

**ALTAMAHA RIVER BASIN
2004 Water Year**

02217274 WHEELER CREEK AT BILL CHEEK ROAD, NEAR AUBURN, GA

LOCATION.—Lat 34°04'56", long 83°51'17" referenced to North American Datum (NAD) 1927 Gwinnett County, Hydrologic Unit 03070101, at concrete box culvert on Bill Cheek Road, 4 miles north of Auburn, GA.

DRAINAGE AREA.—1.31 square miles.

COOPERATION.—Gwinnett County Department of Public Utilities.

PERIODIC WATER-QUALITY RECORDS

PERIOD OF RECORD.—July 25, 2001 to current year.

REMARKS.— Hydrologic event 9 indicates a routine sample while J designates a storm event sample. Laboratory chemical analyses with analyzing agency code 81213 are by the U.S. Geological Survey, Ocala Water Quality Laboratory. Laboratory chemical analyses with analyzing agency code 80855 are by the Severn-Trent Laboratory, Denver, CO. Laboratory sediment analyses are by the U.S. Geological Survey, Sediment Partitioning Research Laboratory. Field determinations of discharge, specific conductance, pH, water temperature, turbidity, and dissolved oxygen are by the U.S. Geological Survey.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	End time	Hydro-logic event	Agency ana-lyzing sample, code (00028)	Instan-taneous dis-charge, cfs (00061)	Gage height, feet (00065)	Turb-idity, IR LED light, det ang 90 deg, FNU (63680)	Turbdty white light, det ang 90 degrees NTU (63675)	Turbdty white light, det ang 90 corrctd NTRU (63676)	BOD, water, 5 day, 20 degC mg/L (00310)	COD, high level, water, unfltrd mg/L (00340)	Fecal coli-form, M-FC 0.7u MF col/100 mL (31625)	Calcium water, fltrd, mg/L (00915)
OCT													
03...	0855	--	9	81213	.95	1.26	--	--	7.0	--	--	290	--
DEC													
22...	1100	--	9	81213	1.6	1.30	--	--	3.9	--	--	180	--
FEB													
06-06	1155	1200	J	81213	18	1.85	--	--	790	--	--	E450	--
MAR													
02...	1030	--	9	81213	1.6	1.30	--	--	6.3	--	--	62	--
23...	0955	--	9	81213	1.4	1.29	--	--	4.1	--	--	130	--
APR													
13-13	0625	0630	J	81213	11	1.71	--	--	520	--	--	2700	--
MAY													
24...	1010	--	9	81213	.74	1.23	--	--	12	--	--	1300	--
MAY													
31-31	1205	1210	J	81213	2.1	1.32	--	--	200	--	--	5300	--
JUL													
07...	0815	--	9	81213	.74	1.24	--	--	11	.4	<5	180	3.00
AUG													
12-12	0940	0950	J	80855	18	1.85	--	790	970	7.9	E16	22000	1.30
SEP													
02-02	0118	0419	J	80855	--	--	3300	1400	--	11.0	25	34000	1.50
SEP													
07-07	0340	0720	J	80855	--	--	3600	640	--	4.3	E7	11000	.83

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02217274 WHEELER CREEK AT BILL CHEEK ROAD, NEAR AUBURN, GA—continued.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Hard-ness, water, mg/L as CaCO3 (00900)	Magnes-ium, water, fltrd, mg/L (00925)	Magnes-ium, water, unfltrd recover -able, mg/L (00927)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Residue vola-tile, sus-pended, mg/L (00535)	Nitrite nitrate water fltrd, mg/L as N (00631)	Nitrite nitrate water unfltrd mg/L as N (00630)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia org-N, water, unfltrd mg/L as N (00625)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Cadmium water, unfltrd ug/L (01027)
OCT 03...	--	--	--	43	5	2	.60	.880	A.010	<.20	<.02	<.02	--
DEC 22...	--	--	--	41	<1	<1	.92	.920	A.014	<.20	<.02	<.02	--
FEB 06-06	--	--	--	36	500	74	.50	.500	A.221	1.4	<.02	.28	--
MAR 02...	--	--	--	38	7	2	.81	.810	A.008	<.20	<.02	<.02	--
MAR 23...	--	--	--	48	<1	<1	.84	.870	A.013	<.20	<.02	<.02	--
APR 13-13	--	--	--	35	359	53	.39	.390	A.197	1.4	<.02	.24	--
MAY 24...	--	--	--	44	7	3	.87	.870	A.037	.30	<.02	<.02	--
MAY 31-31	--	--	--	49	115	19	.56	.580	A.080	.70	<.02	.12	--
JUL 07...	11	.74	--	49	4	1	.86	.930	A.028	<.20	<.02	<.02	<.5
AUG 12-12	9	.32	.6	150	1300	180	1.20	.310	.180	2.0	E.026	.250	<5
SEP 02-02	28	.36	3.9	190	5400	730	.390	.360	.210	1.5	<.050	.170	<5
SEP 07-07	27	.23	4.1	180	3800	480	.340	.360	E.041	<.50	<.050	.230	<5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Chrom-ium, water, unfltrd recover -able, ug/L (01034)	Copper, water, unfltrd recover -able, ug/L (01042)	Lead, water, unfltrd recover -able, ug/L (01051)	Mangan-ese, water, unfltrd recover -able, ug/L (01055)	Zinc, water, unfltrd recover -able, ug/L (01092)	Organic carbon, water, unfltrd mg/L (00680)	Suspnd. sedi-ment, sieve diametr <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT 03...	--	--	--	--	--	1.8	--	4
DEC 22...	--	--	--	--	--	1.1	--	2
FEB 06-06	--	--	--	--	--	3.6	85	635
MAR 02...	--	--	--	--	--	1.0	--	11
MAR 23...	--	--	--	--	--	.8	--	1
APR 13-13	--	--	--	--	--	3.7	90	377
MAY 24...	--	--	--	--	--	1.6	--	7
MAY 31-31	--	--	--	--	--	5.2	77	127
JUL 07...	<1	<2	<2	73	2	2.1	--	4
AUG 12-12	E2	M	M	560	30	--	90	1180
SEP 02-02	42	30	100	2000	390	--	92	3800
SEP 07-07	45	30	200	1600	350	--	88	4060

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WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Hydro-logic event	Location in X-sect. looking dwnstrm ft from l bank (00009)	Instantaneous discharge, cfs (00061)	Gage height, feet (00065)	Dissolved oxygen, percent of saturation (00301)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd std field, units (00400)	Specific conductance, wat unf 25 degC (00095)	Temperature, water, deg C (00010)	Turbidity, IR LED 90 deg, FNU (63680)	Suspnd. sediment, sieve percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
OCT													
03...	0859	9	9.00	.95	1.26	96	10.1	6.9	55	12.2	8.6	--	--
03...	0900	9	6.00	.95	1.26	96	10.1	6.9	55	12.2	8.4	--	--
03...	0901	9	3.00	.95	1.26	96	10.1	6.9	55	12.2	8.2	--	--
DEC													
22...	1106	9	2.00	1.6	1.30	99	12.4	7.0	52	5.1	4.8	--	7
22...	1107	9	4.00	1.6	1.30	99	12.4	7.0	52	5.1	5.0	--	8
22...	1108	9	6.00	1.6	1.30	99	12.4	7.0	52	5.1	4.8	--	7
FEB													
06...	1204	J	9.00	18	1.85	117	14.6	6.8	57	5.6	760	81	604
06...	1205	J	6.00	18	1.85	117	14.6	6.8	57	5.6	730	83	409
06...	1206	J	3.00	18	1.85	117	14.6	6.8	57	5.6	720	91	565
MAR													
02...	1034	9	4.00	1.6	1.30	106	11.4	6.6	48	12.6	5.0	--	--
02...	1035	9	7.00	1.6	1.30	106	11.3	6.6	48	12.6	5.1	--	--
02...	1036	9	10.0	1.6	1.30	105	11.3	6.6	48	12.6	5.3	--	--
23...	1010	9	2.00	1.4	1.29	137	16.4	6.7	51	7.1	5.4	--	--
23...	1011	9	5.00	1.4	1.29	137	16.4	6.7	51	7.1	3.7	--	--
23...	1012	9	8.00	1.4	1.29	136	16.3	6.7	51	7.1	5.7	--	--
APR													
13...	0636	J	10.0	11	1.71	94	10.0	6.7	44	12.3	540	86	372
13...	0637	J	6.00	11	1.71	93	10.0	6.7	44	12.3	540	89	347
13...	0638	J	2.00	10	1.69	93	10.0	6.7	44	12.3	490	88	336
MAY													
24...	1014	9	6.00	.74	1.23	92	8.4	6.3	54	18.7	14	--	--
24...	1015	9	4.00	.74	1.23	92	8.4	6.2	54	18.7	14	--	--
24...	1016	9	2.00	.74	1.23	92	8.4	6.2	54	18.7	15	--	--
31...	1214	J	7.50	2.1	1.32	93	8.2	6.4	58	20.2	--	79	128
31...	1215	J	5.00	2.1	1.32	94	8.3	6.4	58	20.2	--	79	128
31...	1216	J	2.50	2.1	1.32	96	8.4	6.5	58	20.2	--	79	128
JUL													
07...	0828	9	7.00	.74	1.24	94	8.3	6.8	57	20.4	12	--	--
07...	0829	9	5.00	.74	1.24	91	8.0	6.8	57	20.4	10	--	--
07...	0830	9	3.00	.74	1.24	90	7.9	6.8	57	20.4	8.7	--	--
AUG													
12...	0950	J	3.00	18	1.85	104	9.2	6.2	28	20.9	1200	91	1060
12...	0951	J	7.00	18	1.85	103	9.2	6.2	28	20.9	1200	84	1160
12...	0952	J	11.0	18	1.85	103	9.2	6.2	28	20.9	1200	90	1040
SEP													
02...	1001	J	7.50	3.1	1.41	111	9.8	6.6	38	21.5	160	91	102
02...	1002	J	5.00	3.1	1.41	111	9.8	6.6	38	21.5	150	94	96
02...	1003	J	2.50	3.1	1.41	111	9.8	6.6	38	21.5	160	93	98
07...	0945	J	7.50	56	2.25	--	--	5.6	26	21.6	1000	54	2290
07...	0946	J	5.00	56	2.25	--	--	5.5	26	21.6	1100	69	1840
07...	0947	J	2.50	56	2.25	--	--	5.5	26	21.6	1100	78	1610

Remark codes used in this table:

- < -- Less than
- A -- Average value
- E -- Estimated value
- M -- Presence verified, not quantified