

Water-Data Report 2008

**353708079452101 Local number RA-165, NCDENR North Carolina Zoo Research Station MW-2S near Asheboro, NC (Regolith)**

Piedmont and Blue Ridge crystalline-rock aquifers  
Regolith

Randolph County, NC

LOCATION.--Lat 35°37'07.70", long 79°45'20.51" referenced to North American Datum of 1983, Randolph County, NC, Hydrologic Unit 03030003, 6 mi southeast of Asheboro, at the North Carolina Zoo. Owner: NCDENR (North Carolina Department of Environment and Natural Resources).

**GROUND-WATER RECORDS**

WELL CHARACTERISTICS.--Drilled observation well, depth 35 ft, diameter 4 in., cased to 25 ft, screened from 25 ft to 35 ft.

DATUM.--Land-surface datum is 637.05 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of steel casing, 2.91 ft above land-surface datum.

PERIOD OF RECORD.--April 2007 to current year.

GAGE.--Measured periodically with electric tape by NCDENR and USGS.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 23.76 ft below land-surface datum, April 15, 2007; lowest water level recorded, 33.77 ft below land-surface datum, October 30, 2007.

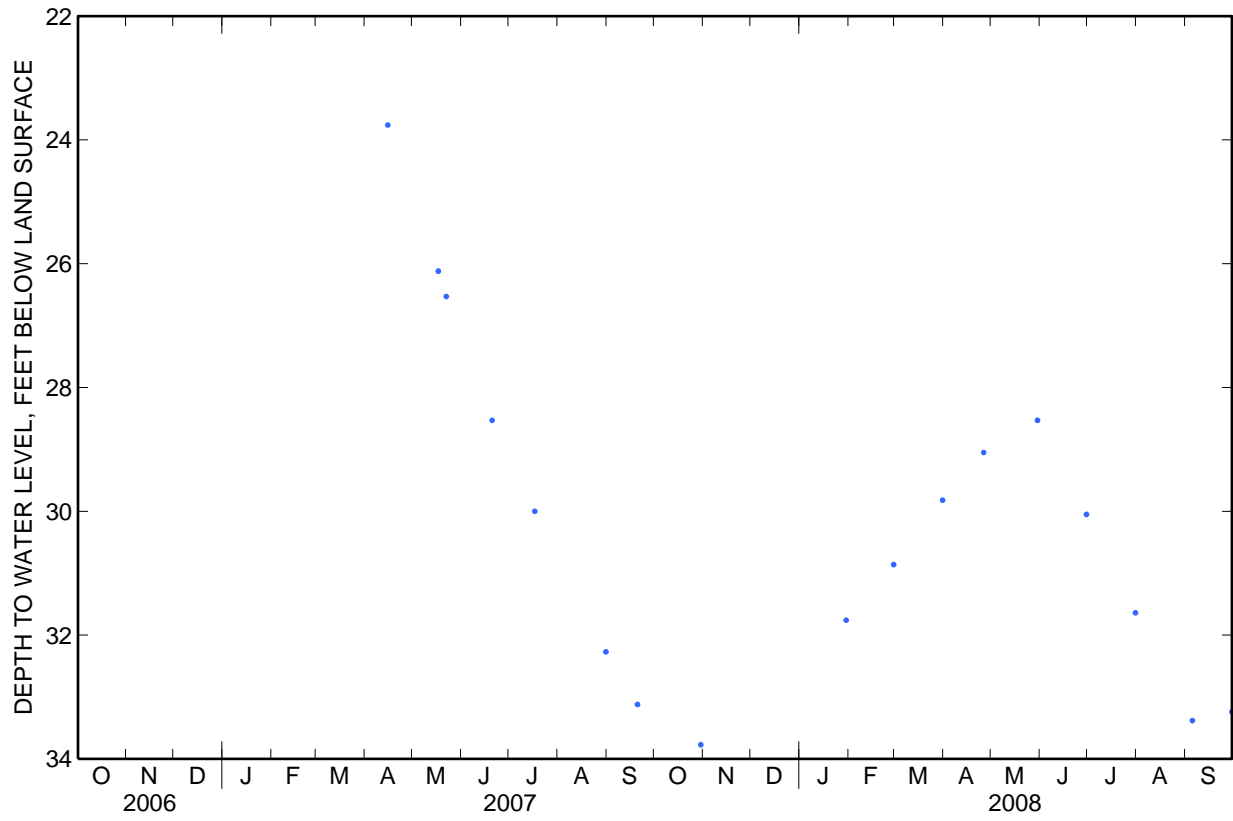
**WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM**

Date	Water level	Date	Water level
Oct 30, 2007	33.77	May 30, 2008	28.53
Jan 30, 2008	31.76	Jun 30	30.05
Feb 29	30.86	Jul 31	31.64
Mar 31	29.82	Sep 5	33.38
Apr 26	29.05	30	33.24

Highest: 28.53 May 30, 2008

Lowest: 33.77 Oct 30, 2007

353708079452101 Local number RA-165, NCDENR North Carolina Zoo Research Station MW-2S near Asheboro, NC (Regolith)—Continued



353708079452101 Local number RA-165, NCDENR North Carolina Zoo Research Station MW-2S near Asheboro, NC (Regolith)—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 2008.

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

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Depth of well, feet below LSD (72008)	Depth to water level, feet below LSD (72019)	Water level, depth below MP, feet (61055)	Sam- pling depth, feet (00003)	Baro- metric pres- sure, mm Hg (00025)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf μS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	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)
Mar 03...	35.00	30.48	33.39	38.0	753	5.1	26	16.6	3	.69	.216	1.41	2.82

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 2 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	ANC, wat unf infl pt titr., field, mg/L as CaCO3 (00419)	Bicar- bonate, wat unf infl pt 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 as SiO2 (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)	Nitrate + nitrite 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)
Mar 03...	7	9	E.02	1.82	<.12	20.1	.98	35	<.020	.12	<.002	.12	E.006

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 3 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Alum- inum, water, fltrd, μg/L (01106)	Anti- mony, water, fltrd, μg/L (01095)	Arsenic water, fltrd, μg/L (01000)	Barium, water, fltrd, μg/L (01005)	Beryll- ium, water, fltrd, μg/L (01010)	Boron, water, fltrd, μg/L (01020)	Cadmium water, fltrd, μg/L (01025)	Chrom- ium, water, fltrd, μg/L (01030)	Cobalt water, fltrd, μg/L (01035)	Copper, water, fltrd, μg/L (01040)	Iron, water, fltrd, μg/L (01046)	Lead, water, fltrd, μg/L (01049)	Mangan- ese, water, fltrd, μg/L (01056)
Mar 03...	13.9	<.14	<.06	18	.06	14	.25	E.07	1.3	E.85	E6	E.05	139

353708079452101 Local number RA-165, NCDENR North Carolina Zoo Research Station MW-2S near Asheboro, NC (Regolith)—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 4 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Molyb- denum, water, fltrd, µg/L (01060)	Nickel, water, fltrd, µg/L (01065)	Selen- ium, water, fltrd, µg/L (01145)	Silver, water, fltrd, µg/L (01075)	Zinc, water, fltrd, µg/L (01090)	Uranium natural water, fltrd, µg/L (22703)
<b>Mar</b> <b>03...</b>	<.2	3.7	.04	<.1	12.8	<.02