



WHITEHALL QUADRANGLE LOUISIANA - 7.5-MINUTE SERIES



## **Description of Map Units**

# QUATERNARY SYSTEM

- Stream alluvium, undifferentiated Deposits of ephemeral and perennial (Tickfaw River) streams incised into older strata. Occur as active and recently stranded terraces. Light to medium gray-brown clay mud and silt mud with medium to fine sand component of quartz and trace amounts of dark silicates and iron oxides. Produced by local re-working of
- Small river natural levee deposits Levee deposit of Amite River confined to the southwest corner of the map. Medium brown-gray clay dominant mud with fine sand and silt size quartz and trace amounts of feldspar, light mica, dark silicates, and iron oxides. Thickness < 2m.

**Coastal swamp** — Active deposit of fresh and brackish water inundation in peralic setting. Dark brown, black-brown, and black organic-rich clay with <1% very fine quartz sand and silt. Undetermined thickness.

**Peoria loess** (not shown) — Wisconsin age loess in thin (< 1m) veneer over Hammond alloformation. Light brown-white, light brown-gray, and light orange-gray fine sand and silt with minor clay, lacking sedimentary structures. Includes small population of coarse and medium sand size rounded and frosted quartz. Fine sand and silt dominated by quartz with minute trace amounts of feldspar, dark silicates, iron oxides, and light mica. Displays 5 cm scale vertical piping in thin erosional bluffs. Thickness

Hammond alloformation—rust-yellow, rust-orange, and reddish-brown silty and fine sandy mud. Depositional structures (laminations) and half-centimeter scale Skolithos ichnofossils are diagnostic. Clay vs. silt and fine sand fraction varies with location, the latter dominated by quartz with feldspar and light and dark

McCulloh, R., Heinrich, P., and Snead, J., 2003, Ponchatoula 30 x 60 minute geologic quadrangle: Louisiana Geological Survey, scale

Saucier, R. T., 1963, Recent geomorphic history of the Pontchartrain

Saucier, R.T., 1994, Geomorphology and Quaternary geologic history of the Lower Mississippi Valley, US Army Engineer Waterways Experiment Station, Vols I and II, 364 p. + Appendices + map folio.

