

HEADWATER DIVERSION CHANNEL BASIN

07020200 PICKLE CREEK AT HAWN STATE PARK  
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°50'05", long 90°13'48, in NE 1/4 NW 1/4 sec.14 T.36 N., R.7 E., Ste. Genevieve County, at foot bridge on walking trail 200 ft downstream from camping area in Hawn State Park.

PERIOD OF RECORD.--November 1992 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

| DATE     | TIME | DIS-CHARGE, INST. (CUBIC FEET PER SECOND) (00061) | TEMPERATURE WATER (DEG C) (00010) | SPECIFIC CONDUCTANCE (µS/cm) (00095) | PH WATER WHOLE FIELD (STANDARD UNITS) (00400) | OXYGEN, DIS-SOLVED (mg/L) (00300) | OXYGEN DEMAND, DIS-SOLVED (PERCENT (HIGH LEVEL) (mg/L) (00301) | OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (mg/L) (00340) | COLIFORMS, 0.7 µm-MF (COLS./100 mL) (31625) | STREPTOCOCCI, FECAL, KF AGAR (COLS. PER 100 mL) (31673) | ALKALINITY WAT TOT FIELD (mg/L as CaCO <sub>3</sub> ) (00410) |
|----------|------|---|-----------------------------------|--------------------------------------|---|-----------------------------------|--|---|---|---|---|
| NOV 1996 |      |   |                                   |                                      |   |                                   |  |   |   |   |   |
| 13...    | 0815 | 2.2   | 4.5                               | 55                                   | 7.04  | 11.1                              | 85   | --  | 10  | 41  | 14  |
| JAN 1997 |      |   |                                   |                                      |   |                                   |  |   |   |   |   |
| 28...    | 0750 | 2.0   | 0.5                               | 48                                   | 6.09  | 13.4                              | 91   | 14  | K9  | 96  | 3   |
| MAR      |      |   |                                   |                                      |   |                                   |  |   |   |   |   |
| 10...    | 1635 | 20  | 10.0                              | 39                                   | 5.63  | 11.1                              | 98   | --  | 0   | K9  | 4   |
| APR      |      |   |                                   |                                      |   |                                   |  |   |   |   |   |
| 01...    | 1520 | 15  | 12.0                              | 49                                   | 6.32  | 11.9                              | 109  | --  | K7  | 22  | 7   |
| JUN      |      |   |                                   |                                      |   |                                   |  |   |   |   |   |
| 18...    | 1800 | 13  | 21.5                              | 38                                   | 6.88  | 8.50                              | 96   | 40  | 135   | 160   | 8   |
| AUG      |      |   |                                   |                                      |   |                                   |  |   |   |   |   |
| 21...    | 1025 | 1.6   | 20.0                              | 57                                   | 7.14  | 8.50                              | 92   | --  | 30  | 205   | 21  |

  

| DATE     | BICARBONATE WATER WH IT FIELD (mg/L as HCO <sub>3</sub> ) (00450) | CARBONATE WATER WH IT FIELD (mg/L as CO <sub>3</sub> ) (00447) | NITROGEN, NO <sub>2</sub> +NO <sub>3</sub> TOTAL (mg/L as N) (00630) | NITROGEN, NITRITE TOTAL (mg/L as N) (00615) | NITROGEN, AMMONIA TOTAL (mg/L as N) (00610) | NITROGEN, AMMONIA + ORGANIC TOTAL (mg/L as N) (00625) | PHOSPHORUS TOTAL (mg/L as P) (00665) | PHOSPHORUS ORTHO TOTAL (mg/L as P) (70507) | HARDNESS TOTAL (mg/L as CaCO <sub>3</sub> ) (00900) | CALCIUM DIS-SOLVED (mg/L as Ca) (00915) |
|----------|---|--|--|---|---|---|--------------------------------------|--|---|---|
| NOV 1996 |   |  |  |   |   |   |                                      |  |   |   |
| 13...    | 15  | 0  | <0.020   | <0.010                                      | <0.010                                      | 0.23  | <0.020                               | <0.010                                     | --  | --                                      |
| JAN 1997 |   |  |  |   |   |   |                                      |  |   |   |
| 28...    | 3   | 0  | 0.030  | <0.010                                      | 0.010                                       | <0.20   | <0.020                               | <0.010                                     | 15  | 2.6                                     |
| MAR      |   |  |  |   |   |   |                                      |  |   |   |
| 10...    | 6   | 0  | <0.020   | <0.010                                      | <0.010                                      | <0.20   | 0.060                                | 0.010                                      | --  | --                                      |
| APR      |   |  |  |   |   |   |                                      |  |   |   |
| 01...    | 8   | 0  | <0.020   | <0.010                                      | <0.010                                      | <0.20   | <0.020                               | <0.010                                     | --  | --                                      |
| JUN      |   |  |  |   |   |   |                                      |  |   |   |
| 18...    | 7   | 0  | <0.020   | <0.010                                      | 0.020                                       | 0.34  | <0.020                               | <0.010                                     | 16  | 3.2                                     |
| AUG      |   |  |  |   |   |   |                                      |  |   |   |
| 21...    | 24  | 0  | <0.020   | <0.010                                      | 0.020                                       | <0.20   | <0.020                               | 0.010                                      | --  | --                                      |

  

| DATE     | MAGNESIUM, DIS-SOLVED (mg/L as Mg) (00925) | SODIUM, DIS-SOLVED (mg/L as Na) (00930) | POTASSIUM, DIS-SOLVED (mg/L as K) (00935) | SULFATE DIS-SOLVED (mg/L as SO <sub>4</sub> ) (00945) | CHLORIDE, DIS-SOLVED (mg/L as Cl) (00940) | FLUORIDE, DIS-SOLVED (mg/L as F) (00950) | SOLIDS, RESIDUE AT 180 DEG. C (70300) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (mg/L) (00530) | ALUMINUM, TOTAL RECOVERABLE (µg/L as Al) (01105) | ALUMINUM, DIS-SOLVED (µg/L as Al) (01106) |
|----------|--|---|---|---|---|--|---------------------------------------|--|--|---|
| JAN 1997 |  |   |   |   |   |  |                                       |  |  |   |
| 28...    | 2.0  | 1.5                                     | 1.0                                       | 11  | 3.9                                       | <0.10                                    | 48                                    | 3  | 150  | 120                                       |
| JUN      |  |   |   |   |   |  |                                       |  |  |   |
| 18...    | 2.0  | 1.3                                     | 0.80                                      | 8.9   | 0.90                                      | <0.10                                    | 44                                    | 2  | 160  | 83  |

  

| DATE     | CADMIUM TOTAL RECOVERABLE (µg/L as Cd) (01027) | CADMIUM DIS-SOLVED (µg/L as Cd) (01025) | COPPER, DIS-SOLVED (µg/L as Cu) (01040) | IRON, DIS-SOLVED (µg/L as Fe) (01046) | LEAD, TOTAL RECOVERABLE (µg/L as Pb) (01051) | LEAD, DIS-SOLVED (µg/L as Pb) (01049) | MANGANESE, DIS-SOLVED (µg/L as Mn) (01056) | MERCURY TOTAL RECOVERABLE (µg/L as Hg) (71900) | ZINC, TOTAL RECOVERABLE (µg/L as Zn) (01092) | ZINC, DIS-SOLVED (µg/L as Zn) (01090) |
|----------|--|---|---|---------------------------------------|--|---------------------------------------|--|--|--|---------------------------------------|
| JAN 1997 |  |   |   |                                       |  |                                       |  |  |  |                                       |
| 28...    | <1   | <1.0                                    | <1.0                                    | 150                                   | <1   | <1.0                                  | 54   | <0.10  | 6  | 5.5                                   |
| JUN      |  |   |   |                                       |  |                                       |  |  |  |                                       |
| 18...    | <1   | <1.0                                    | <1.0                                    | 190                                   | <1   | <1.0                                  | 24   | <0.10  | 2  | 2.5                                   |

K--Results based on colony count outside the acceptable range (non-ideal colony count).