02086490 LAKE MICHIE AT DAM NEAR BAHAMA, NC

LOCATION.--Lat 36°09'03", long 78°49'48", Durham County, Hydrologic Unit 03020201, at dam 3.0 mi southeast of Bahama.

DRAINAGE AREA.--167 mi^2.

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 2002 TO SEPTEMBER 2003

Date	Time	Color, water, fltrd, Pt-Co units (00080)	Sampling depth, meters (00098)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT													
16...	1300	125	1.0	0.30	746	3.6	40	5.9	44	19.0	12	2.86	1.24
16...	1305	--	6.0	--	746	3.3	36	5.9	44	18.8	--	--	--
16...	1310	--	12.0	--	746	3.0	33	5.9	45	18.7	--	--	--
APR													
16...	0915	100	1.0	0.60	759	8.8	91	6.2	47	16.5	14	3.30	1.50
16...	0920	--	6.0	--	759	8.4	73	5.7	38	9.0	--	--	--
16...	0925	--	13.1	--	759	8.2	72	5.8	37	9.3	--	--	--
JUN													
26...	1315	75	1.0	1.00	758	8.3	104	6.4	55	26.3	20	4.53	2.01
26...	1320	--	6.0	--	758	2.1	23	5.6	55	19.3	--	--	--
26...	1325	--	12.0	--	758	1.0	9	5.3	46	9.9	--	--	--
AUG													
14...	0945	75	1.0	0.60	766	7.3	91	6.2	66	27.4	23	5.59	2.22
14...	0950	--	6.0	--	766	0.6	7	5.5	52	22.4	--	--	--
14...	0955	--	12.0	--	766	0.3	2	5.4	54	10.1	--	--	--

Date	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf incrm. titr., field, mg/L as CaCO3 (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
OCT													
16...	2.94	1.76	8	10	2.29	4.3	4.1	53	0.89	0.138	0.33	0.009	0.027
16...	--	--	--	--	--	--	--	--	0.93	0.149	0.33	0.010	0.026
16...	--	--	--	--	--	--	--	--	0.90	0.159	0.32	0.010	0.026
APR													
16...	1.20	2.68	8	10	2.42	8.5	4.8	44	0.37	<0.015	0.214	0.003	0.008
16...	--	--	--	--	--	--	--	--	0.50	0.061	0.187	0.003	0.024
16...	--	--	--	--	--	--	--	--	0.58	0.082	0.174	0.003	0.024
JUN													
26...	1.82	3.08	15	18	3.41	9.2	3.3	54	0.65	E.009	E.018	E.002	<0.007
26...	--	--	--	--	--	--	--	--	0.69	0.153	0.166	0.006	0.017
26...	--	--	--	--	--	--	--	--	0.66	0.172	0.268	<0.002	0.012
AUG													
14...	2.10	3.99	20	24	3.89	10.5	2.3	61	0.63	<0.015	E.011	E.002	<0.007
14...	--	--	--	--	--	--	--	--	0.68	0.101	0.104	0.005	0.011
14...	--	--	--	--	--	--	--	--	1.0	0.493	0.055	0.003	0.017

02086490 LAKE MICHIE AT DAM NEAR BAHAMA, NC—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Phos-phorus, water, unfltrd mg/L (00665)	Organic carbon, water, unfltrd mg/L (00680)	Chloro-phyll a phyto-plank-ton, fluoro, ug/L (70953)	Chloro-phyll b phyto-plank-ton, fluoro, ug/L (70954)	Alum-inum, water, unfltrd recover-able, ug/L (01105)	Arsenic water unfltrd ug/L (01002)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Cobalt water, unfltrd recover-able, ug/L (01037)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)
OCT													
16...	--	16.5	1.1	<0.1	440	<2	<0.2	E.4	<3.4	2.0	780	1	112
16...	--	--	--	--	--	--	--	--	--	--	860	--	137
16...	--	--	--	--	--	--	--	--	--	--	890	--	149
APR													
16...	0.061	7.0	E2.6	<0.1	280	<2	<0.2	<0.8	<3.4	1.5	560	M	53.4
16...	0.089	--	--	--	--	--	--	--	--	--	720	--	60.9
16...	0.120	--	--	--	--	--	--	--	--	--	1,010	--	148
JUN													
26...	0.051	12.2	3.2	E.4	--	--	--	--	--	--	760	--	35.0
26...	0.075	--	--	--	--	--	--	--	--	--	1,180	--	147
26...	0.111	--	--	--	--	--	--	--	--	--	1,670	--	551
AUG													
14...	0.052	9.1	E6.0	<0.1	--	--	--	--	--	--	660	--	50.3
14...	0.083	--	--	--	--	--	--	--	--	--	1,290	--	215
14...	0.105	--	--	--	--	--	--	--	--	--	2,380	--	1,090

Date	Mercury water, unfltrd recover-able, ug/L (71900)	Molyb-denum, water, unfltrd recover-able, ug/L (01062)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, unfltrd recover-able, ug/L (01092)
OCT						
16...	0.09	<2	<2.0	<3	<0.3	<25
16...	--	--	--	--	--	--
16...	--	--	--	--	--	--
APR						
16...	0.02	<2	<2.0	<3	<0.3	34
16...	--	--	--	--	--	--
16...	--	--	--	--	--	--
JUN						
26...	--	--	--	--	--	--
26...	--	--	--	--	--	--
26...	--	--	--	--	--	--
AUG						
14...	--	--	--	--	--	--
14...	--	--	--	--	--	--
14...	--	--	--	--	--	--

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