



Water-Data Report 2009

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 1991-95, 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 2008 TO SEPTEMBER 2009
Part 1 of 5
[Remark codes: <, less than; E, estimated.]

Date	Time	Medium name	Sample type	Baro-metric pres-ure, mm Hg (00025)	Color, water, fltrd, Pt-Co units (00080)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)
Oct								
22...	1315	Surface water	Regular	768	--	--	--	--
22...	1320	Surface water	Regular	768	35	8.6	91	7.6
22...	1325	Surface water	Regular	768	--	8.5	90	7.6
22...	1330	Surface water	Regular	768	--	8.2	86	7.5
Dec								
17...	0915	Surface water	Regular	765	--	--	--	--
17...	0916	<i>QC sample - Surface water</i>	<i>Replicate</i>	--	--	--	--	--
17...	0920	Surface water	Regular	765	25	10.4	91	7.3
17...	0921	<i>QC sample - Surface water</i>	<i>Replicate</i>	--	25	--	--	--
17...	0925	Surface water	Regular	765	--	10.2	89	7.3
17...	0930	Surface water	Regular	765	--	8.7	76	7.2
17...	1148	<i>QC sample - Artificial</i>	<i>Blank</i>	--	--	--	--	--
Feb								
11...	1045	Surface water	Regular	--	--	--	--	--
11...	1050	Surface water	Regular	763	40	13.3	115	8.4
11...	1055	Surface water	Regular	763	--	12.2	102	7.9
11...	1100	Surface water	Regular	763	--	11.1	91	7.3
Apr								
23...	1115	Surface water	Regular	--	--	--	--	--
23...	1120	Surface water	Regular	763	50	7.4	76	6.9
23...	1125	Surface water	Regular	763	--	7.1	72	6.9
23...	1130	Surface water	Regular	763	--	6.5	66	6.8
23...	1215	Bottom material	Regular	--	--	--	--	--
Jun								
29...	0915	Surface water	Regular	--	--	--	--	--
29...	0920	Surface water	Regular	754	25	8.6	112	8.6
29...	0925	Surface water	Regular	754	--	4.4	56	6.9
29...	0930	Surface water	Regular	754	--	.2	3	6.5
Aug								
12...	1130	Surface water	Regular	--	--	--	--	--
12...	1135	Surface water	Regular	766	E25	7.8	101	8.4
12...	1140	Surface water	Regular	766	--	2.8	36	6.9
12...	1145	Surface water	Regular	766	--	.2	2	6.8

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 5

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

Date	Specif-ic conduc-tance, wat unf μS/cm @ 25 degC (00095)	Temper-ature, deg C (00010)	Trans-parency Secchi disc, meters (00078)	Sam-pling depth, meters (00098)	Dis-solved						ANC, wat unf infl pt	Bicar-bonate, wat unf infl pt	Carbon-ate, wat unf infl pt	
					180degC wat fit (70300)	dried @ water, mg/L as CaCO3 (00900)	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, filtrd, mg/L (00915)	Magnes-ium, water, filtrd, mg/L (00925)	Potas-sium, water, filtrd, mg/L (00935)				
Oct														
22...	--	--	.90	1.8	--	--	--	--	--	--	--	--	--	--
22...	156	18.6	--	1.0	105	29	7.22	2.61	3.80	18.2	31.1	38.0	--	--
22...	156	18.5	--	3.0	--	--	--	--	--	--	--	--	--	--
22...	155	18.3	--	6.0	--	--	--	--	--	--	--	--	--	--
Dec														
17...	--	--	1.00	2.0	--	--	--	--	--	--	--	--	--	--
17...	--	--	1.00	2.0	--	--	--	--	--	--	--	--	--	--
17...	156	9.6	--	1.0	105	27	6.70	2.52	3.57	17.4	29.9	36.5	--	--
17...	--	--	--	1.0	103	28	6.91	2.62	3.69	17.9	30	36	--	--
17...	157	9.5	--	3.0	--	--	--	--	--	--	--	--	--	--
17...	164	9.4	--	7.0	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	.02	<.012	<.06	<.12	--	--	--	--
Feb														
11...	--	--	1.00	2.0	--	--	--	--	--	--	--	--	--	--
11...	149	9.0	--	1.0	90	29	7.28	2.70	3.42	18.6	30.3	37.0	--	--
11...	148	7.7	--	3.0	--	--	--	--	--	--	--	--	--	--
11...	148	6.8	--	6.0	--	--	--	--	--	--	--	--	--	--
Apr														
23...	--	--	.70	1.4	--	--	--	--	--	--	--	--	--	--
23...	143	16.5	--	1.0	93	27	6.70	2.54	3.21	14.9	25.3	30.8	--	--
23...	143	16.4	--	3.0	--	--	--	--	--	--	--	--	--	--
23...	143	16.2	--	6.0	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Jun														
29...	--	--	1.00	2.0	--	--	--	--	--	--	--	--	--	--
29...	157	28.7	--	1.0	91	32	7.71	2.99	3.26	15.3	31.3	36.0	.9	--
29...	155	27.4	--	3.0	--	--	--	--	--	--	--	--	--	--
29...	165	23.8	--	6.0	--	--	--	--	--	--	--	--	--	--
Aug														
12...	--	--	1.10	2.2	--	--	--	--	--	--	--	--	--	--
12...	159	29.4	--	1.0	98	32	7.83	2.95	3.43	16.3	35.4	43.1	--	--
12...	158	28.6	--	3.0	--	--	--	--	--	--	--	--	--	--
12...	165	27.7	--	5.0	--	--	--	--	--	--	--	--	--	--

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 5

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

Date	Chlor-ide, water, filtrd, mg/L (00940)	Fluor-ide, water, filtrd, mg/L (00950)	Silica, water, filtrd, mg/L as SiO2 (00955)	Ammonia		Nitrate		Ortho-phos-phate, water, filtrd, mg/L as P (00671)	Phos-phorus, water, unfiltrd mg/L as P (00665)	Chloro-phyll a, phyto-plank-ton, μg/L (70953)	Pheo-phytin a, phyto-plank-ton, μg/L (62360)	Mercury bed sediment μg/g (01385)
				org-N, water, unfiltrd mg/L as N (00625)	Ammonia water, filtrd, mg/L as N (00608)	nitrite water, filtrd, mg/L as N (00631)	Nitrite water, filtrd, mg/L as N (00613)					
Oct												
22...	--	--	--	--	.78	.048	.056	.009	<.008	.039	14.8	5.4
22...	15.3	.19	5.04	14.5	--	--	--	--	--	--	--	--
22...	--	--	--	--	.78	.052	.058	.009	<.008	.040	--	--
22...	--	--	--	14.2	.77	.058	.058	.010	<.008	.039	--	--
Dec												
17...	--	--	--	--	.66	<.020	.257	.007	<.008	.040	21.8	8.8
17...	--	--	--	--	.64	<.020	.257	.007	<.008	.042	19.6	7.9
17...	15.1	.21	4.95	17.0	--	--	--	--	--	--	--	--
17...	15.1	.22	5.15	17.0	--	--	--	--	--	--	--	--
17...	--	--	--	--	.61	<.020	.266	.008	<.008	.036	--	--
17...	--	--	--	17.4	.62	.061	.305	.009	<.008	.037	--	--
17...	<.12	<.08	.06	<.18	--	<.020	<.016	<.002	<.008	--	--	--
Feb												
11...	--	--	--	--	.75	.022	.185	.003	<.008	.043	20.9	21.5
11...	14.5	.18	2.79	16.7	--	--	--	--	--	--	--	--
11...	--	--	--	--	.72	.028	.183	.003	<.008	.038	--	--
11...	--	--	--	16.4	.73	.020	.200	.003	<.008	.040	--	--
Apr												
23...	--	--	--	--	.74	.114	.033	.003	<.008	.049	8.0	8.0
23...	13.7	.14	.59	14.4	--	--	--	--	--	--	--	--
23...	--	--	--	--	.73	.121	.032	.003	<.008	.050	--	--
23...	--	--	--	14.4	.78	.138	.037	.004	<.008	.059	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	.05
Jun												
29...	--	--	--	--	.72	<.020	<.016	<.002	<.008	.033	22.7	4.3
29...	14.3	.15	1.94	12.8	--	--	--	--	--	--	--	--
29...	--	--	--	--	.68	<.020	<.016	<.002	<.008	.036	--	--
29...	--	--	--	9.59	1.2	.479	<.016	<.002	.045	.161	--	--
Aug												
12...	--	--	--	--	.84	<.020	<.016	<.002	<.008	.039	23.0	6.0
12...	14.9	.17	3.18	12.7	--	--	--	--	--	--	--	--
12...	--	--	--	--	.78	E.015	<.016	<.002	E.004	.036	--	--
12...	--	--	--	--	1.1	.245	<.016	<.002	<.008	.051	--	--

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 5

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

Date	Alum- inum, water, unfltrd recover -able, µg/L (01105)	Cadmium water, unfltrd recover -able, µg/L (01027)	Chrom- ium, 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)	Lead, water, unfltrd recover -able, µg/L (01051)	Mangan- ese, water, unfltrd recover -able, µg/L (01055)	Mercury water, unfltrd Mercury water, filtrd, 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)	Silver, water, unfltrd recover -able, µg/L (01077)
Oct													
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	90	<.06	<.40	.16	<4.0	192	.19	126	.041	.177	2.6	1.7	<.06
22...	--	--	--	--	--	213	--	129	--	--	--	--	--
22...	--	--	--	--	--	204	--	128	.023	.028	--	--	--
Dec													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	140	--	70.5	<.010	E.010	--	--	--
17...	--	--	--	--	--	139	--	68.7	<.010	.026	--	--	--
17...	--	--	--	--	--	150	--	75.1	--	--	--	--	--
17...	--	--	--	--	--	232	--	119	<.010	<.010	--	--	--
17...	--	--	--	--	--	--	--	--	<.010	<.010	--	--	--
Feb													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	140	--	55.1	<.010	E.006	--	--	--
11...	--	--	--	--	--	142	--	55.4	--	--	--	--	--
11...	--	--	--	--	--	184	--	76.7	<.010	<.010	--	--	--
Apr													
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	174	<.06	E.26	.23	<4.0	351	.38	122	<.010	<.010	1.2	.80	<.06
23...	--	--	--	--	--	358	--	130	--	--	--	--	--
23...	--	--	--	--	--	448	--	183	<.010	<.010	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
Jun													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	64	--	42.3	.053	.146	--	--	--
29...	--	--	--	--	--	89	--	59.0	--	--	--	--	--
29...	--	--	--	--	--	2,100	--	1,900	<.010	.019	--	--	--
Aug													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	75	--	67.6	--	--	--	--	--
12...	--	--	--	--	--	100	--	115	--	--	--	--	--
12...	--	--	--	--	--	441	--	1,000	--	--	--	--	--

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 5 of 5

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

Date	Zinc, water, unfltrd recover -able, μg/L (01092)	Arsenic water, unfltrd μg/L (01002)	Selen- ium, water, unfltrd μg/L (01147)	Organic carbon, bed sedimnt percent (01395)	Organic carbon, filtrd, mg/L (00681)	Organic carbon, unfltrd mg/L (00680)	Bed sediment, wet sieved, percent <.062mm (69589)	Data base number	Medium code
Oct									
22...	--	--	--	--	--	--	--	01	WS
22...	E1.3	.63	.14	--	6.9	9.2	--	01	WS
22...	--	--	--	--	--	--	--	01	WS
22...	--	--	--	--	7.1	--	--	01	WS
Dec									
17...	--	--	--	--	--	--	--	01	WS
17...	--	--	--	--	--	--	--	04	WSQ
17...	--	--	--	--	6.6	7.8	--	01	WS
17...	--	--	--	--	6.5	7.7	--	04	WSQ
17...	--	--	--	--	--	--	--	01	WS
17...	--	--	--	--	6.5	--	--	01	WS
17...	--	--	--	--	.6	--	--	04	OAQ
Feb									
11...	--	--	--	--	--	--	--	01	WS
11...	--	--	--	--	7.0	9.7	--	01	WS
11...	--	--	--	--	--	--	--	01	WS
11...	--	--	--	--	6.9	--	--	01	WS
Apr									
23...	--	--	--	--	--	--	--	01	WS
23...	E1.6	.43	.15	--	7.6	9.3	--	01	WS
23...	--	--	--	--	--	--	--	01	WS
23...	--	--	--	--	7.7	--	--	01	WS
23...	--	--	--	2.0	--	--	98	01	SB
Jun									
29...	--	--	--	--	--	--	--	01	WS
29...	--	--	--	--	6.7	8.7	--	01	WS
29...	--	--	--	--	--	--	--	01	WS
29...	--	--	--	--	7.4	--	--	01	WS
Aug									
12...	--	--	--	--	--	--	--	01	WS
12...	--	--	--	--	--	8.7	--	01	WS
12...	--	--	--	--	--	--	--	01	WS
12...	--	--	--	--	--	--	--	01	WS