

MISSISSIPPI BUREAU OF GEOLOGY OPEN FILE REPORT 6

GEOLOGIC MAP OF THE TISHOMINGO QUADRANGLE MISSISSIPPI-ALABAMA (INCLUDING MISSISSIPPI PORTION OF THE BISHOP QUADRANGLE)

Geology by Robert K. Merrill

1988

SCALE 1:24,000

- -	1000	2000	3000	4000	5000	6000	7000 FEET
	5		0		1 KILOMETER		

1 MILE

DESCRIPTION OF MAP UNITS

ALLUVIUM

Sand, medium- to brownish-gray, very fine- to very coarse-grained, subangular to subrounded quartz, silty, clayey; commonly contains organic matter; chert and quartzite pebbles common

LOW ELEVATION TERRACE DEPOSITS

light-gray to dark reddish-brown, very fine- to very coarse-grained, subangular to subrounded quartz, silty, clayey; lower portions contain layers and lenses of flattened quartzite and quartz pebbles interspersed with rounded chert pebbles; iron staining common on pebbles. Distributed adjacent to present stream courses, at and above flood plain

HIGH ELEVATION TERRACE DEPOSITS

avel, moderate reddish- to dark yellowish-brown, very well rounded chert and smooth, flattened quartzite pebbles; iron staining common on outer surfaces; beds and lenses of sand, silt, and clay occur frequently in upper portions. Irregular bedding, occasional cross-bedding; ironstone cementation common. Mainly occur at elevations above 600 feet. Erosional contact

COFFEE FORMATION

Sand, light- to medium-gray, very fine- to medium-grained, subangular quartz, glauconitic, micaceous; frequently interbedded with silt, light- to medium-gray, clayey; thinly bedded with occasional intervals of irregular- to massive-bedded sand; occasional lenses and stringers of small chert gravel at base. Frequent thin ironstone beds; weathers to shades of reddishbrown. Unconformity at base.

EUTAW FORMATION TOMBIGBEE SAND MEMBER

Sand, medium light- to olive-gray, very fine- to medium-grained, subangular to subrounded quartz, well sorted, massive-bedded, glauconitic, micaceous, silty, clayey; weathers to various shades of reddish-brown. Frequent occurrence of ferruginous cemented sand molds of <u>Callianassa</u> sp. burrows.

LOWER EUTAW MEMBER

Sand, medium- to olive-gray, fine- to medium-grained, subangular to subrounded quartz, glauconitic, micaceous, horizontal- and cross-bedded; commonly thinly interbedded and interlaminated with clay, medium-gray, locally carbonaceous; isolated occurrences of petrified wood in lower portions. Weathers to various shades of reddish-brown. Frequent occurrence of ferruginous cemented sand molds of <u>Callianassa</u> sp. burrows. Unconformity

McSHAN FORMATION

Sand, pale yellowish-brown to very light-gray, very fine- to fine-grained, well sorted, subangular quartz, glauconitic, micaceous, silty; thinly interbedded and interlaminated with silt, light-gray to grayish orange-pink, micaceous, clayey. Horizontal- and ripple-laminated; frequent zones of massive- to cross-bedded, fine- to coarse-grained sand; frequent chert pebble lenses and stringers. Weathers to various shades of reddish-brown to yellowish-gray; local occurrences of ferruginous cemented sand molds of <u>Callianassa</u> sp. burrows; common occurrence of petrified wood; occasional occurrence of carbonaceous clays, dark-gray, micaceous, containing carbonized wood fragments. Unconformity at base.

TUSCALOOSA GROUP (UNDIFFERENTIATED)

Gravel, chert, white to dark-gray, very well rounded; frequent silt and clay matrix; sand, lightto moderate reddish-brown, very fine- to very coarse-grained, subrounded to angular quartz and chert grains, poorly sorted, with frequent gravel lenses and stringers; clay, white- to medium-gray with occasional occurrences of carbonaceous dark-gray clays; zones of multi-colored chert gravel; isolated occurrences of quartzite; frequent wellcemented chert pebble conglomeratic zones. Laterally traceable silt and clay intervals occur most frequently in uppermost and lowermost intervals. Unconformity at base.

HARTSELLE FORMATION

Sandstone, light-gray to light brownish-gray, fine- to medium-grained, well cemented quartz arenite, thin- to massive-bedded; contains thin intervals of thinly bedded and laminated siltstone and shale, medium- to dark-gray; local ferruginous staining.

PRIDE MOUNTAIN FORMATION

Shale, olive- to dark-gray, calcareous, sandy; limestone, light- to brownish-gray, thin-bedded grainstones, wackestones, and mudstones, fossiliferous, occasionally oolitic, sandy, silty; sandstone, very light- to brownish-gray, thin- to massive-bedded, fine- to medium-grained, sparingly fossiliferous. Unconformity at base.

TUSCUMBIA FORMATION

Limestone, light- to dark bluish-gray, fossiliferous, bioclastic grainstone, wackestone, and mudstone, thin- to thick-bedded, occasionally massive-bedded; some calcareous shale interbeds. Lowermost strata contain beds of chert, very dark-gray to black; uppermost strata contain grainstone, very light-gray, cross-bedded; local occurrences of nodular chert.

Base map prepared from Tishomingo Quadrangle, Tennessee Valley Authority-United States Geological Survey, 1950, photorevised in 1967. 1927 North