

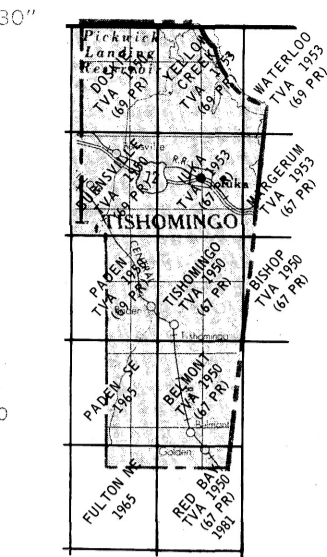
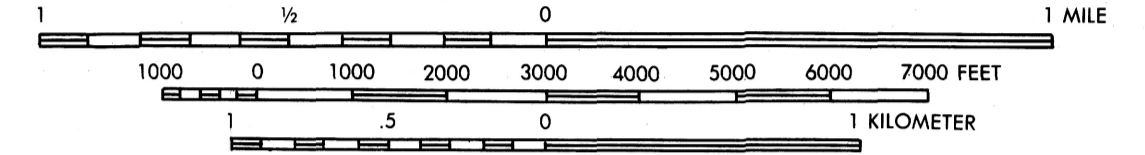
MISSISSIPPI BUREAU OF GEOLOGY
OPEN FILE REPORT 12

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

Geology by Robert K. Merrill

1988

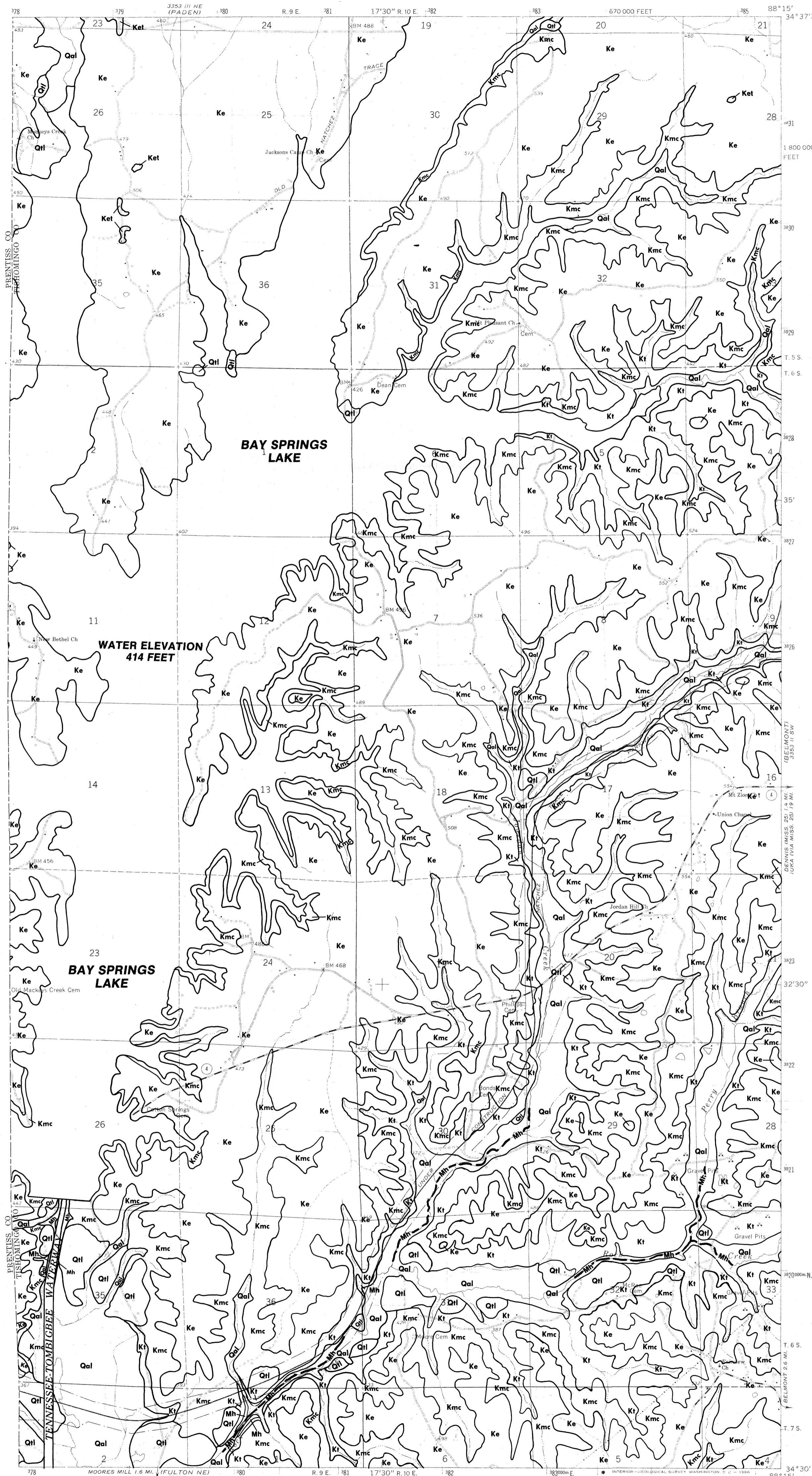
SCALE 1:24,000



Quadrangle map locations.
Mapped portions are shaded.



QUADRANGLE LOCATION



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.

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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.