

**ALTAMAHA RIVER BASIN  
2004 Water Year**

**02208150 ALCOVY RIVER AT NEW HOPE ROAD, NEAR GRAYSON, GA**

**LOCATION.**—Lat 33°55'03", long 83°53'17" referenced to North American Datum (NAD) of 1927, Gwinnett County, Hydrologic Unit 03070103, and 4.2 miles northeast of Grayson.

**DRAINAGE AREA.**—30.8 square miles.

**COOPERATION.**—Gwinnett County Department of Public Utilities.

**PERIODIC WATER-QUALITY RECORDS**

**PERIOD OF RECORD.**—October 15, 1996 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)	Turbdty white light, det ang 90 degrees NTU (63675)	Turbdty white light, det ang 90 corrcrtd NTRU (63676)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, high level, water, unfltrd mg/L (00340)	Calcium water, fltrd, mg/L (00915)	Hard-ness, water, mg/L as CaCO3 (00900)	Magnes-ium, water, fltrd, mg/L (00925)
OCT 02...	1200	--	9	81213	20	3.21	--	9.0	--	8	6.20	22	1.70
DEC 16...	1335	--	9	81213	38	3.62	--	14	1.4	12	6.00	22	1.60
FEB 12-12	0611	1102	J	81213	--	--	--	530	2.6	9	4.30	15	1.10
MAR 04...	1155	--	9	81213	42	3.58	--	8.3	E.4	<5	5.70	21	1.70
MAR 24...	1145	--	9	81213	32	3.37	--	6.4	<.1	<5	5.50	21	1.70
MAY 12-13	2336	0351	J	81213	--	--	--	250	2.6	17	4.50	16	1.20
MAY 27...	0955	--	9	81213	21	3.07	--	12	.9	6	5.20	19	1.40
MAY 31-31	1038	1551	J	81213	--	--	--	170	3.2	9	5.40	20	1.50
JUL 12...	0935	--	9	81213	21	3.06	--	9.6	.3	<5	6.80	24	1.80
AUG 05-06	1500	0447	J	80855	--	--	250	320	5.6	E14	5.20	26	1.30
SEP 16-17	1748	0229	J	80855	--	--	630	910	4.0	E15	2.30	21	.59

**ALTAMAHA RIVER BASIN  
2004 Water Year**

**02208150 ALCOVY RIVER AT NEW HOPE ROAD, NEAR GRAYSON, GA—continued.**

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

Date	Magnesium, water, unfltrd recover-able, mg/L (00927)	Loss on ignition, from ROE, wat unfltrd mg/L (00505)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Residue volatile, 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)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Cadmium water, unfltrd, ug/L (01027)	Chromium, water, unfltrd recover-able, ug/L (01034)
OCT 02...	--	--	54	4	2	.46	.470	A.069	<.20	<.02	<.02	<.5	<1
DEC 16...	--	--	49	6	1	.53	.530	A.082	.20	<.02	<.02	<.5	<1
FEB 12-12	--	--	34	446	62	.40	.400	A.078	1.0	<.02	.25	<.5	8
MAR 04...	--	--	54	4	2	.55	.550	A.060	<.20	<.02	<.02	<.5	<1
MAR 24...	--	--	57	2	2	.54	.560	A.070	<.20	<.02	<.02	<.5	<1
MAY 12-13	--	--	45	219	36	.51	.520	A.119	1.1	<.02	.17	<.5	5
MAY 27...	--	--	61	6	2	.53	.540	A.154	.30	<.02	<.02	<.5	<1
MAY 31-31	--	--	53	155	24	.54	.540	A.123	1.0	<.02	.13	<.5	2
JUL 12...	--	--	54	5	2	.13	.400	A.051	<.20	<.02	<.02	<.5	<1
AUG 05-06	2.4	66	66	360	59	.530	.520	E.070	1.1	<.050	.082	<5	13
SEP 16-17	2.5	--	130	730	100	.170	.210	E.044	.84	<.050	.370	<2.0	31

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

Date	Copper, water, unfltrd recover-able, ug/L (01042)	Lead, water, unfltrd recover-able, ug/L (01051)	Manganese, water, unfltrd recover-able, ug/L (01055)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspnd. sedi-ment, sieve diametr <.063mm (70331)	Sus-pended sedi-ment concentration mg/L (80154)
OCT 02...	<2	<2	355	2	--	7
DEC 16...	<2	<2	255	5	--	7
FEB 12-12	8	20	733	58	65	716
MAR 04...	<2	<2	221	3	--	5
MAR 24...	<2	<2	290	3	--	6
MAY 12-13	6	10	844	33	56	254
MAY 27...	<2	<2	379	2	--	8
MAY 31-31	2	7	579	18	76	180
JUL 12...	<2	<2	393	2	--	7
AUG 05-06	M	M	910	60	90	359
SEP 16-17	20	M	800	70	91	747

**ALTAMAHA RIVER BASIN  
2004 Water Year**

**02208150 ALCOVY RIVER AT NEW HOPE ROAD, NEAR GRAYSON, GA—continued.**

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

Date	Time	Hydro- logic event	Loca- tion in X-sect. looking dwnstrm ft from l bank (00009)	Instan- taneous dis- charge, cfs (00061)	Gage height, feet (00065)	Dis- solved oxygen, percent of sat- uration (00301)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd std field, units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Turb- idity, IR LED light, det ang 90 deg, FNU (63680)
OCT											
02...	1214	9	27.0	21	3.22	96	9.6	7.0	78	14.6	10
02...	1215	9	18.0	21	3.22	96	9.6	7.0	79	14.7	13
02...	1216	9	9.00	21	3.22	96	9.5	7.0	79	14.7	14
DEC											
16...	1340	9	7.00	38	3.62	91	10.8	6.7	74	7.0	16
16...	1341	9	17.0	38	3.62	91	10.8	6.7	75	7.0	16
16...	1342	9	27.0	38	3.62	91	10.8	6.7	75	7.0	17
FEB											
12...	0800	J	30.0	375	6.41	109	12.6	6.8	58	7.3	500
12...	0801	J	20.0	375	6.41	109	12.7	6.8	32	7.3	510
12...	0802	J	10.0	375	6.41	112	13.0	6.8	53	7.3	540
MAR											
04...	1159	9	4.00	42	3.58	98	9.9	6.5	77	14.7	9.6
04...	1200	9	11.0	42	3.58	98	9.9	6.5	76	14.7	9.6
04...	1201	9	18.0	42	3.58	98	9.9	6.5	76	14.7	9.6
24...	1151	9	7.00	32	3.37	94	10.4	7.1	77	10.5	7.5
24...	1153	9	14.0	33	3.38	94	10.4	7.1	77	10.6	8.1
24...	1154	9	21.0	33	3.38	95	10.4	7.1	77	10.6	8.1
MAY											
27...	0959	9	2.00	21	3.07	86	7.7	6.5	83	20.9	14
27...	1000	9	7.00	21	3.07	86	7.7	6.5	83	20.9	11
27...	1001	9	12.0	21	3.07	86	7.7	6.5	82	20.9	11
31...	1040	J	30.0	35	3.41	97	8.4	7.1	69	21.2	230
31...	1041	J	20.0	35	3.41	94	8.1	7.0	69	21.2	260
31...	1042	J	10.0	35	3.41	91	7.9	7.0	69	21.2	270
JUL											
12...	0944	9	21.0	21	3.06	95	8.0	7.0	76	22.9	8.4
12...	0945	9	14.0	21	3.06	95	8.0	7.0	76	22.9	8.9
12...	0946	9	7.00	21	3.06	95	8.0	7.0	76	22.9	8.3
AUG											
05...	1846	J	30.0	31	3.31	90	7.3	7.0	70	24.2	130
05...	1847	J	20.0	31	3.31	90	7.3	7.0	70	24.2	120
05...	1848	J	10.0	31	3.31	88	7.2	7.0	71	24.2	120
SEP											
17...	0829	J	5.00	564	7.25	83	7.3	6.4	48	21.8	290
17...	0830	J	15.0	564	7.25	83	7.3	6.4	48	21.8	280
17...	0831	J	25.0	564	7.25	83	7.3	6.3	48	21.8	270
17...	0832	J	35.0	564	7.25	83	7.2	6.3	48	21.8	280
17...	0833	J	45.0	564	7.25	84	7.4	6.3	48	21.8	250
17...	0834	J	55.0	564	7.25	82	7.2	6.3	48	21.8	260

Remark codes used in this table:

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