

UPPER MISSISSIPPI RIVER MAIN STEM--Continued
 05287890 ELM CREEK NEAR CHAMPLIN, MN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1988 to current year.

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

| Date | Time | Sample type | Medium code | GAGE HEIGHT (FEET) (00065) | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (MG/L) (00300) | OXYGEN, (PER-CENT SATUR-ATION) (00301) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) |
|-----------|------|------------------|-------------|----------------------------|-------------------------------------------------|------------------------------------------|-----------------------------------|----------------------------------------|------------------------------------------------|---------------------------------------------|-----------------------------------------|----------------------------------|------------------------------------|
| OCT 22... | 1200 | ENVIRONMENTAL | | 3.47 | 2.5 | 738 | 7.3 | 61 | 7.6 | -- | 586 | 16.0 | 6.4 |
| NOV 19... | 1100 | ENVIRONMENTAL | | 3.38 | 2.6 | 744 | 4.7 | 38 | 7.8 | -- | 640 | 3.3 | 5.6 |
| DEC 19... | 1015 | ENVIRONMENTAL | | 3.90 | 13 | 742 | 11.8 | 83 | 7.8 | -- | 548 | 2.0 | .2 |
| JAN 24... | 1030 | ENVIRONMENTAL | | 3.48 | 5.0 | 741 | 10.9 | 77 | 7.7 | -- | 714 | -5.0 | .3 |
| FEB 13... | 1035 | ENVIRONMENTAL | | 3.19 | 1.2 | 745 | 11.2 | 79 | 8.2 | -- | 770 | 3.0 | .4 |
| MAR 26... | 1040 | ENVIRONMENTAL | | 3.68 | 8.1 | 750 | 12.0 | 88 | 8.6 | -- | 792 | 5.0 | 2.0 |
| MAR 28-29 | 0100 | COMPOSITE (TIME) | | -- | -- | -- | -- | -- | 7.4 | -- | 411 | -- | -- |
| APR 02-02 | 1221 | COMPOSITE (TIME) | | -- | -- | -- | -- | -- | 7.8 | -- | 440 | -- | -- |
| APR 10-13 | 2327 | COMPOSITE (TIME) | | -- | -- | -- | -- | -- | 7.9 | -- | 490 | -- | -- |
| APR 18... | 1230 | ENVIRONMENTAL | | 7.31 | 183 | 729 | 7.2 | 75 | 7.3 | -- | 550 | 19.0 | 15.3 |
| MAY 05-08 | 2004 | COMPOSITE (TIME) | | -- | -- | -- | -- | -- | 7.8 | -- | 519 | -- | -- |
| MAY 08-11 | 2235 | COMPOSITE (TIME) | | -- | -- | -- | -- | -- | -- | 452 | -- | -- | -- |
| JUN 11-12 | 0102 | COMPOSITE (TIME) | | -- | -- | -- | -- | -- | 8.0 | -- | 490 | -- | -- |
| JUN 12... | 0950 | ENVIRONMENTAL | | 4.97 | 54 | 742 | 5.8 | 66 | 7.5 | -- | 493 | 21.0 | 20.0 |
| JUN 21-24 | 0741 | COMPOSITE (TIME) | | -- | -- | -- | -- | -- | 7.7 | -- | 368 | -- | -- |
| JUL 23... | 1030 | ENVIRONMENTAL | | 5.24 | 63 | 749 | 4.7 | 54 | 7.3 | -- | 436 | 21.0 | 21.0 |
| JUL 25-28 | 1043 | COMPOSITE (TIME) | | -- | -- | -- | -- | -- | 8.2 | -- | 417 | -- | -- |
| AUG 20... | 1400 | ENVIRONMENTAL | | 4.78 | 45 | 743 | 6.8 | 76 | 7.2 | -- | 418 | 27.5 | 20.0 |
| AUG 20... | 1402 | BLANK | | -- | -- | -- | -- | -- | -- | <3 | -- | -- | -- |
| AUG 21-23 | 0407 | COMPOSITE (TIME) | | -- | -- | -- | -- | -- | 7.9 | 326 | 343 | -- | -- |

UPPER MISSISSIPPI RIVER MAIN STEM--Continued

05287890 ELM CREEK NEAR CHAMPLIN, MN--Continued

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

| Date | CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940) | RESIDUE TOTAL AT 105 DEG. C, PENDEDED (MG/L) (00530) | RESIDUE VOLA- TILE, SUS- PENDEDED (MG/L) (00535) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | 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) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340) | Data base number |
|--------------|-------------------------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------|------------------------|
| OCT 22... | 26.1 | <10 | <10 | <.04 | .59 | .12 | .008 | E.05 | .10 | 20 | 01 |
| NOV 19... | 24.3 | <10 | <10 | .05 | .51 | .07 | E.004 | E.04 | .07 | 10 | 01 |
| DEC 19... | 55.6 | 10 | <10 | E.02 | 1.2 | .18 | E.006 | E.05 | .10 | 30 | 01 |
| JAN 24... | 61.0 | <10 | <10 | .13 | .97 | .07 | <.008 | E.03 | .07 | 30 | 01 |
| FEB 13... | 75.2 | <10 | <10 | E.02 | .80 | E.11 | <.008 | <.06 | .07 | 20 | 01 |
| MAR 26... | 109 | <10 | <10 | .07 | .98 | .11 | <.008 | <.06 | .07 | 30 | 01 |
| MAR 28-29 | 59.4 | 36 | -- | .25 | 1.6 | .89 | .024 | .18 | .34 | 40 | 01 |
| APR 02-02 | 56.1 | 62 | -- | .23 | 2.1 | 1.31 | .030 | .17 | .41 | 50 | 01 |
| APR 10-13 | 62.3 | 27 | -- | .08 | 1.4 | 1.14 | .023 | .10 | .18 | 30 | 01 |
| APR 18... | 64.0 | 17 | <10 | <.04 | 1.3 | .48 | .017 | .07 | .13 | 30 | 01 |
| MAY 05-08 | 66.4 | 40 | -- | <.04 | 1.3 | <.05 | .071 | .09 | .18 | 30 | 01 |
| MAY 08-11 | 57.6 | 37 | -- | <.04 | 1.2 | .52 | .016 | .10 | .19 | 40 | 01 |
| JUN 11-12 | 49.0 | <10 | -- | <.04 | 1.3 | .14 | .015 | .22 | .30 | 90 | 01 |
| JUN 12... | 51.2 | <10 | <10 | <.04 | 1.2 | .27 | .018 | .22 | .31 | 40 | 01 |
| JUN 21-24 | 36.0 | 50 | -- | .04 | 1.3 | .59 | .033 | .24 | .36 | 40 | 01 |
| JUL 23... | 30.1 | 54 | <10 | <.04 | 1.5 | .22 | .065 | .25 | .44 | 40 | 01 |
| JUL 25-28 | 29.2 | <10 | -- | .07 | 1.3 | .17 | .036 | .19 | .33 | 40 | 01 |
| AUG 20... | 27.8 | <10 | <10 | .09 | 1.1 | .79 | <.008 | .13 | .20 | 40 | 01 |
| AUG 20... | <.30 | <10 | <10 | <.04 | <.10 | <.05 | <.008 | <.06 | <.06 | <10 | 77 |
| AUG 21-23 | 25.3 | <10 | -- | .05 | 1.2 | .15 | .013 | .15 | .28 | 30 | 01 |

