



Water-Data Report 2008

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.

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
 Part 1 of 4
 [Remark codes: <, less than; E, estimated.]

Date	Time	Color, water, filtrd, 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)	Dis- solved oxygen, water, unfiltrd field, std units (00400)	pH, water, unfiltrd field, std units (00095)	Specif- ic conduc- tance, wat unf μS/cm 25 degC (00095)			Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO ₃ (00900)	Calcium water, filtrd, mg/L (00915)	Magnes- ium, water, filtrd, mg/L (00925)
										25 degC (00095)	Temp- erature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO ₃ (00900)				
Oct																
17...	1115	30	1.0	.70	762	11.3	130	9.1	168	22.2	37	9.25	3.34			
17...	1120	--	2.0	--	762	10.5	120	9.0	168	22.1	--	--	--			
17...	1125	--	5.0	--	762	3.2	36	7.1	170	21.4	--	--	--			
Dec																
05...	0900	--	1.4	.70	--	--	--	--	--	--	--	--	--			
05...	0905	30	1.0	--	751	8.2	75	7.2	186	10.7	34	8.37	3.10			
05...	0910	--	3.0	--	751	8.2	75	7.2	186	10.7	--	--	--			
05...	0915	--	5.0	--	751	8.1	74	7.2	186	10.6	--	--	--			
Feb																
27...	0915	--	1.8	.90	--	--	--	--	--	--	--	--	--			
27...	0920	18	1.0	--	750	12.9	115	7.8	204	9.7	33	8.11	3.05			
27...	0925	--	3.0	--	750	12.8	114	7.7	205	9.6	--	--	--			
27...	0930	--	6.0	--	750	12.0	106	7.6	205	9.5	--	--	--			
Apr																
23...	1145	--	2.0	1.00	--	--	--	--	--	--	--	--	--			
23...	1150	30	1.0	--	762	9.2	95	7.4	182	16.9	31	7.50	2.91			
23...	1155	--	3.0	--	762	9.0	93	7.4	182	16.8	--	--	--			
23...	1200	--	6.0	--	762	4.4	44	6.9	186	15.2	--	--	--			
Jun																
20...	1045	--	2.4	1.20	--	--	--	--	--	--	--	--	--			
20...	1050	30	1.0	--	762	8.2	105	8.6	182	28.0	33	8.10	3.09			
20...	1055	--	3.0	--	762	7.7	98	8.5	182	27.4	--	--	--			
20...	1100	--	6.0	--	762	.2	2	6.9	189	23.4	--	--	--			
Aug																
05...	1000	--	2.6	1.30	--	--	--	--	--	--	--	--	--			
05...	1005	25	1.0	--	758	8.2	109	8.6	192	30.3	35	8.84	3.23			
05...	1010	--	3.0	--	758	6.3	83	7.7	191	29.5	--	--	--			
05...	1015	--	6.0	--	758	.1	2	7.0	203	27.6	--	--	--			

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
 Part 2 of 4
 [Remark codes: <, less than; E, estimated.]

Date	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf infl pt	Bicar- bonate, wat unf infl pt	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO2 (00945)	Sulfate water, fltrd, mg/L (00945)	Residue on 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L (00625)	Ammonia water, fltrd, mg/L (00608)	Nitrate + nitrite, water, fltrd, mg/L (00631)	Nitrite water, fltrd, mg/L (00613)
Oct													
17...	3.90	19.0	39	48	15.4	.21	4.62	10.4	94	.92	E.013	<.016	<.002
17...	--	--	--	--	--	--	--	--	--	.86	E.014	<.016	<.002
17...	--	--	--	--	--	--	--	10.4	--	.94	.028	<.016	E.001
Dec													
05...	--	--	--	--	--	--	--	--	--	.67	.033	.449	.014
05...	4.17	24.3	38	47	19.2	.27	5.35	17.4	124	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	.59	.031	.454	.015
05...	--	--	--	--	--	--	--	17.3	--	.70	.040	.446	.016
Feb													
27...	--	--	--	--	--	--	--	--	--	.70	<.020	.456	.005
27...	4.18	27.0	37	45	21.6	.24	4.33	21.3	128	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	.68	<.020	.462	.005
27...	--	--	--	--	--	--	--	21.3	--	.71	E.012	.469	.005
Apr													
23...	--	--	--	--	--	--	--	--	--	.88	.032	.187	.009
23...	3.73	22.0	32	39	18.5	.20	1.07	20.8	117	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	.78	.038	.190	.009
23...	--	--	--	--	--	--	--	20.7	--	.79	.109	.216	.012
Jun													
20...	--	--	--	--	--	--	--	--	--	.64	<.020	<.016	<.002
20...	3.93	20.0	35	42	17.2	.19	.77	18.8	111	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	.61	<.020	<.016	<.002
20...	--	--	--	--	--	--	--	18.0	--	.70	.102	<.016	<.002
Aug													
05...	--	--	--	--	--	--	--	--	--	.61	<.020	<.016	<.002
05...	4.16	21.8	38.4	47	18.3	.20	1.28	18.1	120	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	.60	<.020	<.016	<.002
05...	--	--	--	--	--	--	--	14.8	--	.69	.172	<.016	<.002

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 4

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

Date	Ortho-phosphate, water, filtrd, mg/L as P (00671)	Phosphorus, water, unfiltrd mg/L as P (00665)	Organic carbon, water, filtrd, mg/L (00681)	Organic carbon, water, unfiltrd mg/L (00680)	Chlorophyll a phyto-plankton, µg/L (70953)	Pheophytin a, phyto-plankton, µg/L (62360)	Alum-inum, water, unfiltrd recover-able, µg/L (01105)	Arsenic water, unfiltrd µg/L (01002)	Cadmium water, unfiltrd µg/L (01027)	Chromium, water, unfiltrd recover-able, µg/L (01034)	Cobalt water, unfiltrd µg/L (01037)	Copper, water, unfiltrd µg/L (01042)	Iron, water, unfiltrd µg/L (01045)
Oct													
17...	<.006	.047	6.5	10.9	50.3	13.8	22	.77	E.01	<.40	.10	<1.2	214
17...	E.003	.042	--	--	--	--	--	--	--	--	--	--	97
17...	<.006	.059	5.9	--	--	--	--	--	--	--	--	--	321
Dec													
05...	E.004	.045	--	--	14.2	10.2	--	--	--	--	--	--	--
05...	--	--	5.8	7.4	--	--	--	--	--	--	--	--	236
05...	E.004	.045	--	--	--	--	--	--	--	--	--	--	230
05...	E.004	.045	5.9	--	--	--	--	--	--	--	--	--	260
Feb													
27...	E.003	.040	--	--	25.0	14.6	--	--	--	--	--	--	--
27...	--	--	5.9	8.0	--	--	--	--	--	--	--	--	152
27...	<.006	.040	--	--	--	--	--	--	--	--	--	--	150
27...	E.003	.040	5.9	--	--	--	--	--	--	--	--	--	178
Apr													
23...	E.003	.046	--	--	21.8	9.9	--	--	--	--	--	--	--
23...	--	--	6.5	8.6	--	--	94	E.50	E.01	E.37	.17	E1.2	172
23...	E.003	.045	--	--	--	--	--	--	--	--	--	--	168
23...	E.003	.057	6.6	--	--	--	--	--	--	--	--	--	280
Jun													
20...	<.006	.031	--	--	15.3	5.6	--	--	--	--	--	--	--
20...	--	--	7.3	9.3	--	--	--	--	--	--	--	--	61
20...	<.006	.029	--	--	--	--	--	--	--	--	--	--	60
20...	<.006	.046	7.3	--	--	--	--	--	--	--	--	--	338
Aug													
05...	E.004	.025	--	--	10.4	3.1	--	--	--	--	--	--	--
05...	--	--	7.2	8.3	--	--	--	--	--	--	--	--	41
05...	E.004	.027	--	--	--	--	--	--	--	--	--	--	65
05...	E.004	.037	7.3	--	--	--	--	--	--	--	--	--	306

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
 Part 4 of 4
 [Remark codes: <, less than; E, estimated.]

Date	Mangan- Lead, water, unfltrd recover -able, μg/L (01051)	Manganese, water, unfltrd recover -able, μg/L (01055)	Mercury Mercury water, unfltrd recover -able, μg/L (71890)	Mercury water, unfltrd recover -able, μg/L (71900)	Molyb- denum, water, unfltrd recover -able, μg/L (01062)	Nickel, water, unfltrd recover -able, μg/L (01067)	Selen- ium, water, unfltrd recover -able, μg/L (01147)	Silver, water, unfltrd recover -able, μg/L (01077)	Zinc, water, unfltrd recover -able, μg/L (01092)
Oct									
17...	.07	122	.013	.113	3.3	.48	.17	<.02	<2.0
17...	--	93.4	--	--	--	--	--	--	--
17...	--	649	<.010	E.008	--	--	--	--	--
Dec									
05...	--	--	--	--	--	--	--	--	--
05...	--	166	<.010	<.010	--	--	--	--	--
05...	--	158	--	--	--	--	--	--	--
05...	--	168	<.010	<.010	--	--	--	--	--
Feb									
27...	--	--	--	--	--	--	--	--	--
27...	--	63.1	<.010	.016	--	--	--	--	--
27...	--	62.5	--	--	--	--	--	--	--
27...	--	71.5	E.005	E.008	--	--	--	--	--
Apr									
23...	--	--	--	--	--	--	--	--	--
23...	.21	68.5	E.006	.021	1.8	1.1	.17	<.02	2.3
23...	--	64.5	--	--	--	--	--	--	--
23...	--	131	<.010	E.008	--	--	--	--	--
Jun									
20...	--	--	--	--	--	--	--	--	--
20...	--	53.8	.025	.065	--	--	--	--	--
20...	--	49.0	--	--	--	--	--	--	--
20...	--	1,200	<.010	E.010	--	--	--	--	--
Aug									
05...	--	--	--	--	--	--	--	--	--
05...	--	48.1	.018	.042	--	--	--	--	--
05...	--	59.6	--	--	--	--	--	--	--
05...	--	1,320	E.008	.017	--	--	--	--	--