

Stratigraphy	Thickness, in feet	Lithology	Hydrogeologic unit	AEDC unit designation	Natural character of aquifer
Regolith derived from in-situ weathering of the St. Louis Limestone, Warsaw Limestone, and Fort Payne Formation	10-100	Clay, silt, and sand with some chert and rock fragments.	Shallow aquifer	Shallow aquifer	Low producing wells, shallow ground-water circulation, low dissolved solids, and bicarbonate dominant anion.
		Rock fragments, chert gravel, and rubble with some clay.	Manchester aquifer, upper part	Intermediate aquifer	Good producing wells, rapid ground-water circulation, low dissolved solids, and bicarbonate dominant anion.
Fort Payne Formation	20-230	Fractured and dissolutional cherty limestone and siltstone.	Manchester aquifer, lower part	Deep aquifer, upper part	
		Dark gray siltstone; dense, cherty limestone; and bedded chert. Few fractures.	Fort Payne aquifer	Deep aquifer, lower part	
Chattanooga Shale	20-30	Dark grayish black, carbonaceous shale.	Chattanooga confining unit	Chattanooga confining unit	Confining unit.

**Figure 3.** Stratigraphy, lithology, and hydrogeologic units for the Arnold Air Force Base area, Tennessee. (Modified from Haugh and Mahoney, 1994.)