

0209684980 CANE CREEK RESERVOIR AT DAM NEAR WHITE CROSS, NC

LOCATION.--Lat 35°56'59", long 79°14'29", Orange County, Hydrologic Unit 03030002, at Orange Water and Sewage Authority intakes, 0.7 mi above State Highway 54, and 3.6 mi northwest of White Cross.

DRAINAGE AREA.--31.4 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1989 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Samples for nutrient and chlorophyll a and b analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE  | TIME | SAMPLING DEPTH (M)<br>(00098) | SPECIFIC CONDUCTANCE (US/CM)<br>(00095) | PH WATER WHOLE FIELD (STANDARD UNITS)<br>(00400) | TEMPERATURE WATER (DEG C)<br>(00010) | COLOR (PLAT-INUM-COBALT UNITS)<br>(00080) | BAROMETRIC PRESURE (MM HG)<br>(00025) | TRANSPARENCY (SECCHI DISK) (M)<br>(00078) | OXYGEN, DIS-SOLVED (PERCENT SATURATION)<br>(00300) | OXYGEN, DIS-SOLVED (MG/L)<br>(00301) | HARDNESS TOTAL (MG/L AS CaCO3)<br>(00900) | CALCIUM DIS-SOLVED (MG/L AS Ca)<br>(00915) | MAGNESIUM, DIS-SOLVED (MG/L AS Mg)<br>(00925) |
|-------|------|-------------------------------|---|--|--------------------------------------|---|---------------------------------------|---|--|--------------------------------------|---|--|---|
| OCT   |      |                               |   |  |                                      |   |                                       |   |  |                                      |   |  |   |
| 30... | 1220 | 1.0                           | 66                                      | 6.9  | 17.6                                 | 25  | 755                                   | .80                                       | 6.1  | 64                                   | 24  | 5.78                                       | 2.37  |
| 30... | 1221 | 7.0                           | 103                                     | 6.7  | 14.6                                 | --  | 755                                   | --  | .2   | 2                                    | --  | --   | --  |
| 30... | 1222 | 13.9                          | 143                                     | 6.8  | 9.8                                  | --  | 755                                   | --  | .6   | 5                                    | --  | --   | --  |
| APR   |      |                               |   |  |                                      |   |                                       |   |  |                                      |   |  |   |
| 20... | 0845 | 1.0                           | 67                                      | 6.5  | 14.6                                 | 40  | 758                                   | .90                                       | 8.5  | 84                                   | 22  | 5.07                                       | 2.16  |
| 20... | 0850 | 7.0                           | 67                                      | 5.8  | 10.3                                 | --  | 758                                   | --  | 4.3  | 38                                   | --  | --   | --  |
| 20... | 0855 | 14.0                          | 74                                      | 5.9  | 9.3                                  | --  | 758                                   | --  | 3.1  | 27                                   | --  | --   | --  |
| JUN   |      |                               |   |  |                                      |   |                                       |   |  |                                      |   |  |   |
| 26... | 0930 | 1.0                           | 77                                      | 8.9  | 27.9                                 | 8   | 768                                   | 1.20                                      | 7.4  | 94                                   | 25  | 5.90                                       | 2.40  |
| 26... | 0935 | 7.0                           | 76                                      | 6.2  | 11.0                                 | --  | 768                                   | --  | .3   | 2                                    | --  | --   | --  |
| 26... | 0940 | 14.0                          | 163                                     | 7.1  | 10.4                                 | --  | 768                                   | --  | .4   | 3                                    | --  | --   | --  |
| AUG   |      |                               |   |  |                                      |   |                                       |   |  |                                      |   |  |   |
| 28... | 1145 | 1.0                           | 77                                      | 8.8  | 28.9                                 | <1  | 756                                   | 1.20                                      | 8.4  | 110                                  | 25  | 5.94                                       | 2.58  |
| 28... | 1150 | 6.0                           | 81                                      | 6.4  | 12.7                                 | --  | 756                                   | --  | .1   | 0                                    | --  | --   | --  |
| 28... | 1155 | 13.3                          | 133                                     | 6.9  | 9.7                                  | --  | 756                                   | --  | .1   | 1                                    | --  | --   | --  |

| DATE  | SODIUM, DIS-SOLVED (MG/L AS Na)<br>(00930) | SODIUM PERCENT (00932) | SODIUM AD-SORPTION RATIO (00931) | POTASSIUM, DIS-SOLVED (MG/L AS K)<br>(00935) | BICARBONATE, DIS-SOLVED (MG/L AS HCO3)<br>(99440) | ANC WATER UNFLTRD IT FIELD (MG/L AS CaCO3)<br>(00419) | SULFATE DIS-SOLVED (MG/L AS SO4)<br>(00945) | CHLORIDE, DIS-SOLVED (MG/L AS CL)<br>(00940) | FLUORIDE, DIS-SOLVED (MG/L AS F)<br>(00950) | SILICA, DIS-SOLVED (MG/L AS SiO2)<br>(00955) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)<br>(70300) | NITROGEN, NITRITE DIS-SOLVED (MG/L AS N)<br>(00613) | NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)<br>(00631) |
|-------|--|------------------------|----------------------------------|--|---|---|---|--|---|--|--|---|---|
| OCT   |  |                        |                                  |  |   |   |   |  |   |  |  |   |   |
| 30... | 3.2  | 20                     | .3                               | 2.72   | 27  | 22  | 2.4   | 4.7  | <.2   | 8.4  | 53   | .001  | .011  |
| 30... | --   | --                     | --                               | --   | --  | --  | --  | --   | --  | --   | --   | --  | --  |
| 30... | --   | --                     | --                               | --   | --  | --  | --  | --   | --  | --   | --   | --  | --  |
| APR   |  |                        |                                  |  |   |   |   |  |   |  |  |   |   |
| 20... | 3.4  | 23                     | .3                               | 2.10   | 38  | 31  | 4.6   | 4.7  | <.2   | 6.6  | 50   | .005  | .411  |
| 20... | --   | --                     | --                               | --   | --  | --  | --  | --   | --  | --   | --   | .003  | .493  |
| 20... | --   | --                     | --                               | --   | --  | --  | --  | --   | --  | --   | --   | .003  | .575  |
| JUN   |  |                        |                                  |  |   |   |   |  |   |  |  |   |   |
| 26... | 4.0  | 24                     | .4                               | 2.10   | 26  | 21  | 3.8   | 5.2  | <.2   | 2.5  | 54   | <.001   | <.005   |
| 26... | --   | --                     | --                               | --   | --  | --  | --  | --   | --  | --   | --   | .003  | .164  |
| 26... | --   | --                     | --                               | --   | --  | --  | --  | --   | --  | --   | --   | .002  | .028  |
| AUG   |  |                        |                                  |  |   |   |   |  |   |  |  |   |   |
| 28... | 3.9  | 23                     | .3                               | 2.21   | 27  | 22  | 3.5   | 5.2  | E.1   | 4.9  | 62   | <.001   | .005  |
| 28... | --   | --                     | --                               | --   | --  | --  | --  | --   | --  | --   | --   | <.001   | .006  |
| 28... | --   | --                     | --                               | --   | --  | --  | --  | --   | --  | --   | --   | .001  | .006  |

| DATE  | NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)<br>(00608) | NITROGEN, ORGANIC TOTAL (MG/L AS N)<br>(00605) | NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)<br>(00625) | NITROGEN, TOTAL (MG/L AS N)<br>(00600) | PHOSPHORUS, TOTAL (MG/L AS P)<br>(00665) | PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)<br>(00671) | CHLOROPHYLL-A (UG/L FLUOROM)<br>(70953) | CHLOROPHYLL-B (UG/L FLUOROM)<br>(70954) | ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)<br>(01105) | ARSENIC TOTAL (UG/L AS AS)<br>(01002) | CADMIUM, WATER UNFLTRD TOTAL (UG/L AS Cd)<br>(01027) | CHROMIUM, TOTAL RECOVERABLE (UG/L AS Cr)<br>(01034) | COBALT, TOTAL RECOVERABLE (UG/L AS Co)<br>(01037) |
|-------|---|--|--|--|--|--|---|---|---|---------------------------------------|--|---|---|
| OCT   |   |  |  |  |  |  |   |   |   |                                       |  |   |   |
| 30... | .007  | .93  | .94  | .95                                    | <.060                                    | <.007  | 5.6                                     | <.1                                     | E17   | <2                                    | <.11   | 4   | <2  |
| 30... | --  | --   | --   | --                                     | --                                       | --   | --                                      | --                                      | --  | --                                    | --   | --  | --  |
| 30... | --  | --   | --   | --                                     | --                                       | --   | --                                      | --                                      | --  | --                                    | --   | --  | --  |
| APR   |   |  |  |  |  |  |   |   |   |                                       |  |   |   |
| 20... | .005  | .53  | .54  | .95                                    | E.037                                    | E.004  | 1.3                                     | <.1                                     | 126   | <2                                    | <.11   | <1  | <2  |
| 20... | .031  | .45  | .49  | .98                                    | E.053                                    | .022   | --                                      | --                                      | --  | --                                    | --   | --  | --  |
| 20... | .126  | .51  | .64  | 1.2                                    | .074                                     | .027   | --                                      | --                                      | --  | --                                    | --   | --  | --  |
| JUN   |   |  |  |  |  |  |   |   |   |                                       |  |   |   |
| 26... | .004  | .50  | .50  | --                                     | <.060                                    | <.007  | 2.5                                     | <.1                                     | --  | --                                    | --   | --  | --  |
| 26... | .061  | .45  | .51  | .68                                    | <.060                                    | <.007  | --                                      | --                                      | --  | --                                    | --   | --  | --  |
| 26... | .510  | .50  | 1.0  | 1.0                                    | E.045                                    | .013   | --                                      | --                                      | --  | --                                    | --   | --  | --  |
| AUG   |   |  |  |  |  |  |   |   |   |                                       |  |   |   |
| 28... | .008  | .40  | .41  | .41                                    | <.060                                    | <.007  | 3.5                                     | E.1                                     | --  | --                                    | --   | --  | --  |
| 28... | .098  | .41  | .51  | .52                                    | E.031                                    | E.006  | --                                      | --                                      | --  | --                                    | --   | --  | --  |
| 28... | 1.21  | .37  | 1.6  | 1.6                                    | .121                                     | .089   | --                                      | --                                      | --  | --                                    | --   | --  | --  |



0209684980 CANE CREEK RESERVOIR AT DAM NEAR WHITE CROSS, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE      | 1,2-DI-CHLORO-PROPANE<br>TOTAL<br>(UG/L)<br>(34541) | TRANS-1,2-DI-CHLORO-ETHENE<br>TOTAL<br>(UG/L)<br>(34546) | HEXA-CHLORO-BUT-ADIENE<br>TOTAL<br>(UG/L)<br>(39702) | ETHANE-HEXA-CHLORO-WATER UNFLTRD RECOVER<br>(UG/L)<br>(34396) | NAPHTH-ALENE<br>TOTAL<br>(UG/L)<br>(34696) | BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC<br>(UG/L)<br>(34551) | BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC<br>(UG/L)<br>(34566) | BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC<br>(UG/L)<br>(34571) | 1,2-DIBROMO-ETHANE WHOLE<br>TOTAL<br>(UG/L)<br>(77651) | SI-MAZINE, WATER, DISS, REC<br>(UG/L)<br>(04035) | PRO-METON, WATER, DISS, REC<br>(UG/L)<br>(04037) | DEETHYL-ATRA-ZINE, WATER, DISS, REC<br>(UG/L)<br>(04040) | CYANA-ZINE, WATER, DISS, REC<br>(UG/L)<br>(04041) |
|-----------|---|--|--|---|--|---|--|--|--|--|--|--|---|
| OCT 30... | --  | --   | --   | --  | --   | --  | --   | --   | --   | --   | --   | --   | --  |
| APR 20... | --  | --   | --   | --  | --   | --  | --   | --   | --   | --   | --   | --   | --  |
| JUN 26... | <.03  | <.03   | <.1  | <.2   | <.2  | <.2   | <.03   | <.05   | <.04   | E.003  | E.004  | E.009  | <.018   |
| AUG 28... | --  | --   | --   | --  | --   | --  | --   | --   | --   | --   | --   | --   | --  |

