

Water-Data Report 2007

0209801100 B. EVERETT JORDAN LAKE AT BELLS LANDING NEAR GRIFFINS CROSSROADS, NC

 Cape Fear Basin
 Haw Subbasin

LOCATION.--Lat 35°43'39", long 79°02'34" referenced to North American Datum of 1983, Chatham County, NC, Hydrologic Unit 03030002, at Bells Landing and 2.0 mi southeast of Griffins Crossroads.

DRAINAGE AREA.--300 mi², approximately.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1991-1995, 1999 to current year.

REMARKS.--Station operated to define water quality as part of a regional surface-water quality assessment. A GC/FID scan for trace organic compounds was performed on samples collected in November 1994 and May 1995. Results may be obtained from the USGS Water Science Center, Raleigh. Samples for nutrient, chlorophyll *a*, and pheophytin *a* analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique. Prior to October 1, 2005, samples for chlorophyll *a* were analyzed using a high-performance liquid chromatography method.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 4

[Remark codes: <, less than; E, estimated.]

Date	Time	Color, water, fltrd, Pt-Co units (00080)	Sam- pling depth, meters (00098)	Trans- parency Secchi disc, meters (00078)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf μS/cm (00095)	Temper- ature, deg C (25 degC (00095))	Hard- ness, water, mg/L as CaCO ₃ (00010)	Magnes- ium, water, fltrd, mg/L (00925)
Oct												
10...	1230	20	1.0	1.10	761	7.2	82	7.2	187	21.5	33	8.01
10...	1235	--	3.0	--	761	7.2	81	7.2	186	21.3	--	--
10...	1240	--	5.0	--	761	6.7	75	7.0	185	21.0	--	--
Apr												
18...	1030	40	1.0	.60	753	7.3	73	6.6	128	15.1	28	6.85
18...	1035	--	4.0	--	753	7.0	70	6.6	129	14.8	--	--
18...	1040	--	9.0	--	753	7.1	70	6.4	103	14.5	--	--
Jun												
29...	0930	25	1.0	1.10	761	7.7	100	8.5	137	28.6	30	7.39
29...	0935	--	3.0	--	761	6.5	83	7.5	136	27.7	--	--
29...	0940	--	6.0	--	761	.2	2	6.8	148	22.4	--	--
Aug												
22...	0845	25	1.0	.80	760	--	--	--	149	28.7	30	7.24
22...	0850	--	3.0	--	760	--	--	--	149	28.7	--	--
22...	0855	--	5.0	--	760	--	--	--	152	28.4	--	--

0209801100 B. EVERETT JORDAN LAKE AT BELLS LANDING NEAR GRIFFINS CROSSROADS, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
 Part 2 of 4
 [Remark codes: <, less than; E, estimated.]

Date	Potas-	ANC,	Bicar-					Residue	Ammonia	Nitrite			
	sium, water, fltrd,	Sodium, water, fltrd,	wat unf incr.	bonate, wat unf incr.	Chlor- ide, titr., field,	Fluor- ide, water, titr., field,	Silica, water, fltrd,	Sulfate	on evap.	+ org-N, at 180degC unfltrd wat flt	Nitrate water, fltrd,		
	mg/L (00935)	mg/L (00930)	CaCO ₃ (00419)	mg/L (00450)	mg/L (00940)	mg/L (00950)	mg/L (00955)	mg/L (00945)	mg/L (70300)	mg/L as N (00625)	mg/L as N (00608)	mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
Oct													
10...	3.94	20.6	37	45	17.9	.23	4.60	13.8	117	.65	.095	.029	
10...	--	--	--	--	--	--	--	--	--	.70	.073	.017	
10...	--	--	--	--	--	--	--	--	--	.70	.085	.018	
Apr													
18...	2.71	12.1	29	35	10.5	.11	6.07	11.0	85	.72	.130	.298	
18...	--	--	--	--	--	--	--	--	--	.69	.143	.282	
18...	--	--	--	--	--	--	--	--	--	.75	.120	.371	
Jun													
29...	2.96	12.8	30	40	11.6	.15	1.85	11.7	92	.59	<.020	<.016	
29...	--	--	--	--	--	--	--	--	--	.62	<.020	<.016	
29...	--	--	--	--	--	--	--	--	--	.71	.082	<.016	
Aug													
22...	3.29	14.9	32	39	13.6	.19	2.69	11.2	95	.60	<.020	<.016	
22...	--	--	--	--	--	--	--	--	--	.64	<.020	<.016	
22...	--	--	--	--	--	--	--	--	10.9	--	.63	.040	
												<.002	

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
 Part 3 of 4
 [Remark codes: <, less than; E, estimated.]

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Chlorophyll a phyto-plankton, µg/L (70953)	Phéo-phytin a, phyto-plankton, µg/L (62360)	Alum-inum, water, unfltrd recover -able, µg/L (01105)	Arsenic water, unfltrd recover -able, µg/L (01002)	Cadmium water, unfltrd recover -able, µg/L (01027)	Chromium, water, unfltrd recover -able, µg/L (01034)	Cobalt water, unfltrd recover -able, µg/L (01037)	Copper, water, unfltrd recover -able, µg/L (01042)	Iron, water, unfltrd recover -able, µg/L (01045)
Oct													
10...	E.003	.036	--	8.9	25.6	8.2	55	.77	<.02	.77	.158	E.6	148
10...	<.006	.036	--	--	--	--	--	--	--	--	--	--	149
10...	<.006	.038	--	--	--	--	--	--	--	--	--	--	197
Apr													
18...	.021	.092	--	7.8	6.9	5.2	305	.44	.02	E.56	.47	2.2	606
18...	.016	.078	--	--	--	--	--	--	--	--	--	--	566
18...	.032	.130	--	--	--	--	--	--	--	--	--	--	899
Jun													
29...	E.003	.037	--	8.7	18.3	4.9	--	--	--	--	--	--	66
29...	<.006	.048	--	--	--	--	--	--	--	--	--	--	286
29...	.012	.078	--	--	--	--	--	--	--	--	--	--	1,270
Aug													
22...	E.004	.031	6.6	8.1	18.9	6.3	--	--	--	--	--	--	103
22...	E.003	.032	--	--	--	--	--	--	--	--	--	--	100
22...	E.004	.040	7.3	--	--	--	--	--	--	--	--	--	150

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
 Part 4 of 4
 [Remark codes: <, less than; E, estimated.]

Date	Mangan- Lead, water, unfiltrd recover -able, µg/L (01051)	Manganese, water, unfiltrd recover -able, µg/L (01055)	Mercury Mercury water, unfiltrd recover -able, µg/L (71890)	Molyb- denum, water, unfiltrd recover -able, µg/L (71900)	Nickel, water, unfiltrd recover -able, µg/L (01062)	Selen- ium, water, unfiltrd recover -able, µg/L (01067)	Silver, water, unfiltrd recover -able, µg/L (01077)	Zinc, water, unfiltrd recover -able, µg/L (01092)
Oct								
10...	.14	92.2	--	<.010	3.2	.78	.16	<.02
10...	--	95.5	--	--	--	--	--	--
10...	--	120	--	--	--	--	--	--
Apr								
18...	.56	114	--	E.005	.9	.98	.15	E.01
18...	--	116	--	--	--	--	--	--
18...	--	109	--	--	--	--	--	--
Jun								
29...	--	55.1	--	--	--	--	--	--
29...	--	740	--	--	--	--	--	--
29...	--	1,740	--	--	--	--	--	--
Aug								
22...	--	160	.040	.050	--	--	--	--
22...	--	158	--	--	--	--	--	--
22...	--	329	.011	.022	--	--	--	--