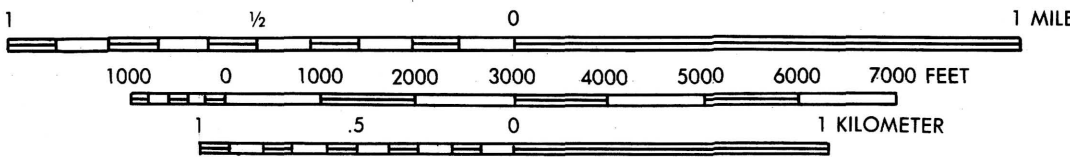


MISSISSIPPI BUREAU OF GEOLOGY  
OPEN FILE REPORT 12

GEOLOGIC MAP  
OF THE  
PADEN SOUTHEAST QUADRANGLE  
(TISHOMINGO COUNTY PORTION)  
MISSISSIPPI

Geology by Robert K. Merrill  
1988

SCALE 1:24,000



DESCRIPTION OF MAP UNITS

QUATERNARY

Qal

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 at base.

Qtl

LOW ELEVATION TERRACE DEPOSITS

Sand, 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 elevation.

CRETACEOUS

EUTAW GROUP

Ket

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 *Callianassa* sp. burrows.

Ke

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 *Callianassa* sp. burrows. Unconformity at base.

Kmc

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 *Callianassa* sp. burrows; common occurrence of petrified wood; occasional occurrence of carbonaceous clays, dark-gray, micaceous, containing carbonized wood fragments. Unconformity at base.

TUSCALOOSA GROUP

Kt

TUSCALOOSA GROUP (UNDIFFERENTIATED)

Gravel, chert, white to dark-gray, very well rounded; frequent silt and clay matrix; sand, light- to 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 well-cemented chert pebble conglomeratic zones. Laterally traceable silt and clay intervals occur most frequently in uppermost and lowermost intervals. Unconformity at base.

MISSISSIPPIAN

CHESTERIAN SERIES

Mh

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.

Base map prepared from the Paden Southeast Quadrangle (Mississippi), Tennessee Valley Authority-United States Geological Survey, 1965, 1927 North American datum.