

Description of Map Units QUATERNARY SYSTEM

HOLOCENE

Ha **Alluvium, undifferentiated**—Active deposits of the modern Tangipahoa River meander belt consist of light yellow-gray and pale yellow-brown medium to coarse grained quartz and chert sand with rounded gravel fragments of chert, older sandstones, and vein quartz. Terrace deposits are mainly quartz and chert sand with mud and muddy sand and a fine gravel component in trace amounts or absent. Fresh colors include yellow gray and yellow ochre. Active channel deposits are about 3 meters thick; terrace deposits stand about 3 meters above modern bars.

Qau **Alluvium, undifferentiated**—Muddy sand and clean sand, with gravel, in shades of light gray, brown-gray, yellow-gray, light and dark yellow ochre. Fluvial deposits of abandoned meander belts acting as distributaries or spillways for Tangipahoa and Natchitoches river during flood stage.

Medium to coarse sand is dominated by quartz with lesser chert and maroon sandstone. Gravel fraction is mainly chert with minor quartz and yellow siliceous sandstone. Abraded fine sand size opaque oxides and dark silicates occur in trace amounts. Active and abandoned quarries in the northern half of the quadrangle borrow from a normally graded sequence of sandy gravel, sand, and muddy sand, 8 to 10 meters thick.

PLEISTOCENE

Small Stream Levee Deposits—Curved and branching positive relief landforms generally bearing southward atop the Hammond surface, truncated and partially denuded by modern streams and tributaries. Isolated mounds in the center and west of the quadrangle composed of muddy coarse sand, shaded dark brownish red, of basinward bearing hyper-concentrated sediment flows. Coarse sand to small gravel size rounded clasts are dominated by chert with lesser vein quartz, siliceous Paleozoic sandstone, and metamorphic lithics. Extensive hills of gold colored muddy sand along the west bank of the Tangipahoa River are interpreted as deposits of overbank flows. Coarse sand to fine gravel quartz is the dominant component with subordinate amounts of fine size chert, opaque oxides, and dark silicates. Thickness < 5 meters.

PRAIRIE ALLOGROUP

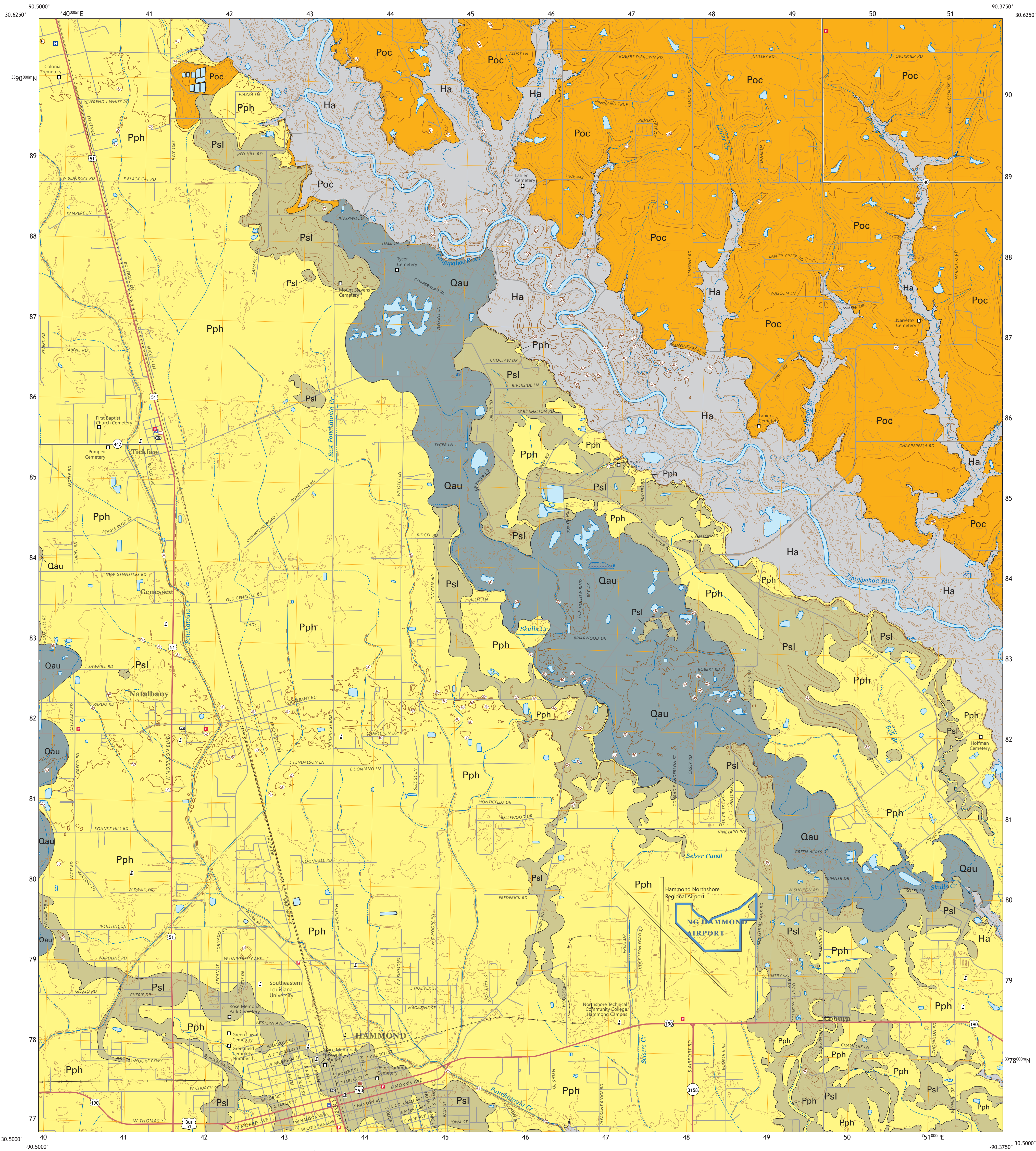
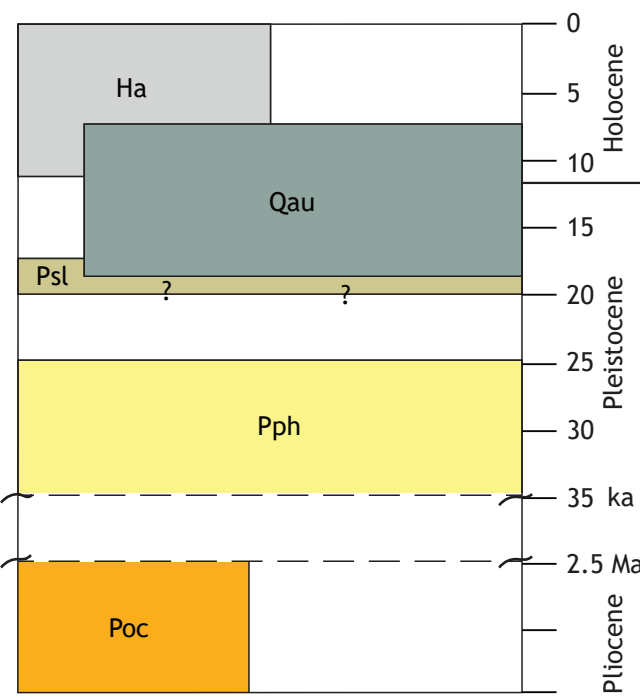
Hammond (allo-) formation—Platform lithosome of the southwestern two thirds of the quadrangle graded laterally from clay and sandy mud in the south to muddy sand and sand with mud northward. Fresh colors are light brown, gray, and brown-gray, with yellow-ochre mottle, and uniform yellow ochre. Sand component is dominated by quartz with trace amounts of fine opaque oxides, dark silicates, and lithic fragments. Rounded fragments of chert, vein quartz, metamorphic lithics, and older siliceous sandstone occur in coarse sand and small gravel sizes. Clay component is mainly montmorillonite with lesser kaolinite and illite.

PLOCENE

Citronelle formation—Principle lithosome northeast of Tangipahoa River meander belt and limited exposure along the west bank. Sedimentary facies vary from sandy clay to conglomeratic muddy sands with distinct fluvial cross and planar bedding. Fresh color shading varies from yellow ochre and gray, gray with red and maroon mottle, and uniform maroon, singly or in combination at road cut exposure scale. Clay component is dominated by kaolinite with lesser vermiculite and minor montmorillonite. Coarse fraction is dominated by quartz, chert, vein quartz, and siliceous sandstone and metamorphic lithics. Opaque oxides occur in the fine sand fraction.

- Open Water, Inundated Area, Wetland**
- Streams**
- Contact**—includes inferred contacts.
- Topographic Contours**

Correlation Diagram



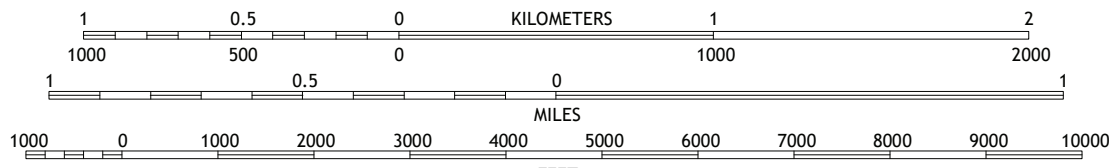
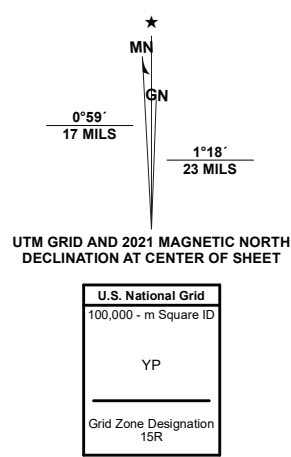
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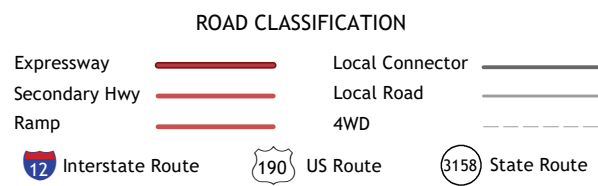
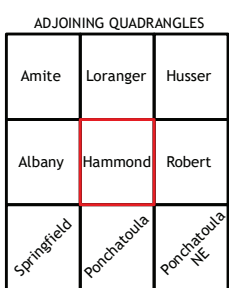
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Information and assistance provided by private property owners and managers were vital to successful field work for this project.



SCALE 1:24,000
CONTOUR INTERVAL 5 FEET
NORTH AMERICAN DATUM OF 1983 (NAD 83)
WORLD GEODETIC SYSTEM 1984 (WGS 84)
UNIVERSAL TRANSVERSE MERCATOR PROJECTION, ZONE 15
NORTH AMERICAN VERTICAL DATUM OF 1985



Base Map..... United States Geological Survey, 2024
Data provided by The National Map (TNM), is the best available at the time of map generation, and includes data content from supporting themes of Elevation, Hydrography, Geographic Names, Transportation, Structures, and Land Cover.
Boundaries.....LaDOTD, 2007
Wetlands.....FWS National Wetlands Inventory 2021

This research is supported by the U. S. Geological Survey, National Cooperative Geologic Mapping Program. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U. S. Government or the state of Louisiana. This map was produced to conform with the National Geospatial Program US Topo Product Standard, 2011.

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Geologic Map of the Hammond 7.5 minute quadrangle, Tangipahoa Parish, Louisiana