Table 1.--Geologic units and their water-bearing properties in Choctaw County

(200)
R290
No.75-477

Series	Geologic units	Thickness (feet)	Lithology	Yield	Quality of water
Holocene and Pleistocene	Alluvium and low terrace deposits	0-50	Silt, clay, sand, and gravel, varicolored, unconsolidated.	Will yield 10 gpm where saturated sands are of sufficient thickness. Potential source of 0.1 mgd or more in basin of Tombigbee River.	Water should be of satisfactory quality for most uses. Data for Choctaw County and adjacent areas indicate that generally the water is soft and has a dissolved-solids content of less than 50 mg/l. May contain iron in excess of 0.3 mg/l.
Pleistocene	High terrace deposits			Will yield 10 gpm where saturated sands are of sufficient thickness.	
Pleistocene (?) and Miocene	Pleistocene (?) and Miocene Series	0-50	Sand, varicolored, fine- to coarse-grained; gravelly sand; gray clay that weathers to mottled shades of gray, pink, and yellow.	Will yield 10 gpm. Potential source of larger supplies.	Water probably is soft to moderately hard and has a dissolved-solids content of less than 100 mg/l. May contain iron in excess of 0.3 mg/l.
Oligocene	Oligocene Series	0-70	Clay, light-gray and greenish-gray, massive, calcareous, glauconitic; gray silty clay with thin beds of sand; yellow sandy glauconitic fossiliferous limestone; soft porous fossiliferous limestone	Relatively impermeable. Potential source of small supplies in southwest part of county near Aquilla.	Water probably is hard and has a dissolved-solids content of less than 200 mg/l.
Eocene	Jackson Group	110-160	Clay, greenish-gray, light-gray, and white, calcareous; greenish-gray and yellowish-gray fine- to coarse-grained glauconitic fossiliferous sand, sandstone, and sandy limestone; light-gray and white chalky fossiliferous marl; gray sandy clay.	Will yield 10 gpm. Potential source of larger supplies.	Water is soft to moderately hard and low in dissolved solids.
	Gosport Sand and Lisbon Formation	125-250	Sand, light-blue-green, coarse to very coarse grained, clayey, glauconitic; white, yellowish-gray and greenish-gray fine- to medium-grained glauconitic crossbedded sand; greenish-gray massive glauconitic fossiliferous clay and clayey sand; dark-gray and chocolate laminated to massive sandy carbonaceous clay.	Will yield 0.1 to 0.3 mgd per well and is a potential source of larger supplies in southwest corner of county near Aquilla.	Water is soft to moderately hard but is usually soft. Dissolved solids generally less than 500 mg/l except near Paragon, Barrytown, and Lenoir Landing where bicarbonate is principal constituent.
	Tallahatta Formation	80-125	Clay and claystone, very light gray and light gray, thin-bedded and massive; thin layers of sandy clay, glaucomitic sand and sandstone, and siltstone.	Will yield 10 gpm locally where thin saturated sands are of sufficient thickness. Basal sand potential source of large quantities of water in southwest part of county.	Water is probably hard to very hard and low in dissolved solids.
	Hatchetigbee Formation	250	Clay, silt, and very fine grained sand, gray, laminated, carbonaceous, micaceous; greenish-gray fine-grained calcareous glauconitic fossiliferous sand and sandstone.	Will yield or is a potential source of 0.1 to 0.3 mgd per well.	Water is generally soft and dissolved-solids content is less than 500 mg/l in all but the southeast part of county. Wells tapping formation have been abandoned in vicinity of Bladen Springs where water reportedly has a high chloride content and sulfurous odor.
	Tuscahoma Sand	350-650	Clay, silt, and very fine grained sand, gray, laminated and thin bedded, carbonaceous, micaceous; fine- to medium-grained crossbedded sand; fossiliferous greensand marl; thin beds of lignite.		Water is soft to very hard but generally is soft to moderately hard. Dissolved-solids content generally is less than 500 mg/l. Sporadically contains iron in excess of 0.3 mg/l.
	Nanafalia Formation	100-130	Sand, white and yellow, crossbedded, medium- to coarse-grained, micaceous, contains clay pebbles and quartz granules; gray clacareous glauconitic fossiliferous silty clay, sand, marl, and sandstone; dark-gray massive blocky tough clay.	Will yield or is potential source of 0.2 to 1.0 mgd per well in all areas except those northeast of Mollie and Lavaca and south of Emory, Souwilpa, and Barrytown (fig. 2).	Water generally is soft and dissolved-solids content is less than 500 mg/l. Sporadically contains iron in excess of 0.3 mg/l.
Paleocene	Naheola Formation	170-190	Clay, silt, and very fine grained sand, gray, laminated and thinbedded, carbonaceous, micaceous; black lignite; gray and yellow fine- to medium-grained glauconitic micaceous sand.	Sand in upper half of formation will yield 10 gpm where it is of sufficient thickness. Lower half of formation is relatively impermeable, not a source of ground water.	
	Porters Creek Formation	350-450	Clay, gray, massive, with distinct conchoidal fracture; greenish-gray glauconitic fossiliferous sand, sandstone, clay, and marl.	Relatively impermeable, not a source of ground water.	Relatively impermeable, not a source of ground water.