416 NEUSE RIVER BASIN

352053077483001 TILE DRAIN (BC1-T1) TO BEAR CREEK TRIBUTARY NEAR SHADETOWN, NC

LOCATION.--Lat 35°20′53.2", long 77°48′30.1", North American Datum of 1983, Lenoir County, Hydrologic Unit 03020202, at State Road 1501 and 0.35 mi west of Shadetown.

DRAINAGE AREA. -- Not applicable.

PERIOD OF RECORD. -- August 2000 to August 2001.

REMARKS.--Station operated in cooperation with the North Carolina Department of Environment and Natural Resources as part of a project to examine nutrient loadings from subsurface tile drains in the Neuse River Basin.

WATER-QUALITY DATA, FOR PERIOD AUGUST 2000 TO AUGUST 2001

				OXYGEN, DIS-	PH WATER	SPE-		HARD- NESS	HARD-		MAGNE-	POTAS-	
DATE	TIME	FLOW RATE (G/M) (00059)	OXYGEN, DIS- SOLVED (MG/L) (00300)	SOLVED (PER- CENT SATUR- ATION) (00301)	WHOLE FIELD (STAND- ARD UNITS) (00400)	CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NESS NONCARB DISSOLV LAB AS CACO3 (MG/L) (00905)	NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
AUG 2000													
29 SEP	1210	6.1	5.2	60	4.5	174	21.4	48	51	14.0	3.90	5.50	3.5
25 OCT	1810	E10.1	5.4	63	4.6	230	22.5	64	67	17.0	6.00	7.30	4.3
23 DEC	1530	E.22	8.6	92	5.0	155	19.3	42	47	13.0	3.60	5.30	3.8
13	1020	E4.1	8.5	76	5.0	177	11.2	54	57	15.0	4.70	4.50	3.8
FEB 2001 28 APR	1045	E.72	8.5	78	4.6	174	11.4	52	56	15.0	4.40	4.60	4.0
04 MAY	0940	E.90	7.8	72	4.8	189	12.1	56	61	16.0	5.00	5.40	4.0
03	1130	E.27	8.2	87	5.3	164	18.4	46	49	13.0	4.00	5.60	4.2
JUN 12	1320	E1.1	8.3	97	5.1	189	22.6	56	59	16.0	4.60	5.60	3.9
JUL 11	1150	E1.2	7.0	85	4.9	204	23.9	61	65	18.0	4.80	6.90	4.0
AUG 16	1305	E1.1	4.1	49	4.6	177	24.2	49	54	15.0	4.10	6.00	3.7
DATE	ALKA- LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	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)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)
AUG 2000 29	LINITY WAT.DIS FET LAB CACO3 (MG/L)	RIDE, DIS- SOLVED (MG/L AS CL)	DIS- SOLVED (MG/L AS SO4)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	GEN, AMMONIA DIS- SOLVED (MG/L AS N)	GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	GEN, NITRITE DIS- SOLVED (MG/L AS N)	GEN, ORGANIC DIS- SOLVED (MG/L AS N)	GEN, ORGANIC TOTAL (MG/L AS N)	GEN, TOTAL (MG/L AS N)	PHORUS DIS- SOLVED (MG/L AS P)
AUG 2000 29 SEP 25	LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	RIDE, DIS- SOLVED (MG/L AS CL) (00940)	DIS- SOLVED (MG/L AS SO4) (00945)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	GEN, ORGANIC TOTAL (MG/L AS N) (00605)	GEN, TOTAL (MG/L AS N) (00600)	PHORUS DIS- SOLVED (MG/L AS P) (00666)
AUG 2000 29 SEP 25 OCT 23	LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	RIDE, DIS- SOLVED (MG/L AS CL) (00940)	DIS- SOLVED (MG/L AS SO4) (00945)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	GEN, ORGANIC TOTAL (MG/L AS N) (00605)	GEN, TOTAL (MG/L AS N) (00600)	PHORUS DIS- SOLVED (MG/L AS P) (00666)
AUG 2000 29 SEP 25 OCT 23 DEC 13	LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	RIDE, DIS- SOLVED (MG/L AS CL) (00940) 12.0	DIS- SOLVED (MG/L AS SO4) (00945) 23.0	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) 6.70	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) <.010	GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	GEN, ORGANIC TOTAL (MG/L AS N) (00605)	GEN, TOTAL (MG/L AS N) (00600)	PHORUS DIS- SOLVED (MG/L AS P) (00666)
AUG 2000 29 SEP 25 OCT 23 DEC 13 FEB 2001 28	LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	RIDE, DIS- SOLVED (MG/L AS CL) (00940) 12.0	DIS- SOLVED (MG/L AS SO4) (00945) 23.0 30.0 26.0	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) 94 128	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) .010 .020	GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) .42 .41	GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) .51 .44	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) 6.70 11.0 3.80	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) <.010 <.010	GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607) .41 .39	GEN, ORGANIC TOTAL (MG/L AS N) (00605) .50 .42	GEN, TOTAL (MG/L AS N) (00600) 7.2 11 4.3	PHORUS DIS- SOLVED (MG/L AS P) (00666) .150 .130
AUG 2000 29 SEP 25 OCT 23 DEC 13 FEB 2001 28 APR 04	LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801) 3 3 5	RIDE, DIS- SOLVED (MG/L AS CL) (00940) 12.0 13.0 12.0	DIS- SOLVED (MG/L AS SO4) (00945) 23.0 30.0 26.0	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) 94 128 84	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) .010 .020 .020 .030	GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) .42 .41 .45	GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) .51 .44 .47 <.20	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) 6.70 11.0 3.80 5.00	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) <.010 <.010 <.010 <.010	GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607) .41 .39 .43	GEN, ORGANIC TOTAL (MG/L AS N) (00605) .50 .42 .45	GEN, TOTAL (MG/L AS N) (00600) 7.2 11 4.3	PHORUS DIS- SOLVED (MG/L AS P) (00666) .150 .130
AUG 2000 29 SEP 25 OCT 23 DEC 13 FEB 2001 28 APR 04 MAY 03	LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801) 3 3 5 3 3 3 3	RIDE, DIS- SOLVED (MG/L AS CL) (00940) 12.0 13.0 14.0	DIS- SOLVED (MG/L AS SO4) (00945) 23.0 30.0 26.0 29.0	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) 94 128 84 95	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) .010 .020 .020 .030 .028	GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) .42 .41 .45 <.20	GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) .51 .44 .47 <.20 .27	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) 6.70 11.0 3.80 5.00 6.00	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) <.010 <.010 <.010 <.010 <.010	GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607) .41 .39 .43	GEN, ORGANIC TOTAL (MG/L AS N) (00605) .50 .42 .45	GEN, TOTAL (MG/L AS N) (00600) 7.2 11 4.3	PHORUS DIS- SOLVED (MG/L AS P) (00666) .150 .130 .130
AUG 2000 29 SEP 25 OCT 23 DEC 13 FEB 2001 28 APR 04 MAY 03 JUN 12	LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801) 3 3 5 3 4	RIDE, DIS- SOLVED (MG/L AS CL) (00940) 12.0 13.0 12.0 14.0	DIS- SOLVED (MG/L AS SO4) (00945) 23.0 30.0 26.0 29.0 26.0	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) 94 128 84 95 96 106	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) .010 .020 .020 .030 .028 .017	GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) .42 .41 .45 <.20 .32	GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) .51 .44 .47 <.20 .27	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) 6.70 11.0 3.80 5.00 6.00 7.40	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) <.010 <.010 <.010 <.010 <.010 <.010	GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607) .41 .39 .43 .29	GEN, ORGANIC TOTAL (MG/L AS N) (00605) .50 .42 .45 .24	GEN, TOTAL (MG/L AS N) (00600) 7.2 11 4.3 6.3 7.8	PHORUS DIS- SOLVED (MG/L AS P) (00666) .150 .130 .130 .100
AUG 2000 29 SEP 25 OCT 23 DEC 13 FEB 2001 28 APR 04 MAY 03 JUN	LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801) 3 3 5 3 4 4 3	RIDE, DIS- SOLVED (MG/L AS CL) (00940) 12.0 13.0 14.0 14.0 15.0	DIS- SOLVED (MG/L AS SO4) (00945) 23.0 30.0 26.0 29.0 26.0	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) 94 128 84 95 96 106 87	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) .010 .020 .020 .030 .028 .017	GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) .42 .41 .45 <.20 .32 .33	GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) .51 .44 .47 <.20 .27 .40 .32	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) 6.70 11.0 3.80 5.00 6.00 7.40 3.10	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) <.010 <.010 <.010 <.010 <.010 <.010 <.010	GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607) .41 .39 .43 .29	GEN, ORGANIC TOTAL (MG/L AS N) (00605) .50 .42 .45 .24 .38	GEN, TOTAL (MG/L AS N) (00600) 7.2 11 4.3 6.3 7.8 3.4	PHORUS DIS- SOLVED (MG/L AS P) (00666) .150 .130 .130 .100 .090

NEUSE RIVER BASIN 417

352053077483001 TILE DRAIN (BC1-T1) TO BEAR CREEK TRIBUTARY NEAR SHADETOWN, NC--Continued
WATER-QUALITY DATA, FOR PERIOD AUGUST 2000 TO AUGUST 2001

DATE					(UG/L AS MN)
AUG 2000					
29	.110	.260	3.6	40	44.0
SEP 25	.080	.120	2.7	60	52.0
OCT 23	.090	.190	3.1	200	44.0
DEC	.050	.150	J.1	200	11.0
13	.060	.120	2.6	90	53.0
FEB 2001 28	.080	.110	2.3	90	49.0
APR 04	.070	.110	3.2	80	51.0
MAY	.070	.110	3.2	80	31.0
03	.070	.140	2.8	180	47.0
JUN 12	.130	.120	2.0	100	50.0
JUL 11	.120	.230	3.4	110	55.0
AUG	.120	.230	3.4	110	33.0
16	.100	.150	3.4	130	49.0