

Assays of waters from this county are given in Table 1, pp. 496, 497, assays Nos. 96, 97. These are discussed on page 488.

*Artesian Prospects.*—The thinness and disconnected character of the Coastal Plain sediments over much of the county render them unimportant as sources of artesian supplies. Along the southern border of the county, however, where the Patuxent formation is thickest its beds may be expected to furnish fair supplies at depths not much exceeding 100 feet, and it is barely possible that at low levels close to the streams flows may be obtained.

#### COUNTY.

| Yield per minute. |                   | How<br>obtained at<br>surface. | Use.                           | Geologic horizon<br>and character of<br>water-beds. | Remarks.                                                         |
|-------------------|-------------------|--------------------------------|--------------------------------|-----------------------------------------------------|------------------------------------------------------------------|
| Flow—<br>gallons. | Pump—<br>gallons. |                                |                                |                                                     |                                                                  |
| -----             | about 200         | steam<br>pump.                 | city supply.                   | basement rock.                                      | Basement rock struck at 90 ft. See<br>water assay, pp. 496, 497. |
| -----             | 100?              | force pump.                    | domestic and<br>manufacturing. | basement rock.                                      |                                                                  |
| -----             | 65                | force pump.                    | domestic.                      | basement rock.                                      | Basement rock struck at 143 ft.                                  |

although a few of the driven wells reach 60 feet. The water comes from the lower sandy portions of the Pleistocene formations or in the deeper wells from the upper sandy beds of the Miocene. Along the scarps where the lower sandy beds of the Pleistocene formations rest upon the more compact Miocene beds, as at Winton, numerous small springs occur. These are, however, but little used.

At Winton two deep wells have been drilled, one of which, situated on low land near the Chowan River, has a flow of about 1 gallon per minute from a depth of 135 feet. In this well a small overflow was also obtained at about 100 feet. The other well, drilled to a depth of 165 feet in the main part of the town on the Chowan terrace, encountered the same water-bearing strata. Not obtaining a flow, the well was not used for a considerable length of time, and when attempts were made to pump it, the pipe was found to be full of sand.

The only other drilled well in the county is at Tunis, the situation of this well being similar to that of the flowing well at Winton. A flow was struck at 165 feet, but the casing was driven only 130 feet. The well flowed about four months, the flow gradually decreasing until, on account of a cave-in between the end of the casing and the water-bearing stratum, the flow ceased. In the fall of 1906 the well was cleaned out and now has a flow of about  $\frac{3}{4}$  gallon per minute.