

**Description of Map Units**

QUATERNARY SYSTEM

HOLOCENE

- Hua** Holocene undifferentiated alluvium—undifferentiated deposits of small upland streams; alluvial deposits of minor streams and creeks, of varying textures, filling valleys incised into older deposits.
- Hb** Backswamp deposits—fine-grained Holocene deposits of rivers, underlying the flood basins between meander belts.

PLEISTOCENE

PRairie ALLOGROUP

- Ppl** Upper Prairie Allogroup—Younger and topographically lower of Prairie Allogroup temporal phases, consisting of alluvial deposits of ancestral late Pleistocene streams. The deposits geomorphically form a very flat and poorly drained alluvial terrace. Grayish-white to reddish-white and light red very fine to medium sand to silt, with clay, to sandy mud, in places including beds of gravelly sand and sandy gravel of chert and vein quartz. Weathers to yellow, orange, and/or brownish-tan hues.

INTERMEDIATE ALLOGROUP

- Pib** Bentley allomformation—dissected alluvial deposits of early Pleistocene streams of primarily the Red River in central Louisiana. The unit is blanketed by yellow loam and incises Tertiary formations; it is incised by younger subunits of the Intermediate allogroup, and by the Prairie Allogroup and younger strata. Equivalent to the Natchez Formation of Mississippi.

TERTIARY SYSTEM

OLIGOCENE

- OMc** Catahoula Formation—texturally heterogeneous suite of generally poorly sorted sediments comprising primarily silt/siltstone to very fine quartzose sand/sandstone, with and without admixtures of clay. Overall or predominant grain size of sand/sandstone tends to average very fine to fine sand. Coarser grains may comprise quartz, chert, and/or mud clasts. Contains petrified wood and lufaceous sandstone locally. Weathers locally to produce a thick (up to 2 meters) gray/tan loamy surface unit. Characteristics of the surface Catahoula accord generally with continental, fluvial-dominated deposition (Fisk, 1940; Hinds, 1999), with the large proportion of silt observed in places suggestive of the onset of transition to deltaic facies (McCulloh and Heinrich, 2002). Recent work indicates a paleontological age of early late Miocene for the Catahoula in its type area in eastern Louisiana (Wrenn et al., 2003), in contrast to the Oligocene age suggested by subsurface-to-surface correlation in the Texas Gulf Coast (Galloway, 1977; Galloway et al., 1992).

VICKSBURG GROUP

- Ov** Vicksburg Group, undifferentiated—grayish, clayey very fine sand to fine sandy clay, with red mottles in places. Mudclay sediment is typically a dark gray to dark reddish brown to chocolate brown, finely laminated silty clay. Petrified wood occurs locally. Divisible into two members of formation rank in Sabine Parish—the Sandel and Nash Creek formations—plus a third in Natchitoches Parish, the overlying Rosefield Formation (Andersen, 1960, 1993). The lowermost formation, the Sandel, comprises sand with interbedded conglomerate containing cobbles and slabs of carbonaceous bentonitic clay like that of the overlying Nash Creek. Based on the investigation of Rukus and Gooch (1939), Andersen (1993) portrayed the Rosefield as comprising lenses of marly clay that form a marine tongue extending into Natchitoches Parish from the east and pinching out westward.

Open Water, Inundated Area, Wetland

Contact—includes inferred contacts.

Streams

Topographic Contours

Produced and published by the Louisiana Geological Survey  
 3079 Energy, Coast & Environment Building, Louisiana State University  
 Baton Rouge, LA 70803 • 225/578-5320 • www.lsu.edu/lgs/

Production of this map was supported by the U.S. Geological Survey,  
 Department of the Interior, under Assistance Award No. 01HQAG0056.

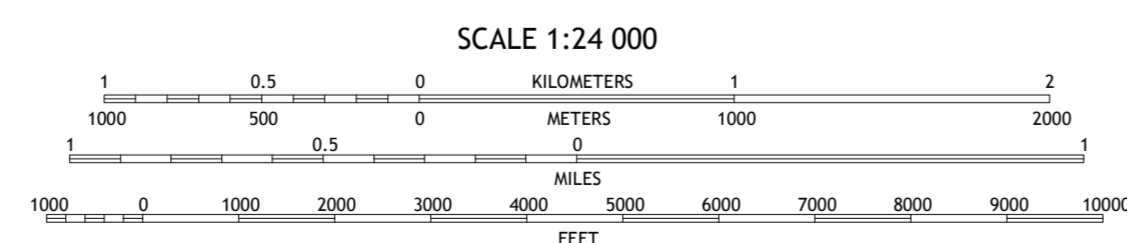
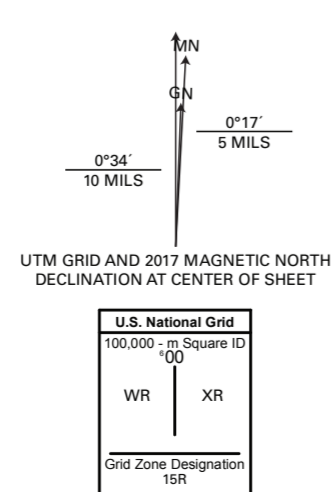
Copyright ©2002, 2021 by the Louisiana Geological Survey

Geology: Paul Heinrich and Richard P. McCulloh

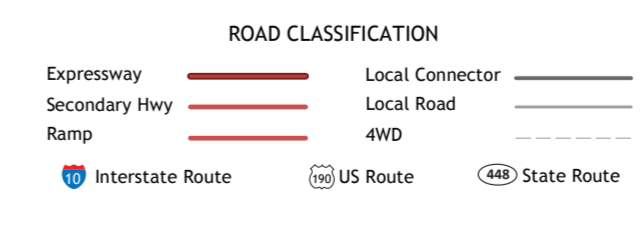
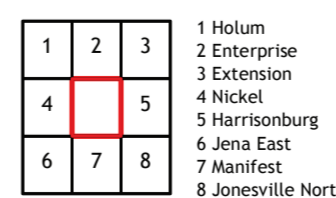
GIS compilation: R. Hampton Peele and Anuradha Eragani

Revision GIS: Robert L. Paulsell

Cartography: Robert L. Paulsell



CONTOUR INTERVAL 20 FEET  
 NORTH AMERICAN VERTICAL DATUM OF 1988  
 This map was produced to conform with the  
 National Geospatial Program US Topo Product Standard, 2011.



AIMWELL, LA  
 2018

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 has been carefully prepared from the best existing sources available at the time of preparation. However, the Louisiana Geological Survey and Louisiana State University do not assume responsibility or liability for any reliance thereon. This information is provided with the understanding that it is not guaranteed to be correct or complete, and conclusions drawn from such data are the sole responsibility of the user. These regional geologic quadrangles are intended for use at the scale of 1:24,000. A detailed on-the-ground survey and analysis of a specific site may differ from these maps.

**Aimwell Surface Geology**  
 Revised 2021