



Water-Data Report 2006

354328078295703 Local number WK-330, Raleigh Hydrogeologic Research Station WC-1D (Bedrock)

Piedmont and Blue Ridge crystalline-rock aquifers
 Mafic Intrusive Igneous Rock
 Wake County, NC

LOCATION.--Lat 35°43'29", long 78°29'57" referenced to North American Datum of 1983, Wake County, NC, Hydrologic Unit 03020201, 9.3 mi east south east of Raleigh. Owner: DENR (North Carolina Department of Environment and Natural Resources), Division of Water Quality.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Depth 342 ft. Upper casing diameter 6.25 in; top of first opening 82 ft, bottom of last opening 342 ft. Drilled observation well, depth 342 ft, diameter 6.25 in., cased to 82 ft, open hole from 82 ft to 342 ft, diameter 6 in.

DATUM.--Land-surface datum is 150.13 ft above National Geodetic Vertical Datum of 1929. Measuring point: Undefined, 2.80 ft above land-surface datum, April 6, 2005, to present. Land-surface datum is 150.13 ft above NAVD of 1988. Measuring point: Top of steel casing, 2.80 ft above land-surface datum.

PERIOD OF RECORD.--October 2005 to September 2006.

GAGE.--Measured periodically with electric and steel tape by DENR and USGS.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.51 ft below land-surface datum, July 17, 2006; lowest water level measured 25.90 ft below land-surface datum, Nov. 9, 2005.

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

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

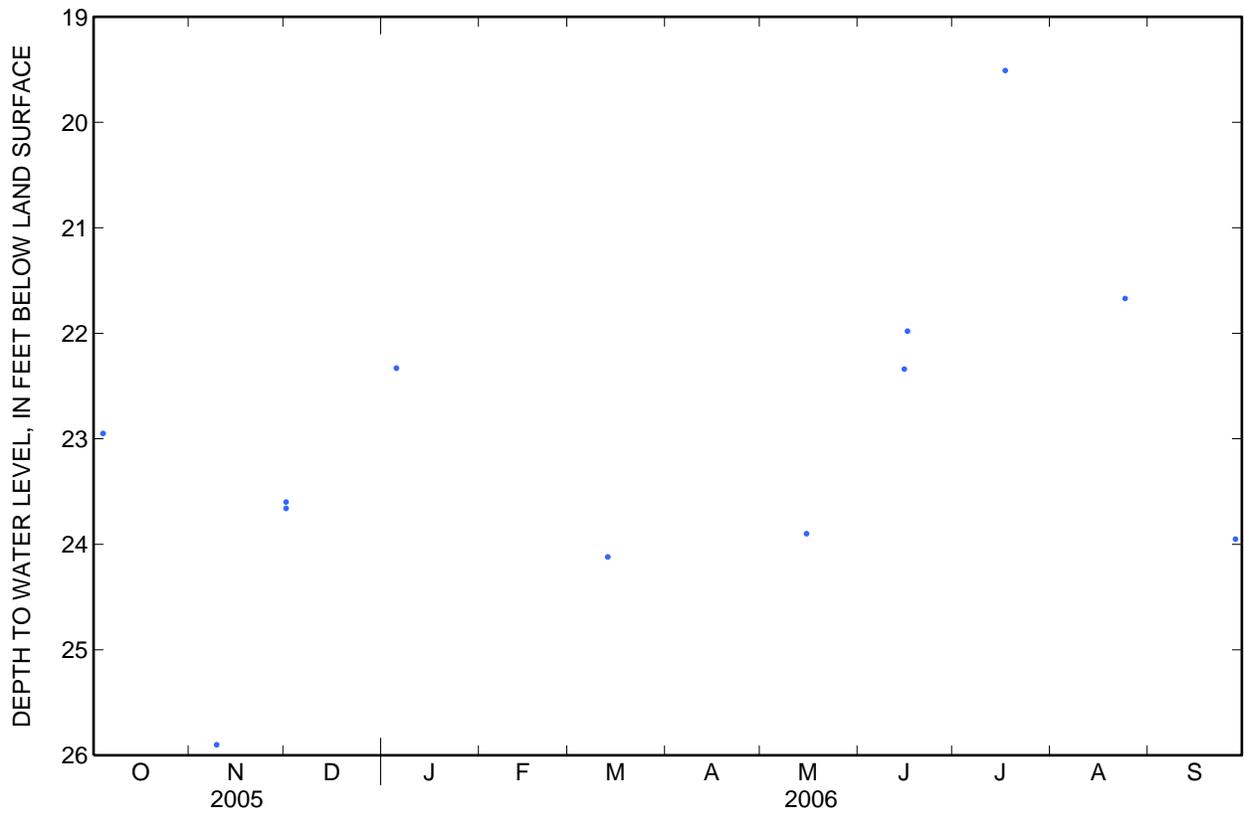
Date	Water level	Measure-ment method	Water level status	Date	Water level	Measure-ment method	Water level status
Oct 4	22.95	T	--	May 15	23.90	T	--
Nov 9	25.90	T	--	Jun 15	22.34	S	--
Dec 1	23.66	T	--	16	21.98	T	--
1	23.60	T	--	Jul 17	19.51	T	--
Jan 5	22.33	T	--	Aug 24	21.67	T	--
Mar 13	24.12	T	--	Sep 28	23.95	T	--

Water year 2006 highest: 19.51 Jul 17, 2006; lowest: 25.90 Nov 09, 2005

Period of record highest: 18.96 Jan 25, 2007; lowest: 25.90 Nov 09, 2005

Record available from Oct 04, 2005, to Jan 25, 2007; 14 entries

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2005 to April 2006.

REMARKS.--Well is part of 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, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd, titr., field, mg/L as CaCO3 (00419)
Oct 04...	1300	342	150.13	.1	2	10.0	699	17.3	8.53	.029	4.34	120	66
Apr 05...	1545	342	150.13	.1	1	10.8	764	18.5	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 3

[Remark codes: <, less than.]

Date	Bicarbonate, wat unfltrd, titr., field, mg/L (00450)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat fltrd, mg/L (70300)	Ammonia water, fltrd, as N, mg/L (00608)	Nitrite + nitrate, water, fltrd, as N, mg/L (00631)	Nitrite water, fltrd, as N, mg/L (00613)	Total nitrogen, wat fltrd, by analysis, mg/L (62854)	Orthophosphate, water, fltrd, as P, mg/L (00671)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)
Oct 04...	81	19.1	2.37	18.7	172	418	1.40	5.83	4.90	8.21	<.006	<6	<.6
Apr 05...	--	--	--	--	--	--	2.51	3.56	3.44	6.89	<.012	--	--

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

Part 3 of 3

[Remark codes: <, less than.]

Date	Tritium	
	2-sigma water unfiltrd pCi/L (75985)	Tritium water unfiltrd pCi/L (07000)
Oct		
04...	--	--
Apr		
05...	1.0	5.1