

Island, cisterns rank first as a source of water supply. A few open and driven wells 10 to 15 feet deep are in use. Much of the well water has an unpleasant taste, due to decaying organic matter. The northern part of Roanoke Island is higher and sandier and driven wells 15 to 18 feet in depth yield an abundant supply of clear water.

The conditions on the banks do not differ greatly from those on the mainland. Cisterns are in most general use, since the water of the shallow open and driven wells, 3 to 10 feet deep, is usually highly colored, due to the organic content and therefore of an unsatisfactory quality. A few wells reach a depth of 18 feet. Where the wells are driven in the dune sands, however, a soft, colorless water is as a rule obtained. Because of the low elevation of the greater part of the banks, large portions of their area are often flooded during storm tides, the ground being saturated and the shallow wells filled with the salt water. It is for this reason and because of the high color and organic content of the well water that cisterns are principally used. At Avon and Hatteras it is reported that the water level in the wells varies with the tides. At Hatteras it is said that a heavy storm tide will so raise the groundwater level that pools of water will form in the lower places.

One assay and one analysis of waters from this county are given elsewhere in this report, as follows: Table 1, pp. 496, 497, assay No. 75; Table 2, pp. 504, 505, analysis No. 27. These are discussed on page 487.

Artesian Prospects.—The sandy strata of the Pleistocene, Pliocene, and Miocene beds, which constitute the underground materials to depths of at least several hundred feet, doubtless contain inexhaustible supplies of water. It is probable that wells exceeding 300 or 400 feet in depth would encounter salty water which would be unfit for domestic or manufacturing purposes.

DUPLIN COUNTY.

Topography.—The surface is made up of several Pleistocene terraces which have been dissected to some extent by stream erosion. On account of the lack of topographic maps it is impossible to determine with any degree of certainty the extent or correlation of these terraces. It is believed, however, that the Chowan, Wicomico, Sunderland, and Coharie terraces are present, the first bordering Northeast Cape Fear River, the second covering a considerable area in the east and south, the third covering nearly all of the northwestern part of the county, and the fourth covering a small area in the extreme northwestern part of the county. The southern boundary of the county to the east of Northeast Cape Fear River passes through the center of the great Angola Bay or Pocoson, a large swampy tract occupying portions of