



Water-Data Report 2007

352519083272401 Local number SW-036, NC-219

Piedmont and Blue Ridge crystalline-rock aquifers
Felsic Gneiss

Swain County, NC

LOCATION.--Lat 35°29'19", long 83°27'23" referenced to North American Datum of 1983, Swain County, NC, Hydrologic Unit 06010203, in Bryson City, 0.75 mi southwest of intersection Fontana Dam road and Tuskaseegee River. Owner: Wallace Company of North Carolina.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 555 ft, diameter 10 in.

DATUM.--Land-surface datum is 1,719 ft above National Geodetic Vertical Datum of 1929 (levels by NCDENR, North Carolina Department of Environment and Natural Resources). Measuring point: top of instrument shelf, 6.90 ft above land-surface datum.

PERIOD OF RECORD.--August 2000 to current year. Records from February 1965 to March 1999 are unpublished and available in the files of the NCDENR, Division of Water Quality.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at station.

REMARKS.--Well is part of terrane-effects network.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.86 ft above land-surface datum, September 18, 2004; lowest water level recorded, 7.37 ft below land-surface datum, September 13, 14, 2007.

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 | 5.92 | 5.69 | 5.51 | 4.67 | 5.47 | 5.56 | 5.74 | 6.16 | 6.59 | 6.63 | 5.82 | 6.83 |
| 2 | 6.02 | 5.64 | 5.37 | 4.82 | 5.51 | 4.60 | 5.62 | 6.19 | 6.59 | 6.70 | 5.89 | 6.88 |
| 3 | 6.10 | 5.71 | 5.38 | 4.95 | 5.57 | 4.63 | 5.70 | 6.21 | 6.61 | 6.73 | 6.04 | 6.91 |
| 4 | 6.17 | 5.79 | 5.46 | 5.04 | 5.66 | 4.79 | 5.61 | 6.20 | 6.62 | 6.77 | 6.19 | 6.95 |
| 5 | 6.22 | 5.85 | 5.65 | 5.06 | 5.74 | 4.95 | 5.60 | 6.16 | 6.65 | 6.79 | 6.32 | 7.06 |
| 6 | 6.21 | 5.89 | 5.68 | 5.01 | 5.77 | 5.11 | 5.63 | 6.07 | 6.65 | 6.82 | 6.42 | 7.13 |
| 7 | 6.29 | 5.91 | 5.72 | 5.02 | 5.82 | 5.20 | 5.68 | 6.16 | 6.67 | 6.83 | 6.44 | 7.19 |
| 8 | 6.31 | 5.69 | 5.71 | 4.38 | 5.80 | 5.29 | 5.77 | 6.18 | 6.71 | 6.80 | 6.51 | 7.23 |
| 9 | 6.28 | 5.61 | 5.74 | 4.42 | 5.86 | 5.37 | 5.83 | 6.18 | 6.71 | 6.86 | 6.55 | 7.19 |
| 10 | 6.31 | 5.66 | 5.78 | 4.52 | 5.88 | 5.45 | 5.86 | 6.23 | 6.73 | 6.85 | 6.59 | 7.27 |
| 11 | 6.37 | 5.73 | 5.81 | 4.64 | 5.91 | 5.51 | 5.89 | 6.24 | 6.77 | 6.67 | 6.60 | 7.31 |
| 12 | 6.34 | 5.69 | 5.88 | 4.73 | 5.94 | 5.58 | 5.79 | 6.17 | 6.80 | 6.17 | 6.68 | 7.33 |
| 13 | 6.39 | 5.76 | 5.91 | 4.80 | 5.98 | 5.64 | 5.83 | 6.20 | 6.77 | 6.21 | 6.76 | 7.35 |
| 14 | 6.42 | 5.80 | 5.95 | 4.85 | 5.92 | 5.68 | 5.80 | 6.25 | 6.76 | 6.32 | 6.84 | 7.17 |
| 15 | 6.45 | 5.70 | 5.99 | 4.90 | 5.94 | 5.70 | 5.62 | 6.26 | 6.69 | 6.45 | 6.84 | 6.45 |
| 16 | 6.47 | 4.49 | 6.02 | 4.97 | 5.98 | 5.04 | 5.73 | 6.29 | 6.74 | 6.55 | 6.85 | 6.61 |
| 17 | 5.71 | 4.48 | 6.05 | 5.12 | 6.06 | 4.77 | 5.78 | 6.29 | 6.79 | 6.60 | 6.88 | 6.74 |
| 18 | 4.88 | 4.64 | 6.08 | 5.16 | 6.10 | 4.79 | 5.82 | 6.36 | 6.81 | 6.59 | 6.91 | 6.87 |
| 19 | 5.15 | 4.77 | 6.09 | 5.21 | 6.11 | 4.98 | 5.84 | 6.39 | 6.68 | 6.56 | 6.93 | 6.88 |
| 20 | 5.27 | 4.99 | 6.11 | 5.25 | 6.12 | 5.09 | 5.85 | 6.41 | 5.98 | 6.51 | 6.97 | 6.96 |
| 21 | 5.36 | 5.13 | 6.12 | 5.25 | 5.96 | 5.17 | 5.90 | 6.44 | 5.88 | 6.39 | 7.01 | 7.01 |
| 22 | 5.47 | 5.16 | 5.96 | 4.99 | 5.88 | 5.25 | 5.95 | 6.47 | 6.10 | 6.45 | 6.95 | 7.04 |
| 23 | 5.58 | 5.17 | 5.63 | 4.98 | 5.89 | 5.33 | 5.98 | 6.46 | 6.26 | 6.49 | 6.94 | 7.08 |
| 24 | 5.70 | 5.32 | 5.67 | 5.01 | 5.97 | 5.36 | 6.02 | 6.50 | 6.40 | 6.43 | 6.95 | 7.16 |
| 25 | 5.76 | 5.38 | 5.65 | 5.09 | 5.91 | 5.48 | 6.05 | 6.52 | 6.52 | 6.37 | 6.93 | 7.19 |
| 26 | 5.81 | 5.45 | 5.61 | 5.17 | 5.73 | 5.53 | 6.03 | 6.51 | 6.56 | 6.24 | 6.90 | 7.17 |
| 27 | 5.76 | 5.49 | 5.65 | 5.25 | 5.76 | 5.59 | 5.98 | 6.52 | 6.58 | 6.20 | 6.95 | 7.16 |
| 28 | 5.35 | 5.54 | 5.62 | 5.31 | 5.71 | 5.64 | 6.04 | 6.53 | 6.59 | 6.04 | 7.00 | 7.18 |
| 29 | 5.39 | 5.56 | 5.64 | 5.37 | --- | 5.69 | 6.09 | 6.57 | 6.54 | 5.81 | 6.96 | 7.24 |
| 30 | 5.52 | 5.65 | 5.69 | 5.41 | --- | 5.71 | 6.13 | 6.59 | 6.50 | 5.90 | 6.91 | 7.26 |
| 31 | 5.60 | --- | 5.65 | 5.46 | --- | 5.78 | --- | 6.60 | --- | 5.90 | 6.86 | --- |
| Mean | 5.89 | 5.44 | 5.77 | 4.99 | 5.86 | 5.30 | 5.84 | 6.33 | 6.58 | 6.47 | 6.69 | 7.06 |
| Max | 6.47 | 5.91 | 6.12 | 5.46 | 6.12 | 5.78 | 6.13 | 6.60 | 6.81 | 6.86 | 7.01 | 7.35 |
| Min | 4.88 | 4.48 | 5.37 | 4.38 | 5.47 | 4.60 | 5.60 | 6.07 | 5.88 | 5.81 | 5.82 | 6.45 |

| Water Year 2007 | |
|------------------------|------|
| Mean | 6.02 |
| High | 4.38 |
| Low | 7.35 |

