506 NEUSE RIVER BASIN

## 02091736 MIDDLE SWAMP NEAR FARMVILLE, NC--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1999 to current year.

REMARKS.--Station operated in cooperation with the U.S. Environmental Protection Agency and the North Carolina Department of Environment and Natural Resources as part of a long-term project to develop a multimedia integrated modeling system (MIMS).

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

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)
OCT 25	1330	1.6	142	6.4	15.2	765	2.7	27	42	12.0	3.00	7.4	23
NOV 14	1330	4.2	162	6.2	15.2		2.9		46	13.0	3.40	7.8	22
DEC 12	0930	25	159	6.5	8.3	766	8.0	67	37	9.70	3.00	7.8	25
JAN													
17 FEB	1500	7.8	151	6.6	9.5	773	7.2	63	43	12.0	3.10	8.0	25
06 28 APR	1245 0935	20 26	148 132	6.6 6.4	7.7 12.0	771 768	10.2 5.4	84 50	39 35	11.0 9.60	2.80	8.7 7.6	27 27
05 MAY	1100	74	112	6.4	11.3	777	9.2	82	31	8.40	2.40	6.2	26
07	1515	.80	131	6.3	18.5	766	2.8	30	40	11.0	3.10	7.7	27
JUN 12	1200	3.1	110	6.4	26.1	764	3.8	46	39	11.0	2.70	5.8	23
JUL 11	1210	4.5	108	6.2	28.5	760	2.7	35	38	11.0	2.50	4.9	21
AUG 15	1400	70	100	5.8	26.2	767	2.9	36	31	9.10	2.00	4.9	23
SEP 26	1150	1.0	105	6.0	19.0	770	3.8	41	37	11.0	2.30	5.6	23
DATE	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT	AD- SORP- TION RATIO (00931)	SIUM, DIS- SOLVED (MG/L AS K) (00935)	DIS- SOLVED (MG/L AS SO4) (00945)	RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RIDE, DIS- SOLVED (MG/L AS F) (00950)	DIS- SOLVED (MG/L AS SIO2) (00955)	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT 25 NOV	AD- SORP- TION RATIO (00931)	SIUM, DIS- SOLVED (MG/L AS K) (00935)	DIS- SOLVED (MG/L AS SO4) (00945)	RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RIDE, DIS- SOLVED (MG/L AS F) (00950)	DIS- SOLVED (MG/L AS SIO2) (00955)	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	GEN, NITRATE DIS- SOLVED (MG/L AS N)	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT 25	AD- SORP- TION RATIO (00931)	SIUM, DIS- SOLVED (MG/L AS K) (00935)	DIS- SOLVED (MG/L AS SO4) (00945)	RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RIDE, DIS- SOLVED (MG/L AS F) (00950)	DIS- SOLVED (MG/L AS SIO2) (00955)	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT 25 NOV 14 DEC 12	AD- SORP- TION RATIO (00931)	SIUM, DIS- SOLVED (MG/L AS K) (00935)	DIS- SOLVED (MG/L AS SO4) (00945)	RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RIDE, DIS- SOLVED (MG/L AS F) (00950)	DIS- SOLVED (MG/L AS SIO2) (00955)	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT 25 NOV 14 DEC 12 JAN 17	AD- SORP- TION RATIO (00931)	SIUM, DIS- SOLVED (MG/L AS K) (00935) 8.40	DIS- SOLVED (MG/L AS SO4) (00945)	RIDE, DIS- SOLVED (MG/L AS CL) (00940) 19.0	RIDE, DIS- SOLVED (MG/L AS F) (00950)	DIS- SOLVED (MG/L AS SIO2) (00955)	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) <.010	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) <.020	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT 25 NOV 14 DEC 12 JAN 17 FEB 06	AD- SORP- TION RATIO (00931) .5 .5 .6	SIUM, DIS- SOLVED (MG/L AS K) (00935) 8.40 11.0 11.0 8.30 8.70	DIS- SOLVED (MG/L AS SO4) (00945) 3.0 2.4 9.1 7.3	RIDE, DIS- SOLVED (MG/L AS CL) (00940) 19.0 21.0 23.0 22.0	RIDE, DIS- SOLVED (MG/L AS F) (00950) .1 .2 .1	DIS- SOLVED (MG/L AS SIO2) (00955) 2.5 3.4 5.6 .7	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) 109 123 102 111 119	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) 77 88 85 80 79	GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)  <.010 <.010 <.010 .010	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)  <.020 .040 .240 .070	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)  .070 .074 .040 <.010 .114	GEN, ORGANIC TOTAL (MG/L AS N) (00605) .84 1.0 .70
OCT 25 NOV 14 DEC 12 JAN 17 FEB 06 28 APR	AD- SORP- TION RATIO (00931) .5 .5 .6 .5	SIUM, DIS- SOLVED (MG/L AS K) (00935) 8.40 11.0 11.0	DIS- SOLVED (MG/L AS SO4) (00945) 3.0 2.4 9.1 7.3	RIDE, DIS- SOLVED (MG/L AS CL) (00940) 19.0 21.0 23.0	RIDE, DIS- SOLVED (MG/L AS F) (00950)	DIS- SOLVED (MG/L AS SIO2) (00955) 2.5 3.4 5.6 .7	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) 109 123 102 111 119 104	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)  <.010 <.010 <.010 <.010	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)  <.020 .040 .240 .070 .210 .400	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)  .0770 .074 .040 <.010	GEN, ORGANIC TOTAL (MG/L AS N) (00605) .84 1.0
OCT 25 NOV 14 DEC 12 JAN 17 FEB 06 28	AD- SORP- TION RATIO (00931) .5 .5 .6	SIUM, DIS- SOLVED (MG/L AS K) (00935) 8.40 11.0 11.0 8.30 8.70	DIS- SOLVED (MG/L AS SO4) (00945) 3.0 2.4 9.1 7.3	RIDE, DIS- SOLVED (MG/L AS CL) (00940) 19.0 21.0 23.0 22.0	RIDE, DIS- SOLVED (MG/L AS F) (00950) .1 .2 .1	DIS- SOLVED (MG/L AS SIO2) (00955) 2.5 3.4 5.6 .7	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) 109 123 102 111 119	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) 77 88 85 80 79	GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)  <.010 <.010 <.010 .010	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)  <.020 .040 .240 .070	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)  .070 .074 .040 <.010 .114	GEN, ORGANIC TOTAL (MG/L AS N) (00605) .84 1.0 .70
OCT 25 NOV 14 DEC 12 JAN 17 FEB 06 28 APR 05	AD- SORP- TION RATIO (00931) .5 .5 .6 .5	SIUM, DIS- SOLVED (MG/L AS K) (00935) 8.40 11.0 11.0 8.30 8.70 7.00	DIS- SOLVED (MG/L AS SO4) (00945) 3.0 2.4 9.1 7.3 5.2 7.3	RIDE, DIS- SOLVED (MG/L AS CL) (00940) 19.0 21.0 23.0 22.0 18.0	RIDE, DIS- SOLVED (MG/L AS F) (00950) .1 .2 .1	DIS- SOLVED (MG/L AS SIO2) (00955) 2.5 3.4 5.6 .7	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) 109 123 102 111 119 104	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) 77 88 85 80 79 69	GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)  200 .380	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)  <.010 <.010 <.010 <.010 .010	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)  <.020 .040 .240 .070 .210 .400	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)  .070 .074 .040 <.010 .114 .052	GEN, ORGANIC TOTAL (MG/L AS N) (00605) .84 1.0 .70 
OCT 25 NOV 14 DEC 12 JAN 17 FEB 06 28 APR 05 MAY 07 JUNN 12	AD- SORP- TION RATIO (00931) .5 .5 .6 .5	SIUM, DIS- SOLVED (MG/L AS K) (00935) 8.40 11.0 8.30 8.70 7.00 5.40	DIS- SOLVED (MG/L AS SO4) (00945) 3.0 2.4 9.1 7.3 5.2 7.3	RIDE, DIS- SOLVED (MG/L AS CL) (00940) 19.0 21.0 23.0 22.0 22.0 18.0	RIDE, DIS- SOLVED (MG/L AS F) (00950) .1 .2 .1 .2	DIS- SOLVED (MG/L AS SIO2) (00955) 2.5 3.4 5.6 .7 1.2 1.2	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) 109 123 102 111 119 104 88	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) 77 88 85 80 79 69 59	GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)  <.010 <.010 <.010 .010 .020 <.010	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)  <.020 .040 .240 .070 .210 .400	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)  .070 .074 .040 <.010 .114 .052 <.010	GEN, ORGANIC TOTAL (MG/L AS N) (00605)  .84  1.0 .70 1.4 .77
OCT 25 NOV 14 DEC 12 JAN 17 FEB 06 28 APR 05 MAY 07 JUN 12 JUN 12 JUL 11	AD- SORP- TION RATIO (00931) .5 .5 .6 .5 .6	SIUM, DIS- SOLVED (MG/L AS K) (00935) 8.40 11.0 8.30 8.70 7.00 5.40 4.50	DIS- SOLVED (MG/L AS SO4) (00945) 3.0 2.4 9.1 7.3 5.2 7.3 7.8 2.2	RIDE, DIS- SOLVED (MG/L AS CL) (00940) 19.0 21.0 23.0 22.0 22.0 18.0 15.0	RIDE, DIS- SOLVED (MG/L AS F) (00950) .1 .2 .1 .2 .1	DIS- SOLVED (MG/L AS SIO2) (00955) 2.5 3.4 5.6 .7 1.2 1.2	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) 109 123 102 111 119 104 88	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) 77 88 85 80 79 69 59	GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618) 200 .380	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)  <.010 <.010 <.010 .010 .020 <.010 <.010	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)  <.020 .040 .240 .070 .210 .400 .400 .040	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)  .070 .074 .040 <.010 .114 .052 <.010 .066	GEN, ORGANIC TOTAL (MG/L AS N) (00605) .84 1.0 .70  1.4 .77 
OCT 25 NOV 14 DEC 12 JAN 17 FEB 06 28 APR 05 MAY 07 JUN 12 JUL JUL	AD- SORP- TION RATIO (00931) .5 .5 .6 .5 .6 .5 .5	SIUM, DIS- SOLVED (MG/L AS K) (00935) 8.40 11.0 8.30 8.70 7.00 5.40 4.50 2.10	DIS- SOLVED (MG/L AS SO4) (00945) 3.0 2.4 9.1 7.3 5.2 7.3 7.8 2.2	RIDE, DIS- SOLVED (MG/L AS CL) (00940) 19.0 21.0 23.0 22.0 18.0 15.0 9.3	RIDE, DIS- SOLVED (MG/L AS F) (00950) .1 .2 .1 .2 .1	DIS- SOLVED (MG/L AS SIO2) (00955) 2.5 3.4 5.6 .7 1.2 1.0	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) 109 123 102 111 119 104 88 104	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) 77 88 85 80 79 69 59 68 58	GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618) 200 .380	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)  <.010 <.010 <.010 <.010 <.010 <.010 <.010 <.010 <.010 <.010 <.010 <.010	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)  <.020 .040 .240 .070 .210 .400 .400 .400 .040 <.020	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)  .070 .074 .040 <.010 .114 .052 <.010 .066 .037	GEN, ORGANIC TOTAL (MG/L AS N) (00605) .84 1.0 .70  1.4 .77  .75

## NEUSE RIVER BASIN 507

## 02091736 MIDDLE SWAMP NEAR FARMVILLE, NC--Continued

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

DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL (82082)	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL (82085)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT													
25 NOV	.71	.91	.78			.300	.160	.140	1300	170	-23.00	-3.78	14
14	.83	1.1	.90	1.1	.94	.360	.170	.170	2000	390	-20.33	-3.30	5.5
DEC													
12	.53	.74	.57	.98	.81	.120	.070	.100	790	17.0	-27.31	-4.84	11
JAN 17		.65	.44	.72	.51	.210	.090	.050	820	64.0	-26.66	-4.40	10
FEB		.05	.44	. / 2	.51	.210	.090	.030	820	04.0	-20.00	-4.40	10
06	.72	1.5	.83	1.7	1.0	.210	.110	.140	1600	56.0	-23.36	-4.03	9.9
28	.63	.82	.68	1.2	1.1	.170	.080	.090	1000	47.0	-23.17	-4.08	11
APR 05		.85	.72	1.2	1.1	.120	.070	.080	660	12.0			12
MAY		.05	. /2	1.2	1.1	.120	.070	.080	660	12.0			12
07	.75	.82	.82	.86	.86	.300	.170	.150	1300	46.0			17
JUN													
12 JUL	.84	1.1	.88			.440	.220	.240	1600	69.0			14
11	. 71	.94	.75	.98	.79	.390	.190	.200	1100	86.0			14
AUG	. / ±		.,5	.50	.,,	.550	.100	.200	1100	00.0			
15	.97	1.2	1.0	1.3	1.1	.390	.180	.170	1450	47.0			15
SEP 26	.63	1.1	.70			.360	.080	.070	690	249			11