



Water-Data Report 2006

352840082381002 Local number BU-069, DENR Bent Creek Research Station MW-11 (Transition Zone well)

Piedmont and Blue Ridge crystalline-rock aquifers
 Quaternary Saprolite
 Buncombe County, NC

LOCATION.--Lat 35°28'40", long 82°38'10" referenced to North American Datum of 1983, Buncombe County, NC, Hydrologic Unit 06010105, 1.2 mi north of Blue Ridge Parkway, 3.1 mi west of Brevard Road in Bent Creek Research Forest. Owner: DENR (North Carolina Department of Environment and Natural Resources), Division of Water Quality.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 53 ft, diameter 4 in., cased to 38 ft, screened interval from 38 to 53 ft, sand filter packed from 32 to 53 ft.

DATUM.--Land-surface datum is 2,202.52 ft above NGVD of 1929. Measuring point: Top of protective steel casing, 2.77 ft above land-surface datum.

PERIOD OF RECORD.--February 2003 to current year.

GAGE.--Measured periodically with steel tape.

REMARKS.--Well is part of Piedmont/Mountains ground-water study.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.07 ft below land-surface datum, July 3, 2003; lowest water level measured, 6.05 ft below land-surface datum, July 7, 2005.

**WATER LEVELS IN FEET BELOW LAND SURFACE DATUM
 WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

[Measurement method: S, steel tape; T, electric tape. Water-level status: --, static.]

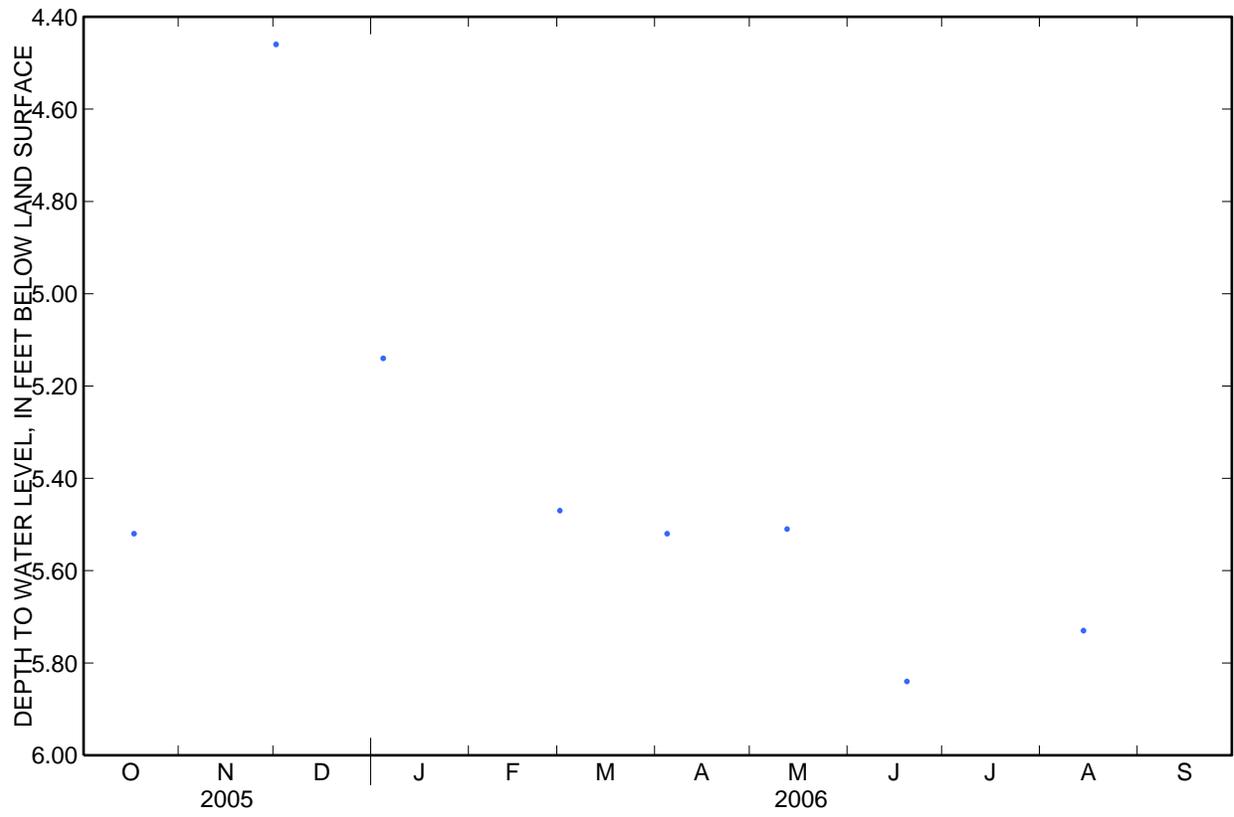
Date	Water level	Measure-ment method	Water level status	Date	Water level	Measure-ment method	Water level status
Oct 17	5.52	S	--	Apr 4	5.52	S	--
Dec 1	4.46	S	--	May 12	5.51	S	--
Jan 4	5.14	S	--	Jun 19	5.84	T	--
Mar 1	5.47	S	--	Aug 14	5.73	S	--

Water year 2006 highest: 4.46 Dec 01, 2005; lowest: 5.84 Jun 19, 2006

Period of record highest: 3.07 Jul 03, 2003; lowest: 6.05 Jul 27, 2005

Record available from Feb 04, 2003, to Aug 14, 2006; 33 entries

352840082381002 Local number BU-069, DENR Bent Creek Research Station MW-11 (Transition Zone well)—Continued



352840082381002 Local number BU-069, DENR Bent Creek Research Station MW-11 (Transition Zone well)—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2005.

REMARKS.--Well is part of the Piedmont/Mountains ground-water study.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 1 of 3

[Remark codes: <, less than.]

Date	Time	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Dissolved oxygen, percent of saturation (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unfltrd uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd, mg/L as CaCO3 (00419)	
Nov 04...	1300	53.0	2,202.52	7.7	77	5.4	13	13.0	.73	.490	.28	.98	6

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 2 of 3

[Remark codes: <, less than.]

Date	Bicar-bonate, wat unfltrd, titr., field, mg/L (00450)	Bromide water, fltrd, mg/L (71870)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro-gen, wat flt by anal ysis, mg/L (62854)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Arsenic water, fltrd, ug/L (01000)
Nov 04...	7	<.02	.55	<.10	8.53	.67	12	<.04	<.06	<.008	.06	<.006	<.12

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 3 of 3

[Remark codes: <, less than.]

Date	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)	Mangan-ese, water, fltrd, ug/L (01056)	Tritium 2-sigma water unfltrd pCi/L (75985)	Tritium water unfltrd pCi/L (07000)
Nov 04...	<7.0	<6	.8	2.6	24