

which rendered it unfit for boiler or domestic use. Very small flows are reported at Oriental from wells 25 to 30 feet in depth. The water is slightly hard and ferruginous. Several wells 50 to 80 feet in depth have been driven at Vandemere. The well of the Pamlico Lumber Company, located in the creek channel where the water is about 10 feet deep, yielded a strong flow at a depth of 50 or 60 feet, the top of the pipe being 2 feet above the river level. The flow is reported to vary with the level of the water in the river and to increase with a north-east wind. Another well at an oyster cannery, driven to a depth of 100 feet, furnished a very hard sulphurous water, and was therefore abandoned. Two of the strongest flowing wells in the county have been obtained in the extreme northeast near Hobucken. The water is strongly sulphurous.

Assays of waters from this county are given in Table 1, pp. 500, 501, assays Nos. 146-152. These are discussed on page 490.

Artesian Prospects.—In all parts of the county water can be obtained at depths of from 50 to 200 feet or more. Except in the higher area in the west, the water will rise nearly to the surface, and where the surface is less than 5 or 6 feet above sea level will overflow. The flows in most cases will be small. At depths exceeding 350 or 400 feet salty water is apt to be encountered.

COUNTY.

Yield per minute.		How obtained at surface.	Use.	Geologic horizon and character of water-beds.	Remarks.
Flow— gallons.	Pump— gallons.				
6	30	flows. flows and pumped by steam.	domestic and boiler.	Miocene. Miocene; shell-rock.	Other horizons at 60 and 120 ft.
		hand pump.	domestic.	Miocene. Miocene? or Pliocene?	Other horizons at 37 and 62 ft.
		flows.	drinking and boiler.	Miocene? or Pliocene? sand.	
		pump.	domestic.	Miocene? or Pliocene? white sand.	
			domestic and stock.	Miocene? or Pliocene? white sand.	
		pump.	domestic.	Eocene; rock.	
		pump.	boiler and domestic.	Miocene? or Pliocene? sand.	

level. Towards the southeast it gradually becomes lower, until along Albemarle Sound it is only about 5 feet above the sea.

Geology.—Fine sands and sandy loams of the Pamlico formation form the surface materials over the entire county. These conceal beds of sand, clay, and shell marl, probably for the most part of Pleisto-