 2003 08... | -- | -- | 480 | 586 | -- | -- | -- | -- | 0.77 | 0.97 | 0.18 | <0.06 | <0.008 |
| APR 01... | 8.45 | 15.5 | 218 | 266 | -- | 22.5 | 0.16 | 109 | 0.92 | 1.1 | E.03 | 0.19 | 0.008 |
| | 4.86 | 14.5 | 299 | 365 | -- | 18.8 | -- | 54.1 | 0.77 | 0.85 | <0.04 | <0.12 | <0.008 |
| JUN 04... | 3.80 | 14.2 | 309 | 377 | -- | 14.4 | -- | 32.9 | 1.0 | 1.1 | <0.04 | <0.06 | <0.008 |
| | 2.80 | 14.1 | 215 | 262 | -- | 10.4 | -- | 64.4 | 1.1 | 1.2 | <0.04 | 0.61 | 0.038 |
| JUL 02... | 2.59 | 15.4 | 302 | 368 | -- | 11.8 | -- | 57.8 | 1.2 | 1.2 | E.03 | <0.06 | E.004 |
| 05078730 COUNTY DITCH 140 NEAR BENOIT, MN (SW1) (LAT 47°41'15"N LONG 096°22'23"W) | | | | | | | | | | | | | |
| OCT 2002 16... | -- | -- | -- | -- | -- | -- | -- | -- | 2.2 | 2.4 | 1.24 | 0.21 | 0.037 |
| NOV 25... | 5.25 | 16.5 | -- | -- | -- | 8.61 | -- | 123 | 1.0 | 1.1 | 0.08 | 0.23 | 0.008 |
| | 5.03 | 16.7 | -- | -- | -- | 8.17 | -- | 125 | 1.0 | 1.1 | 0.08 | 0.23 | 0.008 |
| APR 2003 01... | 6.04 | 8.29 | 133 | 162 | -- | 7.74 | 0.12 | 78.4 | 0.91 | 1.6 | 0.24 | 0.14 | 0.009 |
| | 5.42 | 25.8 | 250 | 305 | 11 | 9.13 | -- | 205 | 0.87 | 1.0 | <0.04 | <0.06 | <0.008 |
| JUN 03... | 2.92 | 37.7 | 228 | 278 | -- | 6.94 | -- | 261 | 1.1 | 1.2 | <0.04 | <0.06 | <0.008 |
| | 2.39 | 27.6 | 221 | 270 | -- | 6.04 | -- | 169 | 1.0 | 1.1 | <0.04 | 0.07 | E.007 |
| JUL 01... | 5.38 | 11.1 | 260 | 317 | 7 | 10.8 | -- | 70.2 | 1.0 | 1.3 | <0.04 | <0.06 | E.006 |
| AUG 05... | 14.1 | 57.8 | 381 | 465 | -- | 17.7 | -- | 281 | 3.4 | 3.4 | 0.78 | <0.06 | E.004 |

GLACIAL RIDGE WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES

| Date | Ortho-phosphate, water, fltrd, mg/L as P (00671) | Phos-phorus, water, fltrd, mg/L (00666) | Phos-phorus, water, unfltrd mg/L (00665) |
|------|---|---|--|
|------|---|---|--|

05078470 JUDICIAL DITCH 64 NEAR MENTOR, MN (SW4) (LAT 47°44'16"N LONG 096°12'08"W)

| | | | |
|----------|-------|-------|-------|
| OCT 2002 | | | |
| 16.. | <0.02 | 0.011 | 0.013 |
| NOV | | | |
| 26.. | <0.02 | E.004 | 0.007 |
| JAN 2003 | | | |
| 08.. | <0.02 | E.004 | 0.005 |
| APR | | | |
| 01.. | <0.02 | 0.016 | 0.030 |
| MAY | | | |
| 01.. | <0.02 | 0.010 | 0.010 |
| JUN | | | |
| 04.. | <0.02 | 0.014 | 0.019 |
| 11.. | <0.02 | 0.018 | 0.028 |
| JUL | | | |
| 02.. | <0.02 | 0.025 | 0.033 |
| AUG | | | |
| 05.. | <0.09 | 0.012 | 0.029 |
| SEP | | | |
| 03.. | <0.02 | 0.013 | 0.023 |
| 30.. | <0.02 | 0.006 | 0.018 |

05078520 CYR CREEK NEAR MARCOUX CORNERS, MN (SW5) (LAT 47°48'12"N LONG 096°16'35"W)

| | | | |
|----------|-------|-------|-------|
| OCT 2002 | | | |
| 16.. | E.01 | 0.019 | 0.028 |
| NOV | | | |
| 26.. | <0.02 | 0.009 | 0.023 |
| JAN 2003 | | | |
| 08.. | E.01 | 0.019 | 0.075 |
| APR | | | |
| 01.. | <0.02 | 0.029 | 0.051 |
| 30.. | E.01 | 0.014 | 0.022 |
| JUN | | | |
| 04.. | E.01 | 0.032 | 0.042 |
| 11.. | E.01 | 0.031 | 0.050 |
| JUL | | | |
| 02.. | 0.04 | 0.067 | 0.078 |

05078730 COUNTY DITCH 140 NEAR BENOIT, MN (SW1) (LAT 47°41'15"N LONG 096°22'23"W)

| | | | |
|----------|-------|-------|-------|
| OCT 2002 | | | |
| 16.. | 0.02 | 0.037 | 0.072 |
| NOV | | | |
| 25.. | <0.02 | 0.018 | 0.047 |
| 25.. | <0.02 | 0.019 | 0.050 |
| APR 2003 | | | |
| 01.. | E.02 | 0.037 | 0.148 |
| 29.. | <0.02 | 0.023 | 0.052 |
| JUN | | | |
| 03.. | 0.02 | 0.050 | 0.066 |
| 10.. | <0.02 | 0.012 | 0.030 |
| JUL | | | |
| 01.. | <0.02 | 0.011 | 0.042 |
| AUG | | | |
| 05.. | 0.15 | 0.26 | 0.38 |

WATER QUALITY DATA

GLACIAL RIDGE WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES

| Date | Time | Sample type | Instantaneous discharge, cfs (00061) | Barometric pressure, mm Hg (00025) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | pH, water, unfltrd lab, std units (00403) | Specif. conductance, wat unf 25 deg C (90095) | Specif. conductance, wat unf 25 deg C (00095) | Specif. conductance, wat unf uS/cm 25 deg C (00095) | Temperature, water, deg C (00010) | Calcium water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) |
|------|------|-------------|--------------------------------------|------------------------------------|--------------------------------|---|---|---|---|---|-----------------------------------|------------------------------------|---------------------------------------|
|------|------|-------------|--------------------------------------|------------------------------------|--------------------------------|---|---|---|---|---|-----------------------------------|------------------------------------|---------------------------------------|

05078770 JUDICIAL DITCH 66 NEAR MARCOUX CORNERS, MN (SW6) (LAT 47°46'54"N LONG 096°19'52"W)

| | | | | | | | | | | | | | |
|----------|-------|---------------|------|-----|------|-----|-----|-----|-----|------|------|--------|----|
| OCT 2002 | | | | | | | | | | | | | |
| 16... | 1630 | Environmental | -- | 737 | 12.1 | 8.5 | -- | -- | 524 | 6.3 | -- | -- | -- |
| 16... | 1631 | Blank | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | | | | | |
| 26... | 0845 | Environmental | 1.1 | 751 | 12.4 | 8.0 | 7.8 | 544 | 574 | 0.0 | 69.8 | 30.6 | |
| JAN 2003 | | | | | | | | | | | | | |
| 08... | 0900 | Environmental | 1.3 | 724 | 13.0 | 8.2 | -- | -- | 526 | 0.0 | -- | -- | -- |
| FEB | | | | | | | | | | | | | |
| 20... | 0840 | Environmental | 0.34 | 735 | 11.3 | 7.7 | 7.7 | 554 | 547 | 0.0 | 71.0 | 29.6 | |
| 20... | 0841 | Blank | -- | -- | -- | -- | 7.2 | E4 | -- | -- | E.01 | <0.008 | |
| APR | | | | | | | | | | | | | |
| 01... | 1100 | Environmental | 4.2 | 732 | 11.3 | 7.9 | 7.9 | 552 | 587 | 3.4 | 61.5 | 28.3 | |
| 30... | 0830 | Environmental | 1.9 | 737 | 11.5 | 8.0 | 8.1 | 556 | 579 | 7.3 | 67.8 | 32.0 | |
| JUN | | | | | | | | | | | | | |
| 03... | 1350 | Environmental | 1.2 | 737 | 10.6 | 8.3 | 8.2 | 547 | 561 | 21.4 | 64.1 | 31.2 | |
| 11... | 0830 | Environmental | 17 | 734 | 7.7 | 7.7 | 7.9 | 632 | 652 | 16.6 | 66.1 | 34.7 | |
| JUL | | | | | | | | | | | | | |
| 02... | 0800 | Environmental | 3.5 | 729 | 7.2 | 7.8 | 8.1 | 549 | 579 | 21.2 | 64.2 | 30.9 | |
| AUG | | | | | | | | | | | | | |
| 05... | 1020 | Environmental | 0.50 | 736 | 7.6 | 8.0 | 8.1 | 572 | 593 | 21.0 | 74.1 | 27.9 | |
| SEP | | | | | | | | | | | | | |
| 03... | 1120 | Environmental | 0.04 | 740 | 10.0 | 8.0 | 8.2 | 502 | 533 | 16.8 | 60.2 | 28.0 | |
| 03... | 1125 | Blank | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | 30... | Environmental | 0.19 | 744 | 12.4 | 8.0 | 8.2 | 551 | 587 | 4.6 | 84.2 | 30.5 | |

05079200 COUNTY DITCH 72 (BURNHAM CK) NR. MAPLE BAY (SW3) (LAT 47°38'19"N LONG 096°16'48"W)

| | | | | | | | | | | | | | |
|----------|-------|---------------|------|-----|------|-----|-----|-----|-----|------|------|-------|----|
| OCT 2002 | | | | | | | | | | | | | |
| 16... | 1455 | Environmental | -- | 736 | 11.9 | 8.2 | -- | -- | 644 | 6.5 | -- | -- | -- |
| NOV | | | | | | | | | | | | | |
| 25... | 1400 | Environmental | 0.19 | 742 | 9.1 | 7.6 | 7.4 | 689 | 720 | 0.0 | 103 | 33.3 | |
| MAR 2003 | | | | | | | | | | | | | |
| 31... | 1440 | Environmental | 0.69 | 722 | 10.2 | 8.0 | 7.9 | 459 | 474 | 11.5 | 59.9 | 21.3 | |
| APR | | | | | | | | | | | | | |
| 28... | 1550 | Environmental | 1.4 | 737 | 12.2 | 8.2 | 8.2 | 594 | 641 | 14.4 | 87.0 | 28.4 | |
| JUN | | | | | | | | | | | | | |
| 02... | 1400 | Environmental | 0.35 | 733 | 15.3 | 8.6 | 8.5 | 560 | 562 | 25.2 | 70.8 | 31.2 | |
| 02... | 1401 | Replicate | 0.35 | 733 | 15.3 | 8.6 | 8.4 | 556 | 562 | 25.2 | 71.8 | 30.9 | |
| 02... | 1402 | Blank | -- | -- | -- | -- | 7.3 | E3 | -- | -- | 0.07 | 0.029 | |
| | 10... | Environmental | 21 | 730 | 7.2 | 7.7 | 7.7 | 400 | 407 | 15.9 | 51.6 | 19.0 | |
| JUL | | | | | | | | | | | | | |
| 01... | 1050 | Environmental | 2.8 | 733 | 11.5 | 8.1 | 8.0 | 565 | 592 | 21.3 | 77.2 | 30.3 | |
| AUG | | | | | | | | | | | | | |
| 04... | 1400 | Environmental | 0.08 | 733 | 12.2 | 8.2 | 8.3 | 541 | 564 | 26.2 | 66.7 | 28.9 | |
| SEP | | | | | | | | | | | | | |
| 03... | 0740 | Environmental | 0.02 | 736 | 3.3 | 7.3 | 7.9 | 431 | 449 | 13.6 | 35.5 | 26.2 | |
| 29... | 1400 | Environmental | 0.04 | 739 | 9.7 | 7.7 | 8.1 | 552 | 598 | 9.8 | 84.0 | 28.0 | |

05079250 COUNTY DITCH 65 NEAR MAPLE BAY, MN (SW2) (LAT 47°36'43"N LONG 096°16'46"W)

| | | | | | | | | | | | | | |
|----------|------|---------------|------|-----|-----|-----|-----|-----|-----|-----|------|------|----|
| OCT 2002 | | | | | | | | | | | | | |
| 16... | 1420 | Environmental | -- | 736 | 9.5 | 8.1 | -- | -- | 570 | 5.0 | -- | -- | -- |
| NOV | | | | | | | | | | | | | |
| 25... | 1150 | Environmental | 0.39 | 742 | 9.4 | 7.6 | 7.8 | 647 | 674 | 0.0 | 85.4 | 39.3 | |
| JAN 2003 | | | | | | | | | | | | | |
| 07... | 1230 | Environmental | 0.16 | 730 | 8.8 | 8.4 | -- | -- | 655 | 0.1 | -- | -- | -- |
| FEB | | | | | | | | | | | | | |
| 19... | 1240 | Environmental | 0.02 | 735 | 2.5 | 7.1 | 7.5 | 422 | 430 | 0.0 | 65.6 | 18.8 | |

GLACIAL RIDGE WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES

| Date | Potassium, water, fltrd, mg/L (00935) | Sodium, water, fltrd, mg/L (00930) | Alka-linity, wat flt inc tit field, mg/L as CaCO ₃ (39086) | Bicar-bonate, wat flt inerm. titr., field, mg/L (00453) | Carbon-ate, wat flt inerm. titr., field, mg/L (00452) | Chlor-ide, wat fltrd, mg/L (00940) | Fluor-ide, wat fltrd, mg/L (00950) | Sulfate water, fltrd, mg/L (00945) | Ammonia + org-N, water, fltrd, mg/L as N (00623) | Ammonia + org-N, water, unfltrd, mg/L as N (00625) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + Ammonia water, fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) |
|------|---------------------------------------|------------------------------------|---|---|---|------------------------------------|------------------------------------|------------------------------------|--|--|---|---|---|
|------|---------------------------------------|------------------------------------|---|---|---|------------------------------------|------------------------------------|------------------------------------|--|--|---|---|---|

05078770 JUDICIAL DITCH 66 NEAR MARCOUX CORNERS, MN (SW6) (LAT 47°46'54"N LONG 096°19'52"W)

| | | | | | | | | | | | | | |
|----------|-------|-------|-----|-----|----|-------|------|-------|-------|-------|-------|-------|--------|
| OCT 2002 | | | | | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | 0.35 | 0.39 | <0.04 | 0.69 | 0.010 |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | <0.10 | <0.10 | <0.04 | <0.06 | <0.008 |
| NOV | | | | | | | | | | | | | |
| 26... | 3.77 | 7.75 | -- | -- | -- | 7.50 | -- | 66.2 | 0.36 | 0.33 | 0.05 | 1.04 | 0.014 |
| JAN 2003 | | | | | | | | | | | | | |
| 08... | -- | -- | 213 | 260 | -- | -- | -- | -- | 0.38 | 0.41 | 0.10 | 1.09 | 0.010 |
| FEB | | | | | | | | | | | | | |
| 20... | 4.37 | 7.25 | 237 | 289 | -- | 6.12 | 0.15 | 58.4 | 0.41 | 0.43 | 0.14 | 1.46 | 0.013 |
| 20... | <0.10 | <0.09 | -- | -- | -- | <0.20 | 0.00 | <0.2 | <0.10 | <0.10 | <0.04 | <0.06 | <0.008 |
| APR | | | | | | | | | | | | | |
| 01... | 6.50 | 11.1 | 158 | 193 | -- | 13.0 | 0.12 | 114 | 0.86 | 1.1 | 0.10 | 0.64 | 0.015 |
| 30... | 3.83 | 9.37 | 225 | 274 | -- | 11.1 | -- | 61.8 | 0.60 | 0.69 | <0.04 | 0.16 | <0.008 |
| JUN | | | | | | | | | | | | | |
| 03... | 4.40 | 9.01 | 207 | 252 | 7 | 9.36 | -- | 68.0 | 0.96 | 1.0 | E.03 | <0.06 | E.006 |
| 11... | 3.60 | 16.8 | 225 | 274 | -- | 22.3 | -- | 82.6 | 1.2 | 1.6 | 0.04 | 0.71 | 0.035 |
| JUL | | | | | | | | | | | | | |
| 02... | 3.54 | 10.0 | 218 | 266 | -- | 9.80 | -- | 68.2 | 0.74 | 0.89 | <0.04 | E.04 | E.005 |
| AUG | | | | | | | | | | | | | |
| 05... | 2.93 | 7.63 | 265 | 323 | -- | 7.77 | -- | 41.0 | 0.76 | 0.83 | E.03 | <0.06 | E.005 |
| SEP | | | | | | | | | | | | | |
| 03... | 2.43 | 5.00 | 237 | 289 | 6 | 9.46 | -- | 32.1 | 0.43 | 0.47 | <0.04 | <0.06 | <0.008 |
| 03... | -- | -- | -- | -- | -- | -- | -- | <0.10 | <0.10 | <0.10 | E.02 | <0.06 | <0.008 |
| 30... | 3.16 | 7.12 | 247 | 301 | -- | 8.95 | -- | 53.8 | 0.36 | 0.41 | <0.04 | <0.06 | <0.008 |

05079200 COUNTY DITCH 72 (BURNHAM CK) NR. MAPLE BAY (SW3) (LAT 47°38'9"N LONG 096°16'48"W)

| | | | | | | | | | | | | | |
|----------|-------|-------|-----|-----|----|-------|------|------|-------|-------|-------|-------|--------|
| OCT 2002 | | | | | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | 0.71 | 0.84 | 0.14 | 0.22 | 0.025 |
| NOV | | | | | | | | | | | | | |
| 25... | 2.34 | 8.05 | -- | -- | -- | 12.4 | -- | 64.8 | 0.57 | 0.52 | 0.05 | 0.53 | 0.015 |
| MAR 2003 | | | | | | | | | | | | | |
| 31... | 7.23 | 4.88 | 189 | 231 | -- | 11.7 | 0.12 | 43.8 | 0.81 | 1.0 | E.03 | 0.20 | 0.010 |
| APR | | | | | | | | | | | | | |
| 28... | 3.08 | 6.80 | 284 | 346 | 4 | 13.8 | -- | 42.8 | 0.79 | 0.82 | <0.04 | <0.12 | <0.008 |
| JUN | | | | | | | | | | | | | |
| 02... | 0.80 | 7.58 | 233 | 284 | 10 | 11.1 | -- | 56.4 | 0.97 | 1.0 | <0.04 | <0.06 | <0.008 |
| 02... | 0.74 | 7.68 | 235 | 287 | 12 | 11.1 | -- | 56.2 | 0.96 | 1.0 | <0.04 | <0.06 | <0.008 |
| 02... | <0.16 | <0.10 | -- | -- | -- | <0.20 | -- | <0.2 | <0.10 | <0.10 | <0.04 | <0.06 | <0.008 |
| 10... | 1.70 | 4.24 | 161 | 196 | -- | 6.92 | -- | 36.1 | 0.93 | 1.1 | E.03 | <0.06 | <0.008 |
| JUL | | | | | | | | | | | | | |
| 01... | 2.15 | 6.54 | 268 | 327 | 4 | 9.74 | -- | 41.7 | 1.4 | 1.4 | <0.04 | <0.06 | <0.008 |
| AUG | | | | | | | | | | | | | |
| 04... | 2.75 | 10.5 | 262 | 320 | 7 | 14.4 | -- | 20.9 | 1.2 | 1.2 | <0.04 | <0.06 | <0.008 |
| SEP | | | | | | | | | | | | | |
| 03... | 3.28 | 13.0 | 149 | 182 | -- | 27.7 | -- | 36.8 | 0.88 | 0.89 | <0.04 | <0.06 | <0.008 |
| 29... | 1.63 | 10.4 | 257 | 314 | -- | 16.4 | -- | 33.9 | 0.43 | 0.54 | <0.04 | <0.06 | <0.008 |

05079250 COUNTY DITCH 65 NEAR MAPLE BAY, MN (SW2) (LAT 47°36'43"N LONG 096°16'46"W)

| | | | | | | | | | | | | | |
|----------|------|------|-----|-----|----|------|------|------|------|------|-------|-------|--------|
| OCT 2002 | | | | | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | 0.60 | 0.62 | <0.04 | <0.06 | <0.008 |
| NOV | | | | | | | | | | | | | |
| 25... | 3.60 | 8.90 | -- | -- | -- | 9.23 | -- | 13.1 | 0.73 | 0.72 | <0.04 | E.05 | <0.008 |
| JAN 2003 | | | | | | | | | | | | | |
| 07... | -- | -- | 346 | 422 | -- | -- | -- | -- | 0.76 | 0.78 | 0.29 | 0.10 | 0.011 |
| FEB | | | | | | | | | | | | | |
| 19... | 1.19 | 2.30 | 225 | 278 | -- | 0.94 | 0.17 | 6.7 | 0.55 | 0.62 | 0.33 | <0.06 | <0.008 |

WATER QUALITY DATA

GLACIAL RIDGE WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES

| Date | Ortho-phosphate, water, fltrd, mg/L as P (00671) | Phos-phorus, water, fltrd, mg/L (00666) | Phos-phorus, water, unfltrd mg/L (00665) |
|------|---|---|--|
|------|---|---|--|

05078770 JUDICIAL DITCH 66 NEAR MARCOUX CORNERS, MN (SW6) (LAT 47°46'54"N LONG 096°19'52"W)

| | OCT 2002 | | |
|----------|----------|-------|--------|
| | 16... | <0.02 | 0.006 |
| | 16... | <0.02 | <0.004 |
| NOV | 26... | <0.02 | E.004 |
| JAN 2003 | 08... | <0.02 | 0.005 |
| FEB | 20... | <0.02 | 0.012 |
| | 20... | <0.02 | <0.004 |
| APR | 01... | <0.02 | 0.019 |
| | 30... | <0.02 | 0.008 |
| JUN | 03... | <0.02 | 0.011 |
| | 11... | E.01 | 0.027 |
| JUL | 02... | <0.02 | 0.021 |
| AUG | 05... | <0.09 | 0.018 |
| SEP | 03... | <0.02 | 0.007 |
| | 03... | <0.02 | <0.004 |
| | 30... | <0.02 | 0.006 |

05079200 COUNTY DITCH 72 (BURNHAM CK) NR. MAPLE BAY (SW3) (LAT 47°38' 9"N LONG 096°16'48"W)

| | OCT 2002 | | |
|----------|----------|-------|--------|
| | 16... | <0.02 | 0.011 |
| NOV | 25... | <0.02 | 0.007 |
| MAR 2003 | 31... | <0.02 | 0.023 |
| APR | 28... | <0.02 | 0.010 |
| JUN | 02... | <0.02 | 0.013 |
| | 02... | 0.06 | 0.013 |
| | 02... | <0.02 | <0.004 |
| | 10... | <0.02 | 0.015 |
| JUL | 01... | <0.02 | 0.023 |
| AUG | 04... | <0.09 | 0.025 |
| SEP | 03... | <0.02 | 0.021 |
| | 29... | <0.02 | 0.010 |

05079250 COUNTY DITCH 65 NEAR MAPLE BAY, MN (SW2) (LAT 47°36'43"N LONG 096°16'46"W)

| | OCT 2002 | | |
|----------|----------|-------|-------|
| | 16... | <0.02 | 0.006 |
| NOV | 25... | <0.02 | 0.008 |
| JAN 2003 | 07... | <0.02 | E.004 |
| FEB | 19... | <0.02 | E.003 |

GLACIAL RIDGE WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES

| Date | Time | Sample type | Instantaneous discharge, cfs (00061) | Barometric pressure, mm Hg (00025) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | pH, water, unfltrd lab, std units (00403) | Specif. conductance, wat unf 25 deg C (90095) | Specif. conductance, wat unf 25 deg C (00095) | Temper-ature, water, deg C (00010) | Calcium water, fltrd, mg/L (00915) | Magnes-ium, water, fltrd, mg/L (00925) |
|---|--|--|---|--|---|--|---|---|---|--|---|--|
| 05079250 COUNTY DITCH 65 NEAR MAPLE BAY, MN (SW2) (LAT 47°36'43"N LONG 096°16'46"W) | | | | | | | | | | | | |
| MAR 2003 31... | 1150 | Environmental | 1.2 | 723 | 9.4 | 7.7 | 7.6 | 352 | 355 | 5.1 | 42.0 | 17.1 |
| APR 29... | 0950 | Environmental | 2.2 | 741 | 8.6 | 7.8 | 8.0 | 554 | 580 | 7.8 | 71.8 | 31.9 |
| JUN 03... | 0830 | Environmental | 9.6 | 735 | 4.9 | 7.4 | 7.5 | 433 | 446 | 15.7 | 54.0 | 21.4 |
| JUN 10... | 1220 | Environmental | 37 | 730 | 5.2 | 7.4 | 7.8 | E418 | 442 | 15.4 | 50.2 | 23.9 |
| JUL 01... | 0830 | Environmental | 9.9 | 734 | 4.7 | 7.4 | 7.6 | 437 | 459 | 18.8 | 55.0 | 25.8 |
| AUG 04... | 1220 | Environmental | 0.05 | 734 | 7.0 | 7.5 | 7.8 | 562 | 591 | 23.2 | 73.9 | 28.7 |
| SEP 29... | 1200 | Environmental | 0.02 | 739 | 8.8 | 7.4 | 7.8 | 536 | 578 | 8.3 | 83.6 | 29.4 |
| 05079250 COUNTY DITCH 65 NEAR MAPLE BAY, MN (SW2) (LAT 47°36'43"N LONG 096° 6'46"W) | | | | | | | | | | | | |
| Date | Potassium, water, fltrd, mg/L (00935) | Sodium, water, fltrd, mg/L as CaCO ₃ (00930) | Alka-linity, wat flt inc tit incr. field, titr., mg/L as CaCO ₃ (39086) | Bicar-bonate, wat flt Chlor-ide, water, fltrd, mg/L (00453) | Fluor-ide, water, fltrd, mg/L (00940) | Sulfate water, fltrd, mg/L (00950) | Ammonia + org-N, water, fltrd, mg/L as N (00945) | Ammonia + org-N, water, unfltrd, mg/L as N (00623) | Ammonia water, fltrd, mg/L as N (00625) | Nitrite + nitrate water, fltrd, mg/L as N (00608) | Nitrite water, fltrd, mg/L as N (00631) | Ortho-phosphate, water, fltrd, mg/L as P (00671) |
| MAR 2003 31... | 6.44 | 4.17 | 160 | 195 | 5.95 | 0.14 | 18.6 | 0.64 | 0.93 | E.03 | 0.07 | E.006 <0.02 |
| APR 29... | 4.61 | 9.09 | 338 | 413 | 8.39 | -- | 20.7 | 0.83 | 0.89 | <0.04 | <0.12 | <0.008 <0.02 |
| JUN 03... | 6.94 | 4.10 | 212 | 259 | 7.47 | -- | 2.4 | 1.3 | 1.5 | <0.04 | <0.06 | <0.008 <0.02 |
| JUN 10... | 3.30 | 6.47 | 222 | 271 | 5.28 | -- | 11.2 | 1.2 | 1.4 | <0.04 | E.05 | E.004 <0.02 |
| JUL 01... | 2.24 | 4.95 | 235 | 287 | 3.82 | -- | 6.1 | 1.1 | 1.1 | <0.04 | <0.06 | <0.008 <0.02 |
| AUG 04... | 1.70 | 8.21 | 312 | 381 | 4.54 | -- | 3.5 | 0.96 | 1.0 | <0.04 | <0.06 | <0.008 <0.09 |
| SEP 29... | 1.83 | 6.33 | 289 | 353 | 3.88 | -- | 19.3 | 0.49 | 0.58 | <0.04 | <0.06 | <0.008 <0.02 |
| 05079250 COUNTY DITCH 65 NEAR MAPLE BAY, MN (SW2) (LAT 47°36'43"N LONG 096°16'46"W) | | | | | | | | | | | | |
| Date | | | | Phos-phorus, water, fltrd, mg/L (00666) | Phos-phorus, water, unfltrd, mg/L (00665) | | | | | | | |
| MAR 2003 31... | | | | 0.022 | 0.071 | | | | | | | |
| APR 29... | | | | 0.011 | 0.022 | | | | | | | |
| JUN 03... | | | | 0.026 | 0.040 | | | | | | | |
| JUN 10... | | | | 0.026 | 0.073 | | | | | | | |
| JUL 01... | | | | 0.018 | 0.028 | | | | | | | |
| AUG 04... | | | | 0.015 | 0.035 | | | | | | | |
| SEP 29... | | | | 0.007 | 0.015 | | | | | | | |