



GEOLOGIC MAP
of the
PADEN SOUTHEAST QUADRANGLE
Tishomingo and Prentiss Counties, Mississippi

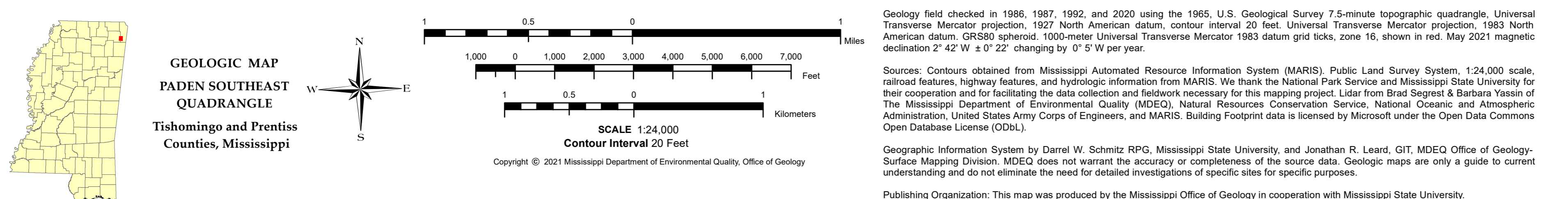
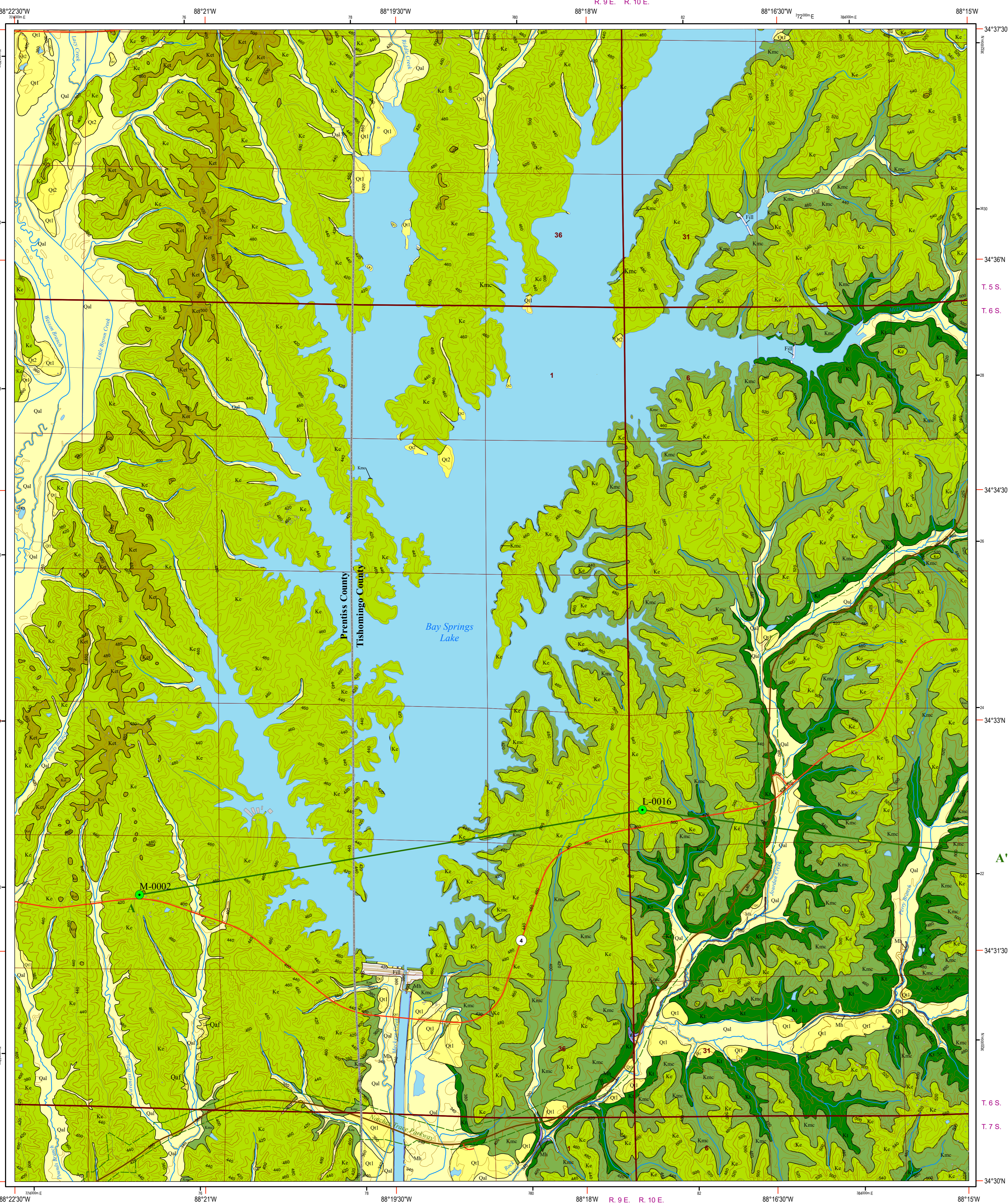


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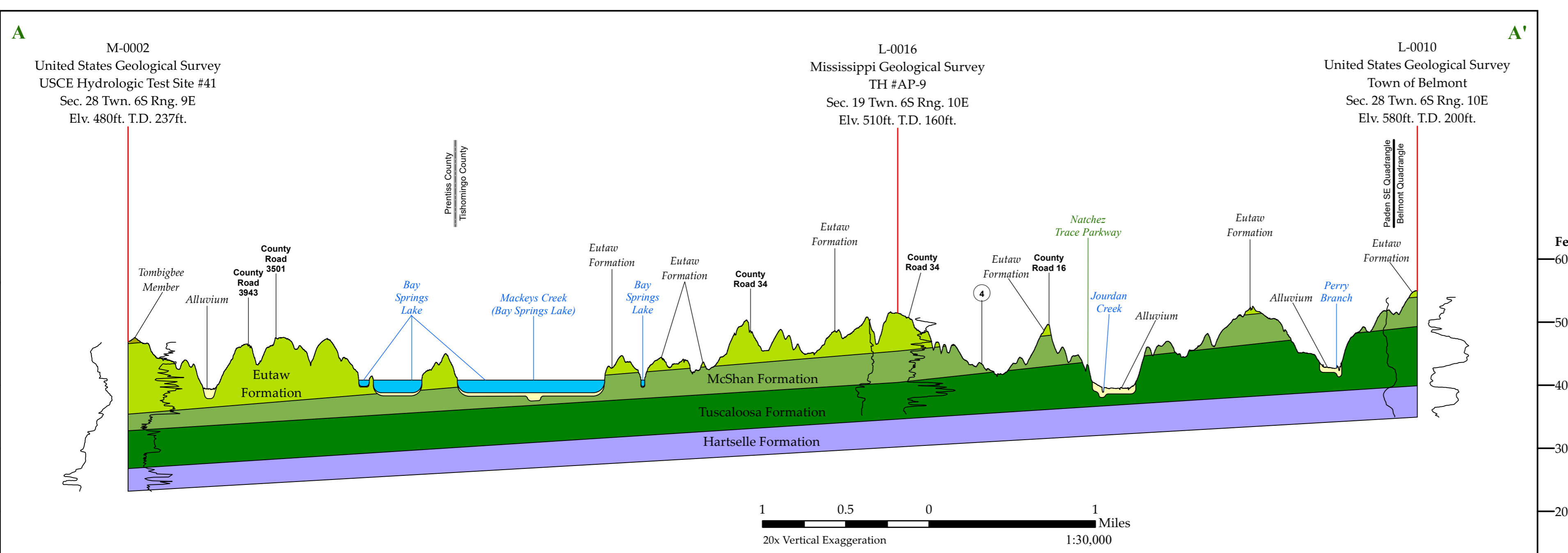
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DESCRIPTION OF MAP UNITS

Geologic Period	Geologic Group	Map Unit	Description
QUATERNARY	HOLOCENE	Fill	ARTIFICIAL FILL Anthropogenic fill including earthen, stone, and manufactured materials such as concrete and steel.
		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.
		Qaf	ALLUVIAL FAN Alternating sand, silt, and clay deposited at the mouth of stream as flow velocity changes. Coarsest at apex thinning radially to toe.
PLEISTOCENE		Qt1	TERRACE ALLUVIUM 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. Qt1 - youngest and lowest in elevation of Terrace alluvium deposits. Qt2 - second youngest in age and elevation of Terrace alluvium deposits. The older in age and higher in elevation Terrace alluvium deposits become increasingly eroded and discontinuous.
		Qt2	
CRETACEOUS	EUTAW GROUP	Ket	EUTAW FORMATION Ket Tombigbee 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. The base is conformable with the underlying portion of the Lower Eutaw Formation. Thickness ranges up to 55 feet.
		Ke	
		Ke	
UPPER CRETACEOUS		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 <i>Callianassa</i> sp. burrows; common occurrence of petrified wood; occasional occurrence of carbonaceous clays, dark-gray, micaceous, containing carbonized wood fragments. The McShan Formation disconformably overlies the Tuscaloosa Group. Thickness ranges up to about 55 feet.
		Kmc	
MISSISSIPPIAN		qt	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. The Tuscaloosa Group disconformably overlies the Hartselle Formation. Thickness ranges up to about 95 feet.
		qt	
		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. Basal contact and total thickness not
		Mh	
		M-0002	Drill Hole Locality and Identifier
		⊗	Surface Mine



Structural Cross-Section of the Paden Southeast 7.5-Minute Geologic Quadrangle



2009-2018 Mississippi Statewide LIDAR-Generated DEM and Hill Shade