



Water-Data Report 2007

**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: NCDENR (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 199.25 ft above North American Vertical Datum of 1988. Measuring point: top of PVC casing, 2.72 ft above land-surface datum, May 2, 2006, to present.

PERIOD OF RECORD.--May 2005 to current year. Continuous record May 2006 to January 2007.

GAGE.--Measured periodically with electric and steel tape by NCDENR, Division of Water Quality 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 recorded, 23.50 ft below land-surface datum, November 9, 10, 2006.

**WATER LEVELS IN FEET BELOW LAND SURFACE DATUM**

<b>Date</b>	<b>Water level</b>	<b>Date</b>	<b>Water level</b>
Oct 11, 2006	23.24	Mar 20, 2007	20.63
Nov 17	23.37	May 1	20.46
17	23.39	Jun 21	21.40
Jan 10, 2007	21.68	Sep 11	23.15
25	21.30	13	23.22
Feb 27	20.84		

Highest: 20.46 May 01, 2007

Lowest: 23.39 Nov 17, 2006

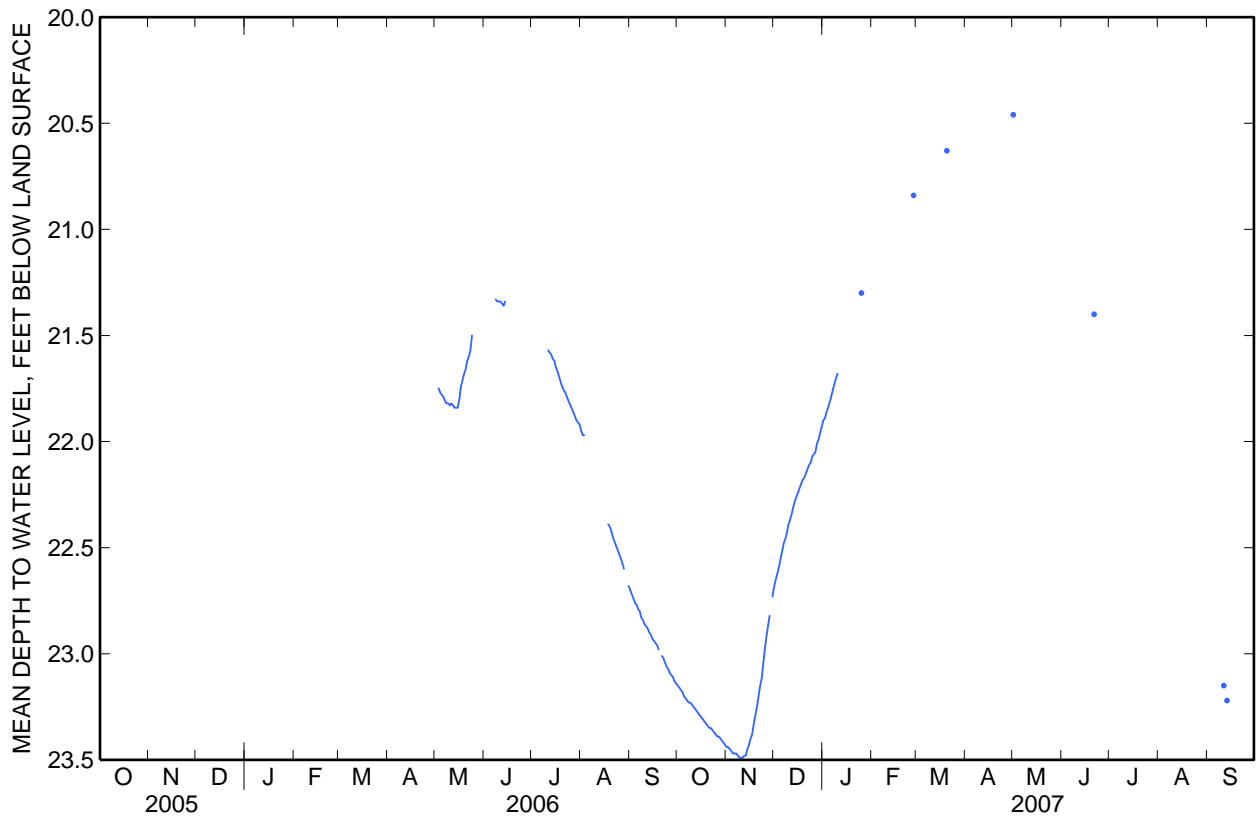
## 354315078300104 Local number WK-335, Raleigh Hydrogeologic Research Station WC-2CH (Bedrock)—Continued

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	23.15	23.44	22.68	21.90	---	---	---	---	---	---	---	---
2	23.16	23.44	22.65	21.89	---	---	---	---	---	---	---	---
3	23.17	23.45	22.62	21.86	---	---	---	---	---	---	---	---
4	23.18	23.46	22.59	21.84	---	---	---	---	---	---	---	---
5	23.20	23.47	22.55	21.81	---	---	---	---	---	---	---	---
6	23.21	23.47	22.52	21.79	---	---	---	---	---	---	---	---
7	23.22	23.47	22.48	21.76	---	---	---	---	---	---	---	---
8	23.23	23.48	22.46	21.73	---	---	---	---	---	---	---	---
9	23.23	23.49	22.43	21.70	---	---	---	---	---	---	---	---
10	23.24	23.49	22.39	---	---	---	---	---	---	---	---	---
11	23.25	23.49	22.37	---	---	---	---	---	---	---	---	---
12	23.26	23.48	22.34	---	---	---	---	---	---	---	---	---
13	23.27	23.48	22.31	---	---	---	---	---	---	---	---	---
14	23.28	23.45	22.28	---	---	---	---	---	---	---	---	---
15	23.29	23.43	22.26	---	---	---	---	---	---	---	---	---
16	23.30	23.40	22.24	---	---	---	---	---	---	---	---	---
17	23.31	23.38	22.22	---	---	---	---	---	---	---	---	---
18	23.32	23.33	22.20	---	---	---	---	---	---	---	---	---
19	23.33	23.29	22.18	---	---	---	---	---	---	---	---	---
20	23.34	23.25	22.17	---	---	---	---	---	---	---	---	---
21	23.35	23.20	22.15	---	---	---	---	---	---	---	---	---
22	23.35	23.15	22.13	---	---	---	---	---	---	---	---	---
23	23.36	23.12	22.11	---	---	---	---	---	---	---	---	---
24	23.37	23.05	22.10	---	---	---	---	---	---	---	---	---
25	23.38	22.98	22.07	---	---	---	---	---	---	---	---	---
26	23.39	22.92	22.06	---	---	---	---	---	---	---	---	---
27	23.39	22.87	22.05	---	---	---	---	---	---	---	---	---
28	23.40	22.82	22.01	---	---	---	---	---	---	---	---	---
29	23.41	---	21.99	---	---	---	---	---	---	---	---	---
30	23.42	22.73	21.96	---	---	---	---	---	---	---	---	---
31	23.43	---	21.93	---	---	---	---	---	---	---	---	---
<b>Mean</b>	23.30	23.29	22.27	21.81	---	---	---	---	---	---	---	---
<b>Max</b>	23.43	23.49	22.68	21.90	---	---	---	---	---	---	---	---
<b>Min</b>	23.15	22.73	21.93	21.70	---	---	---	---	---	---	---	---

	Calendar Year 2006	Water Year 2007
<b>Mean</b>	22.56	22.84
<b>High</b>	21.33	21.70
<b>Low</b>	23.49	23.49

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



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

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 2006, 2007.

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

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 2

[Remark codes: <, less than.]

Date	Time	Depth of well, feet below LSD (72008)	Depth to top sample intrval feet below LSD (72015)	Water level, depth below MP, feet (61055)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif-ic conduc-tance, wat unf 25 degC (00095)	Temper-ature, water, deg C (00010)	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)
Sep 11...	1225	85	47.00	25.87	754	9.6	99	6.0	578	16.5	<.020	58.1	<.002

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 2 of 2

[Remark codes: <, less than.]

Date	Total nitro-gen, wat flt by anal ysis, mg/L (62854)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Rn-222 2-sigma water, unfltrd pCi/L (76002)	Rn-222, water, unfltrd pCi/L (82303)
Sep 11...	64.8	.044	83	7,820