

One assay and three analyses of waters from this county are given elsewhere in this report, as follows: Table 1, pp. 498, 499, assay No. 98; Table 2, pp. 506, 507, analyses Nos. 31-33. These are discussed on page 488.

Artesian Prospects.—The sandy beds of the Miocene contain an abundance of potable water which is sometimes hard, owing to the presence of Miocene shell marl beds.

HERTFORD

Number.	Location.	Owner.	Date completed.	Elevation of surface above datum—feet.	Datum.	Depth—feet.	Diameter—inches.	Depth to principal water supply—feet.	Height of water, $\pm$ surface—feet.
1	Tunis.....	K. R. Israel.....	1906	5	sea level.	165	1 $\frac{1}{4}$	165	+ 2
2	Winton.....	S. P. Taylor.....	1905	45	sea level.	165	1 $\frac{1}{4}$	165	—33
3	do.....	W. P. Taylor.....	1905	0	sea level.	135	1 $\frac{1}{4}$	135	+ 4

HYDE COUNTY.

Topography.—The surface of the entire county is low, nowhere exceeding 15 feet in elevation above sea level. It forms a part of the Pamlico terrace plain, which is the lowest of the Pleistocene terraces. The highest land is reported to be in the vicinity of Pungo Lake in the northwest corner of the county. Much of the county is covered by peaty swamps. Salt marshes border the coast everywhere. Mattamuskeet Lake, 16 miles long by 5 miles wide and 4 feet deep, lies in the center of the county. Alligator Lake, a much smaller lake, 3 to 5 feet deep, is in the northern part of the county. Low ridges surround these lakes. According to legend, the lake depressions were formed by the burning of peat bogs. They may, however, be original depressions in the surface of the terrace plain.

Geology.—Fine sands, sandy loams, and clays belonging to the Pamlico formation constitute the surface materials over all the county. These rest upon sandy clays and shell marls believed to be of Pleistocene age. The latter rest in turn upon similar Pliocene beds. The combined thickness of the Pliocene and Pleistocene beds is thought to amount to about 80 to 100 feet. Beneath the Pliocene beds are similar beds of Miocene age which have an unknown thickness. (See section of well at Lake Landing, p. 252.)

Water Resources.—Cistern water is used by many of the inhabitants of the county. A few shallow open wells 6 to 15 feet in depth are in use, but almost everywhere in the county water from this source is re-