

Water-Data Report 2008

0209799150 B. EVERETT JORDAN LAKE ABOVE U.S. HIGHWAY 64 AT WILSONVILLE, NC

Cape Fear Basin
Haw Subbasin

LOCATION.--Lat 35°44'30", long 79°01'09" referenced to North American Datum of 1983, Chatham County, NC, Hydrologic Unit 03030002, 0.2 mi above bridge on U.S. Highway 64, and 1.1 mi west of Wilsonville.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1991 to current year.

REMARKS.--Station operated to define water quality as part of a regional surface-water quality assessment. 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.

0209799150 B. EVERETT JORDAN LAKE ABOVE U.S. HIGHWAY 64 AT WILSONVILLE, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Time	Sample medium and type	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)
Oct									
17...	1215	Surface water, regular	40	1.0	.70	762	5.3	60	7.2
17...	1216	QC - Surface water, replicate	--	--	.70	--	--	--	--
17...	1217	QC - Surface water, replicate	--	--	.70	--	--	--	--
17...	1220	Surface water, regular	--	4.0	--	762	4.7	54	7.2
17...	1225	Surface water, regular	--	8.0	--	762	4.4	50	7.1
Dec									
05...	1015	Surface water, regular	--	1.4	.70	--	--	--	--
05...	1020	Surface water, regular	40	1.0	--	751	8.6	79	7.2
05...	1025	Surface water, regular	--	5.0	--	751	8.4	77	7.2
05...	1030	Surface water, regular	--	9.0	--	751	8.4	77	7.2
Feb									
28...	0845	Surface water, regular	--	1.4	.70	--	--	--	--
28...	0850	Surface water, regular	20	1.0	--	763	10.9	94	7.6
28...	0855	Surface water, regular	--	4.0	--	763	10.8	93	7.6
28...	0900	Surface water, regular	--	9.0	--	763	10.7	92	7.6
Apr									
23...	1230	Surface water, regular	--	1.6	.80	--	--	--	--
23...	1235	Surface water, regular	50	1.0	--	762	9.2	97	7.5
23...	1240	Surface water, regular	--	5.0	--	762	8.7	91	7.3
23...	1245	Surface water, regular	--	10.0	--	762	5.3	53	6.9
Jun									
20...	0930	Surface water, regular	--	2.8	1.40	--	--	--	--
20...	0935	Surface water, regular	25	1.0	--	762	7.2	92	8.0
20...	0940	Surface water, regular	--	4.0	--	762	2.1	27	7.0
20...	0945	Surface water, regular	--	9.0	--	762	.2	2	7.0
Aug									
05...	1100	Surface water, regular	--	2.4	1.20	--	--	--	--
05...	1105	Surface water, regular	25	1.0	--	758	8.7	118	8.9
05...	1110	Surface water, regular	--	4.0	--	758	.7	8	6.9
05...	1115	Surface water, regular	--	8.0	--	758	.2	2	7.0

0209799150 B. EVERETT JORDAN LAKE ABOVE U.S. HIGHWAY 64 AT WILSONVILLE, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Specific conductance, wat unf μ S/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, flttd, mg/L (00915)	Magnesium, water, flttd, mg/L (00925)	Potassium, water, flttd, mg/L (00935)	Sodium, water, flttd, mg/L (00930)	ANC, wat unf infl pt titr., field, mg/L as CaCO3 (00419)	Bicarbonate, wat unf infl pt titr., field, mg/L (00450)	Chloride, water, flttd, mg/L (00940)	Fluoride, water, flttd, mg/L (00950)	Silica, water, flttd, mg/L as SiO2 (00955)	Sulfate water, flttd, mg/L (00945)
Oct													
17...	180	21.6	37	9.43	3.32	4.08	20.7	41	50	16.6	.23	4.66	12.5
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	181	21.3	--	--	--	--	--	--	--	--	--	--	--
17...	181	21.3	--	--	--	--	--	--	--	--	--	--	13.4
Dec													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	183	10.5	35	8.69	3.14	4.06	22.7	39	47	18.1	.26	4.90	17.1
05...	182	10.5	--	--	--	--	--	--	--	--	--	--	--
05...	182	10.5	--	--	--	--	--	--	--	--	--	--	17.1
Feb													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	194	8.9	33	8.19	2.98	3.94	24.8	36	44	19.9	.23	3.38	21.8
28...	194	8.9	--	--	--	--	--	--	--	--	--	--	--
28...	196	8.9	--	--	--	--	--	--	--	--	--	--	21.8
Apr													
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	176	17.8	30	7.49	2.78	3.79	20.7	32	39	17.6	.17	.47	21.0
23...	177	17.6	--	--	--	--	--	--	--	--	--	--	--
23...	184	15.4	--	--	--	--	--	--	--	--	--	--	20.8
Jun													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	183	27.9	34	8.37	3.12	3.95	20.0	34	42	17.0	.20	.65	18.6
20...	184	26.7	--	--	--	--	--	--	--	--	--	--	--
20...	203	21.8	--	--	--	--	--	--	--	--	--	--	14.1
Aug													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	190	30.9	36	9.19	3.19	4.17	21.4	37.8	44.0	17.5	.22	2.29	17.6
05...	186	28.8	--	--	--	--	--	--	--	--	--	--	--
05...	223	25.8	--	--	--	--	--	--	--	--	--	--	11.9

0209799150 B. EVERETT JORDAN LAKE ABOVE U.S. HIGHWAY 64 AT WILSONVILLE, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	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)	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, unfltrd mg/L as P (00665)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Chloro- phyll a phyto- plank- ton, fluoro, µg/L (70953)	Pheo- phytin a, phyto- plank- ton, µg/L (62360)	Alum- inum, water, unfltrd recover- able, µg/L (01105)	Arsenic water, unfltrd µg/L (01002)
Oct													
17...	111	1.1	.031	<.016	E.001	E.004	.068	6.2	10.2	52.3	19.3	60	.75
17...	--	--	--	--	--	--	--	--	--	48.9	18.6	--	--
17...	--	--	--	--	--	--	--	--	--	50.2	19.2	--	--
17...	--	.97	.061	<.016	E.002	<.006	.057	--	--	--	--	--	--
17...	--	1.0	.090	<.016	E.002	<.006	.066	7.7	--	--	--	--	--
Dec													
05...	--	.79	.106	.278	.082	<.006	.045	--	--	15.6	10.1	--	--
05...	115	--	--	--	--	--	--	6.0	8.8	--	--	--	--
05...	--	.80	.108	.271	.083	E.004	.046	--	--	--	--	--	--
05...	--	.81	.112	.269	.083	E.003	.066	6.1	--	--	--	--	--
Feb													
28...	--	.83	E.013	.363	.006	E.003	.051	--	--	23.1	16.9	--	--
28...	127	--	--	--	--	--	--	5.9	7.6	--	--	--	--
28...	--	.80	E.013	.362	.006	E.003	.046	--	--	--	--	--	--
28...	--	.76	E.014	.378	.006	E.003	.042	6.0	--	--	--	--	--
Apr													
23...	--	.89	.032	.060	.005	E.003	.072	--	--	29.4	15.7	--	--
23...	128	--	--	--	--	--	--	7.0	10.0	--	--	154	E.49
23...	--	.85	.038	.072	.005	E.003	.070	--	--	--	--	--	--
23...	--	.78	.104	.204	.013	E.004	.059	6.3	--	--	--	--	--
Jun													
20...	--	.65	<.020	<.016	<.002	<.006	.033	--	--	15.3	7.3	--	--
20...	115	--	--	--	--	--	--	7.9	9.4	--	--	--	--
20...	--	.65	<.020	<.016	<.002	<.006	.035	--	--	--	--	--	--
20...	--	1.2	.480	<.016	E.001	.075	.175	8.5	--	--	--	--	--
Aug													
05...	--	.72	<.020	<.016	<.002	E.004	.036	--	--	15.4	4.8	--	--
05...	124	--	--	--	--	--	--	7.8	9.7	--	--	--	--
05...	--	.62	<.020	<.016	<.002	E.004	.035	--	--	--	--	--	--
05...	--	1.4	.683	<.016	<.002	.080	.152	8.0	--	--	--	--	--

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Cadmium water, unfltrd 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 ftrd, 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 μg/L (01147)	Silver, water, unfltrd recover- able, μg/L (01077)
Oct													
17...	.02	<.40	.13	<1.2	254	.19	302	E.008	.019	4.5	.56	.17	<.02
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	259	--	285	--	--	--	--	--	--
17...	--	--	--	--	337	--	350	E.006	.010	--	--	--	--
Dec													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	570	--	252	E.008	.022	--	--	--	--
05...	--	--	--	--	291	--	181	--	--	--	--	--	--
05...	--	--	--	--	255	--	170	<.010	E.010	--	--	--	--
Feb													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	229	--	93.3	.020	.023	--	--	--	--
28...	--	--	--	--	229	--	92.5	--	--	--	--	--	--
28...	--	--	--	--	228	--	91.0	.010	E.009	--	--	--	--
Apr													
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<.01	E.35	.18	1.3	269	.34	84.6	<.010	<.010	2.1	1.1	.17	<.02
23...	--	--	--	--	261	--	77.2	--	--	--	--	--	--
23...	--	--	--	--	384	--	159	<.010	<.010	--	--	--	--
Jun													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	61	--	55.6	<.010	<.010	--	--	--	--
20...	--	--	--	--	84	--	102	--	--	--	--	--	--
20...	--	--	--	--	2,150	--	2,420	<.010	<.010	--	--	--	--
Aug													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	62	--	61.2	E.009	.013	--	--	--	--
05...	--	--	--	--	83	--	182	--	--	--	--	--	--
05...	--	--	--	--	1,730	--	2,500	E.006	E.006	--	--	--	--

0209799150 B. EVERETT JORDAN LAKE ABOVE U.S. HIGHWAY 64 AT WILSONVILLE, NC—Continued

Date	Zinc, water, unfltrd recover -able, µg/L (01092)
Oct	
17...	2.1
17...	--
17...	--
17...	--
17...	--
Dec	
05...	--
05...	--
05...	--
05...	--
Feb	
28...	--
28...	--
28...	--
28...	--
Apr	
23...	--
23...	2.2
23...	--
23...	--
Jun	
20...	--
20...	--
20...	--
20...	--
Aug	
05...	--
05...	--
05...	--
05...	--