System	Series	Formation	Approximate thickness (feet)	Physical character	Hydrologic Comments
Quaternary	Recent and Pleistocene		0-100	Nondescript clays and sands-shell beds and marly strata occur in extreme eastern areas.	Excellent aquifer for domestic and small industrial supplies.
Tertiary	Miocene	Chespeake group, includes Yorktown, St. Marys, and Calvert formations.	0-600	Shell marls, blue and gray clays, and minor amounts of sand.	Although most of the sediments are relatively impermeable, the sand beds yield moderate supplies extensively in the eastern peninsula areas.
	Eocene	Includes from top to bottom the Chickahominy, Nanjemoy, and Aquia formations.	0-400	Gray marls and fine quartz and glauconitic sands.	Quartz and glauconitic sands furnish water to some screened wells.
	Paleocene (and Cretaceous)	Mattaponi	0-300	Mottled clay, glauconitic sand and marl, and thick quartz basal sand.	A prolific water-bearing formation in central part of Coastal Plain. East of Williamsburg, the formation yields brackish water.
Cretaceous	Upper and Lower Cretaceous	Potomac group	0-4500	Lenticular sands and clays underlying entire Coastal Plain.	Some of the sand beds are very permeable and are capable of furnishing large supplies of water to wells. Toward the coast the lowermost parts of these deposits contain brackish water, and in places all contain water too brackish for use.
Pre-Cretaceous	igneous and metamorphic rocks, also dense sandstones and shales, collectively called "basement rocks"				

Table 7. GENERALIZED DESCRIPTION OF FORMATIONS AND THEIR HYDROLOGIC CHARACTERISTICS IN VIRGINIA