

Water-Data Report 2007

**354328078295704 Local number WK-331, Raleigh Hydrogeologic Research Station WC-1CH (Bedrock)**

Piedmont and Blue Ridge crystalline-rock aquifers

Felsic 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: NCDENR (North Carolina Department of Environment and Natural Resources), Division of Water Quality.

**GROUND-WATER RECORDS**

WELL CHARACTERISTICS.--Drilled observation well, depth 90 ft, diameter 6 in., cased to 21 ft, open hole from 21 to 90 ft.

DATUM.--Land-surface datum is 165.48 ft above North American Vertical Datum of 1988. Measuring point: top of pvc casing, 2.40 ft above land-surface datum, Jan. 12, 2005, to present.

PERIOD OF RECORD.--May 2005 to current year.

GAGE.--Water-level recorder collecting data at 30-minute intervals.

REMARKS.--Well is part of Piedmont/Mountains ground-water study. Missing data from June 21, 2007 to September 30, 2007 due to equipment and funding problems.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 12.57 ft below land-surface datum, December 10, 2006; lowest water level recorded, 19.00 ft below land-surface datum, November 19, 20, 2005.

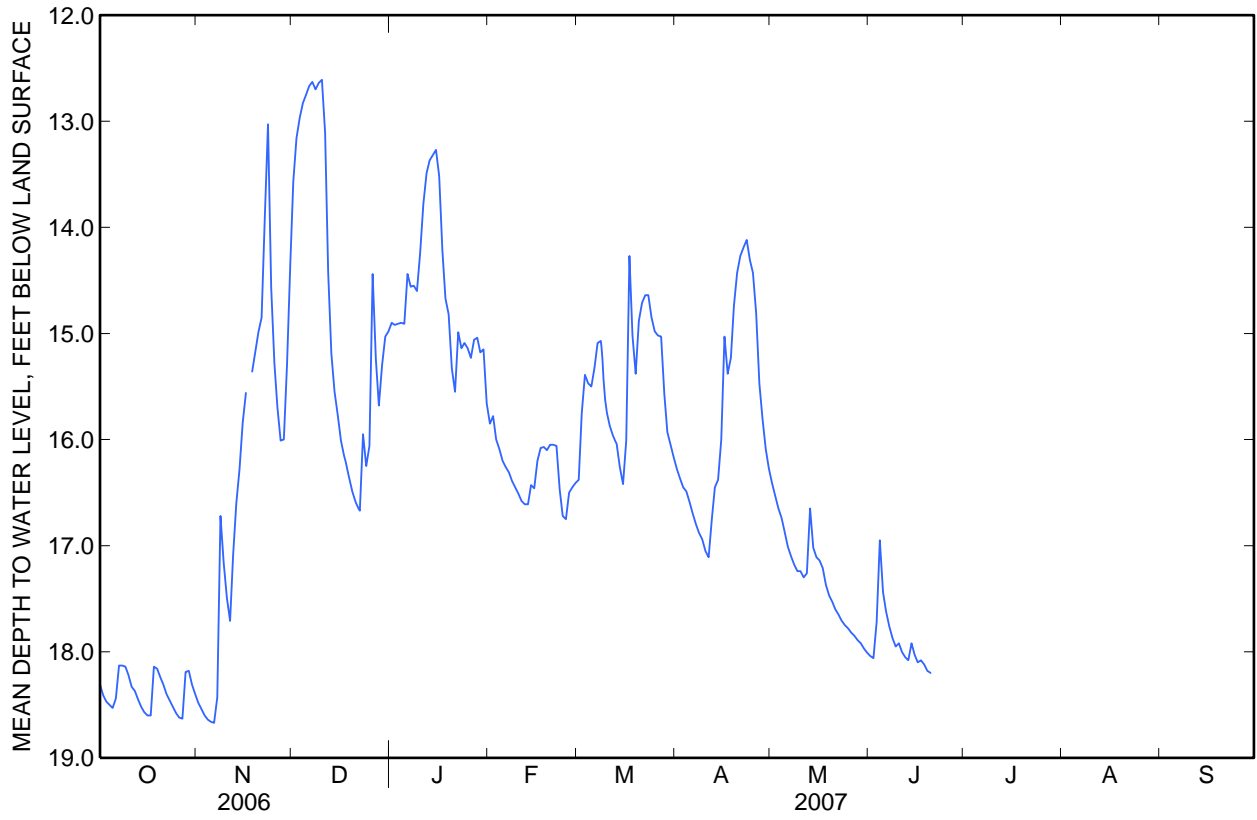
## 354328078295704 Local number WK-331, Raleigh Hydrogeologic Research Station WC-1CH (Bedrock)—Continued

**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	18.31	18.48	13.57	14.90	15.85	16.38	16.28	16.41	18.04	---	---	---
2	18.41	18.54	13.16	14.92	15.78	15.75	16.37	16.53	18.06	---	---	---
3	18.47	18.60	12.97	14.91	16.00	15.39	16.45	16.65	17.72	---	---	---
4	18.50	18.64	12.83	14.90	16.09	15.47	16.49	16.74	16.95	---	---	---
5	18.53	18.66	12.75	14.91	16.20	15.50	16.59	16.87	17.44	---	---	---
6	18.44	18.67	12.67	14.44	16.26	15.32	16.70	17.01	17.62	---	---	---
7	18.13	18.43	12.63	14.56	16.31	15.09	16.80	17.10	17.76	---	---	---
8	18.13	16.72	12.70	14.55	16.39	15.07	16.88	17.18	17.87	---	---	---
9	18.14	17.16	12.64	14.60	16.45	15.50	16.94	17.24	17.95	---	---	---
10	18.22	17.49	12.61	14.24	16.51	15.76	17.05	17.24	17.92	---	---	---
11	18.33	17.71	13.11	13.78	16.58	15.89	17.11	17.30	18.00	---	---	---
12	18.37	17.09	14.42	13.49	16.61	15.98	16.75	17.26	18.05	---	---	---
13	18.45	16.60	15.19	13.37	16.61	16.04	16.45	16.65	18.08	---	---	---
14	18.52	16.28	15.55	13.32	16.43	16.26	16.38	17.02	17.92	---	---	---
15	18.57	15.84	15.77	13.27	16.46	16.42	16.00	17.11	18.03	---	---	---
16	18.60	15.56	16.01	13.52	16.20	16.01	15.03	17.14	18.10	---	---	---
17	18.60	---	16.15	14.22	16.08	14.27	15.38	17.21	18.08	---	---	---
18	18.14	15.36	16.28	14.67	16.07	15.02	15.23	17.37	18.12	---	---	---
19	18.16	15.17	16.41	14.82	16.10	15.38	14.74	17.47	18.18	---	---	---
20	18.24	14.99	16.53	15.33	16.05	14.88	14.43	17.53	18.20	---	---	---
21	18.31	14.85	16.62	15.55	16.05	14.71	14.27	17.60	---	---	---	---
22	18.40	13.91	16.67	14.99	16.06	14.64	14.19	17.65	---	---	---	---
23	18.46	13.03	15.95	15.14	16.47	14.64	14.12	17.71	---	---	---	---
24	18.52	14.57	16.25	15.09	16.72	14.85	14.31	17.75	---	---	---	---
25	18.58	15.28	16.06	15.14	16.75	14.98	14.43	17.78	---	---	---	---
26	18.62	15.70	14.44	15.23	16.50	15.02	14.81	17.82	---	---	---	---
27	18.63	16.01	15.24	15.06	16.45	15.03	15.47	17.85	---	---	---	---
28	18.19	16.00	15.68	15.04	16.41	15.57	15.81	17.89	---	---	---	---
29	18.18	15.29	15.30	15.18	---	15.93	16.09	17.92	---	---	---	---
30	18.31	14.36	15.03	15.15	---	16.05	16.27	17.97	---	---	---	---
31	18.40	---	14.98	15.66	---	16.17	---	18.01	---	---	---	---
<b>Mean</b>	18.38	16.38	14.72	14.64	16.30	15.45	15.79	17.32	17.90	---	---	---
<b>Max</b>	18.63	18.67	16.67	15.66	16.75	16.42	17.11	18.01	18.20	---	---	---
<b>Min</b>	18.13	13.03	12.61	13.27	15.78	14.27	14.12	16.41	16.95	---	---	---

<b>Water Year 2007</b>	
<b>Mean</b>	16.26
<b>High</b>	12.61
<b>Low</b>	18.67

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**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 10...	1045	90	73.00	21.26	754	9.1	95	6.0	800	17.0	<.020	82.8	<.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 10...	89.9	.023	80	8,050