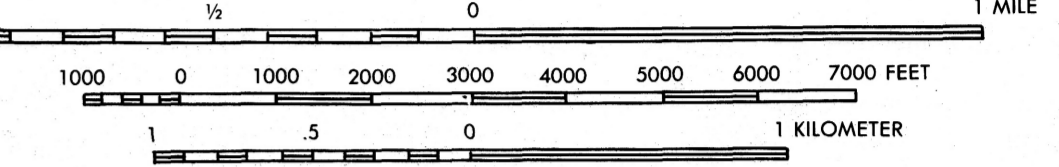


**GEOLOGIC MAP
OF THE
IUKA QUADRANGLE**
(INCLUDING MISSISSIPPI PORTION OF THE
MARGERUM QUADRANGLE, MISSISSIPPI-ALABAMA)

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 quartz 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. |
| | Qth | HIGH ELEVATION TERRACE DEPOSITS
Gravel, moderate reddish- to dark yellowish-brown, very well rounded chert and smooth, flattened quartz 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 at base. |
| SELMIA GROUP | Kc | 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 reddish-brown. Unconformity at base. |
| | 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 <i>Callianassa</i> sp. burrows. |
| EUTAW GROUP | 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 <i>Callianassa</i> 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 pebbles and stringers. Weathers to various shades of reddish-brown to yellowish-gray; local occurrences of ferruginous cemented sand molds of <i>Callianassa</i> 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. |
| | Mpm | 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. |
| MISSISSIPPIAN | Mt | TUSCUMBIA FORMATION
Limestone, light- to dark bluish-gray, fossiliferous, bioclastic grainstones, 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. |
| | Mfp | FORT PAYNE FORMATION
Chert, very light- to dark-gray, thin-bedded; locally weathered to clay, silty, white to very light-gray, and tripolitic silt, white to very light-gray; locally stained shades of brown. |

Quadrangle map locations.
Mapped portions are shaded.



Base map prepared from Iuka and Margerum Quadrangles, (Mississippi-Alabama), Tennessee Valley Authority, United States Geological Survey, 1953, photorevised 1967. 1927 North American Datum.