



Water-Data Report 2006

354315078300104 Local number WK-335, Raleigh Hydrogeologic Research Station WC-2CH (Bedrock)

Piedmont and Blue Ridge crystalline-rock aquifers

Felsic Intrusive Igneous Rock

Wake County, NC

LOCATION.--Lat 35°43'16", long 78°29'59" 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.--Drilled observation well, depth 85 ft, diameter 4 in., cased to 70 ft, screened interval from 70 to 85 ft, sand filter packed from 65 to 85 ft.

DATUM.--Land-surface datum is 180.46 ft above NGVD of 1929. Measuring point: Top of PVC casing, 2.72 ft above land-surface datum.

PERIOD OF RECORD.--May 2005 to current year. Continuous record began May 2006.

GAGE.--Measured periodically with electric and steel tape by DENR and USGS. Water-level recorder collecting data at 60-minute intervals.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.22 ft below land-surface datum, May 9, 2005; lowest water level measured, 23.13 ft below land-surface datum, Sept. 30, 2006.

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.]

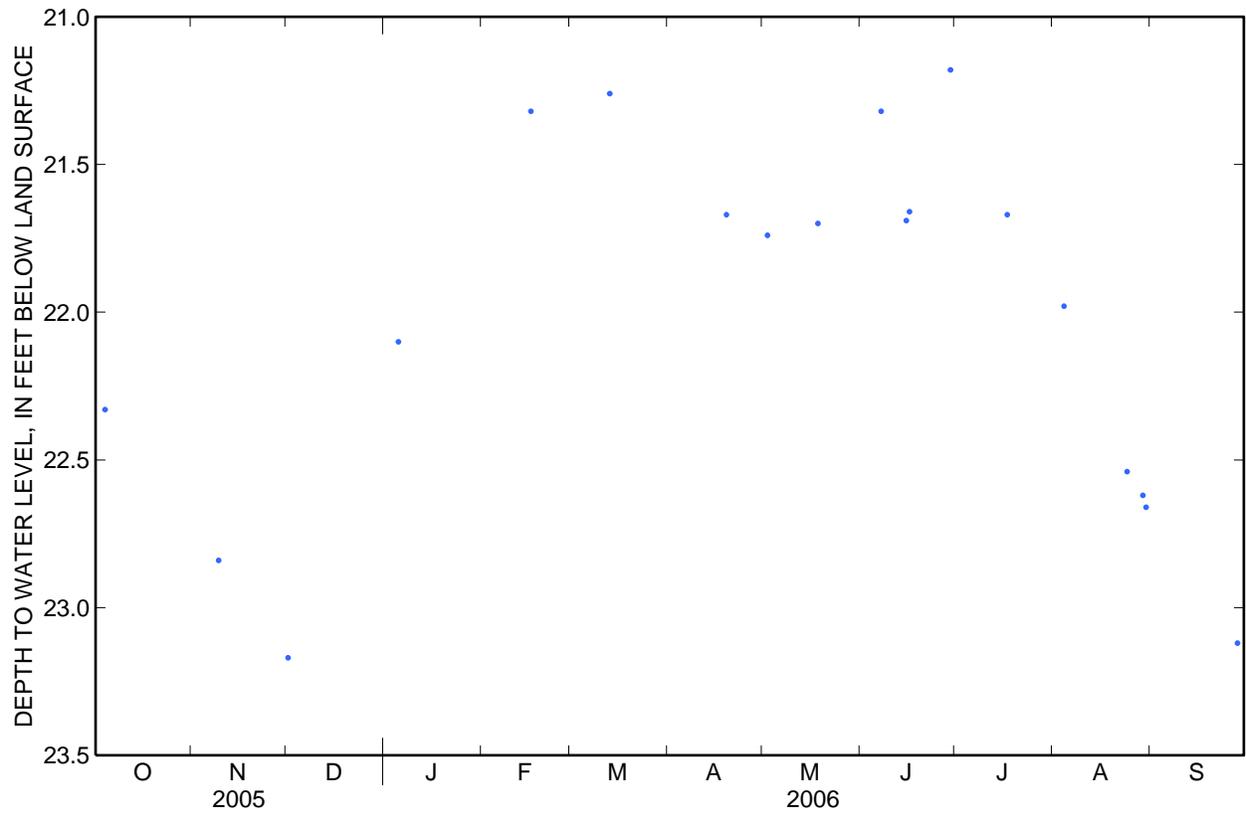
Date	Water level	Measure-ment method	Water level status	Date	Water level	Measure-ment method	Water level status
Oct 4	22.33	S	--	Jun 15	21.69	T	--
Nov 9	22.84	T	--	16	21.66	T	--
Dec 1	23.17	T	--	29	21.18	T	--
Jan 5	22.10	T	--	Jul 17	21.67	T	--
Feb 16	21.32	T	--	Aug 4	21.98	T	--
Mar 13	21.26	T	--	24	22.54	T	--
Apr 19	21.67	T	--	29	22.62	T	--
May 2	21.74	T	--	30	22.66	T	--
18	21.70	T	--	Sep 28	23.12	T	--
Jun 7	21.32	T	--				

Water year 2006 highest: 21.18 Jun 29, 2006; lowest: 23.17 Dec 01, 2005

Period of record highest: 19.22 May 09, 2005; lowest: 23.39 Nov 17, 2006

Record available from May 09, 2005, to Jan 25, 2007; 29 entries

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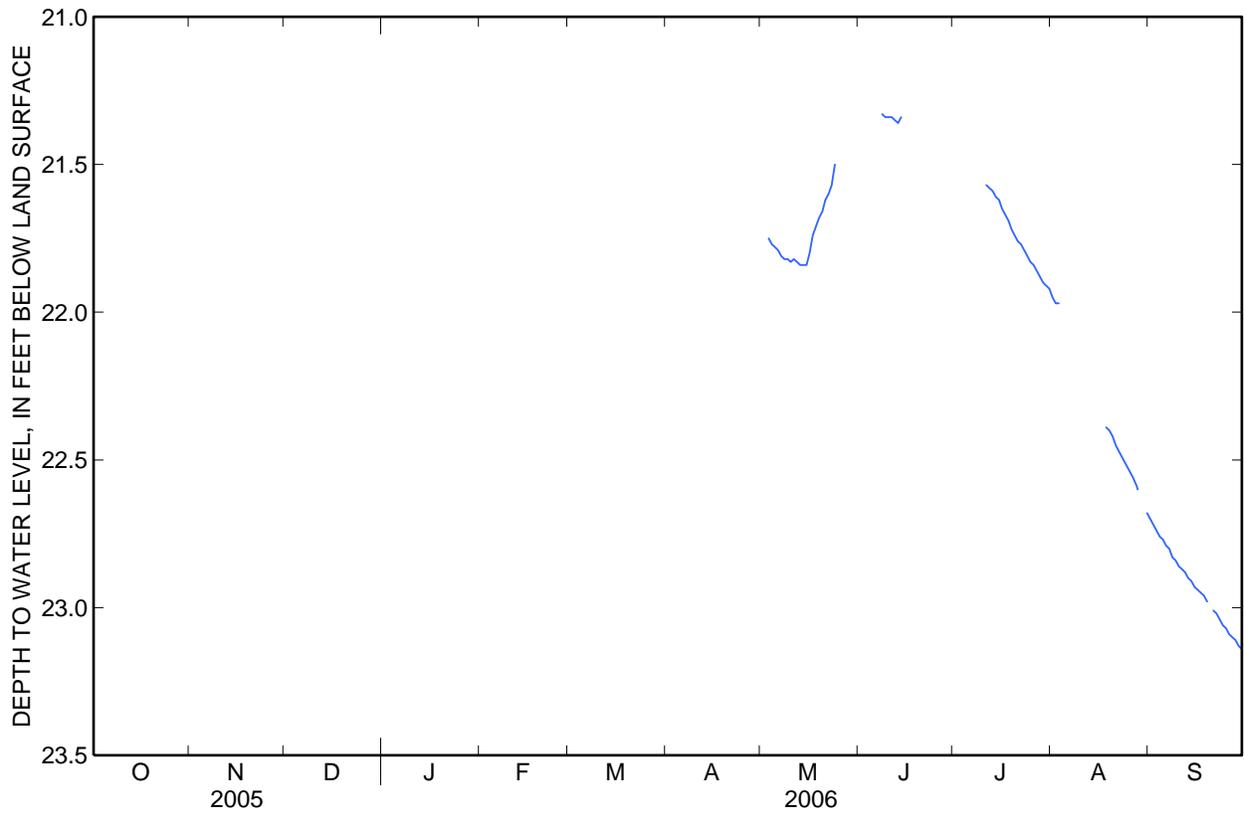
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DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	---	---	---	---	---	---	---	21.95	22.70
2	---	---	---	---	---	---	---	---	---	---	21.97	22.72
3	---	---	---	---	---	---	---	21.75	---	---	21.97	22.74
4	---	---	---	---	---	---	---	21.77	---	---	---	22.76
5	---	---	---	---	---	---	---	21.78	---	---	---	22.77
6	---	---	---	---	---	---	---	21.79	---	---	---	22.79
7	---	---	---	---	---	---	---	21.81	---	---	---	22.80
8	---	---	---	---	---	---	---	21.82	21.33	---	---	22.83
9	---	---	---	---	---	---	---	21.82	21.34	---	---	22.84
10	---	---	---	---	---	---	---	21.83	21.34	---	---	22.86
11	---	---	---	---	---	---	---	21.82	21.34	21.57	---	22.87
12	---	---	---	---	---	---	---	21.83	21.35	21.58	---	22.88
13	---	---	---	---	---	---	---	21.84	21.36	21.59	---	22.90
14	---	---	---	---	---	---	---	21.84	21.34	21.61	---	22.91
15	---	---	---	---	---	---	---	21.84	---	21.62	---	22.93
16	---	---	---	---	---	---	---	21.80	---	21.65	---	22.94
17	---	---	---	---	---	---	---	21.74	---	21.67	---	22.95
18	---	---	---	---	---	---	---	21.71	---	21.69	22.39	22.96
19	---	---	---	---	---	---	---	21.68	---	21.72	22.40	22.98
20	---	---	---	---	---	---	---	21.66	---	21.74	22.42	---
21	---	---	---	---	---	---	---	21.62	---	21.76	22.45	23.01
22	---	---	---	---	---	---	---	21.60	---	21.77	22.47	23.02
23	---	---	---	---	---	---	---	21.57	---	21.79	22.49	23.04
24	---	---	---	---	---	---	---	21.50	---	21.81	22.51	23.06
25	---	---	---	---	---	---	---	---	---	21.83	22.53	23.07
26	---	---	---	---	---	---	---	---	---	21.84	22.55	23.09
27	---	---	---	---	---	---	---	---	---	21.86	22.57	23.10
28	---	---	---	---	---	---	---	---	---	21.88	22.60	23.11
29	---	---	---	---	---	---	---	---	---	21.90	---	23.13
30	---	---	---	---	---	---	---	---	---	21.91	---	23.14
31	---	---	---	---	---	---	---	---	---	21.92	22.68	---
Mean	---	---	---	---	---	---	---	21.75	21.34	21.75	22.40	22.93
Max	---	---	---	---	---	---	---	21.84	21.36	21.92	22.68	23.14
Min	---	---	---	---	---	---	---	21.50	21.33	21.57	21.95	22.70

Water Year 2006	
Mean	22.18
High	21.33
Low	23.14

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2005.

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 1 of 2

[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)	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 05...	1400	85	180.46	6.3	65	5.4	461	17.4	41.8	7.99	4.07	26.7	13

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 2

[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 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 nitrogen, wat flt by analysis, mg/L (62854)	Orthophosphate, water, fltrd, mg/L as P (00671)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)
Oct 05...	15	12.2	<.1	40.8	.2	411	<.04	50.9	<.008	47.7	.039	<6	15.7