

quality and suitable for most ordinary purposes. Elsewhere the amount is excessive and the waters are unpalatable and not satisfactory for either domestic or manufacturing purposes. Iron salts are present in many cases and, in the case of some wells, in excessive amounts. The odor of hydrogen sulphide may be detected in many of the waters when they first issue from the wells. Flowing wells have been obtained at many places, as a rule, on ground lower than the general level of the region immediately surrounding the wells.

The water conditions of the several counties in the area under consideration have been treated separately elsewhere in this report.

The area over which potable waters may be obtained from the Miocene and marine Pliocene formations by drilling is indicated on the map (Plate XXXVI).

TERTIARY AND QUATERNARY.

SURFICIAL PLIOCENE? (LAFAYETTE FORMATION) AND PLEISTOCENE.

The Lafayette and Pleistocene deposits, because of their lithologic similarity and because both exist as surficial coverings upon older formations, may be appropriately treated under one heading. From the standpoint of the actual, practical use to which they have been put in the past, and the use, though constantly diminishing, to which they are still being put, these formations may be regarded as the most important of all the Coastal Plain aquifers in the State. Their availability as a source of supply, however, is so well known, and the means of obtaining the water are so simple and easily applied that there is little need of treating them exhaustively here.

The Lafayette deposits are present as surficial coverings, probably at but few places exceeding 25 or 30 feet in thickness, along the northwestern border of the Coastal Plain province. (See geologic map, Plate XIII, in pocket.) They rest in part upon ancient rocks, and in part upon beds of the Patuxent formation. They occur for the most part at elevations of from 200 to 500 feet and form mantle-like coverings which cap the tops of, and lap down over the slopes of, the pre-Lafayette hills. The sandhill country in the southwestern part of the Coastal Plain region forms a part of this area. The materials consist of sandy loams and sands, as a rule coarse and in places arkosic, and having at their base at many places a bed of coarse gravels and cobbles. Except very locally, they are loose in texture and permit of the free passage of water among their constituent parts. Where the materials on which the Lafayette deposits rest are more compact and less pervious to water than the Lafayette materials themselves, the basal beds of the latter