

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.
 - Hol** **Ouachita River natural levee deposits**—deposits forming low natural levees flanking the meander belts of the Ouachita River. Where observed in the Monroe area the sediments comprise grayish brown silty clay with well developed soil structure.
 - Hom** **Ouachita River meander-belt deposits**—point bar deposits underlying meander belts of the Ouachita River.

- PLEISTOCENE**
- PRAIRIE ALLOGROUP**
- Plu** **Upper Lapine alloformation**—stratigraphically higher sequence underlying the lower of two depositional surfaces of the Lapine alloformation. Silty to sandy clay, and clayey to silty very fine to fine sand, of grayish to dark gray coloration with orange-brown to red mottles. May be veneered locally by silty colluvium.
 - Plr** **Lapine alloformation, relict beach ridge**—relict shoreline ridges formed on depositional surfaces of the Lower Lapine alloformation. Grayish very fine to medium sand, in places clayey and/or gravelly, weathering to tan, yellowish brown, orangish brown, or reddish brown coloration. The texture typically becomes clayey away from the ridge crests. The upper 1 to 2 m may consist of a reddish-brown weathering zone in places.
 - Pll** **Lower Lapine alloformation**—stratigraphically lower sequence underlying the higher of two depositional surfaces of the Lapine alloformation. Tan to light gray fine to very fine sand, in places clayey and/or gravelly, weathering to yellowish brown or orangish brown coloration. Ironstone nodules are common and range in size up to 0.6 m. Contains some admixed dark brown organic material in places. May be veneered locally by silty colluvium.
 - Ppl** **Upper Prairie Allogroup**—Younger of the Prairie Allogroup temporal phases. Alluvial deposits of ancestral late Pleistocene streams.
 - Pp** **Prairie Allogroup, undifferentiated**—fluvial terraces of the Ouachita River and its tributaries. Very fine to medium sand, in places gravelly and containing beds of sandy gravel, of yellowish brown to orangish brown coloration.

- TERTIARY SYSTEM**
- EOCENE**
- CLAIBORNE GROUP**
- Ecc** **Cockfield Formation**—generally very fine to fine sand of grayish to grayish brown coloration weathering to brownish orange-red hues. Ranges from sandy clay to medium sand, in places containing grayish clayey laminae that may become broken into rip-up clasts. Ironstone beds and nodules are common. Weathers locally to produce a thick (1 to 2.5 m) loamy sand surface mantle. Above its basal sand unit the Cockfield comprises "interbedded clays, silts, and muds" (Andersen 1960, p. 92) and is "predominantly composed of very fine sand and silt" (Andersen 1993, p. 87), with scattered occurrences of petrified wood, leaf fossils, lignite, and glauconite (Andersen 1960). These characteristics are suggestive of deltaic deposition on a shallow shelf.
- Open Water, Inundated Area, Wetland**
- Contact**—includes inferred contacts.
- Railroads**
- Streams**
- Topographic Contours**

References:

Andersen, H. V., 1960. Geology of Sabine Parish, Louisiana Department of Conservation, Louisiana Geological Survey, Geological bulletin no. 34, 164 p. plus plates (includes one 1:62,500-scale geologic map).

Andersen, H. V., 1993. Geology of Natchitoches Parish, Louisiana Geological Survey, Geological bulletin no. 44, 227 p. plus plates (includes one 1:62,500-scale geologic map).

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

This geologic map was funded in part by the USGS National Cooperative
Geologic Mapping Program under STATEMAP award number 04HQAG0073

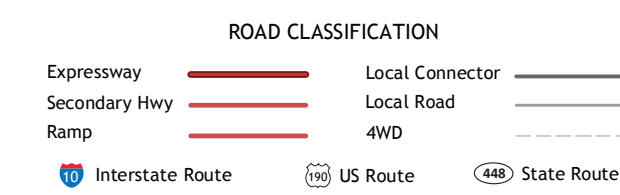
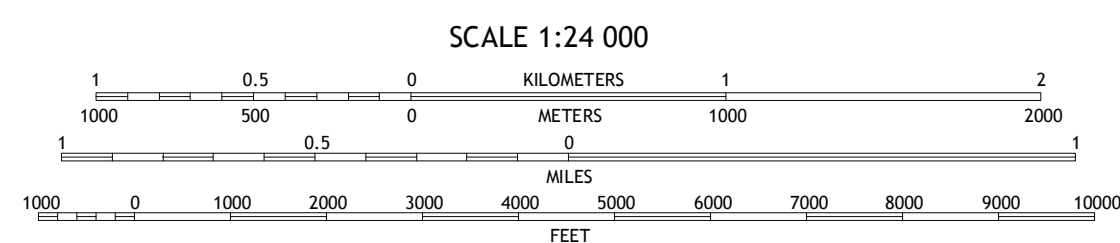
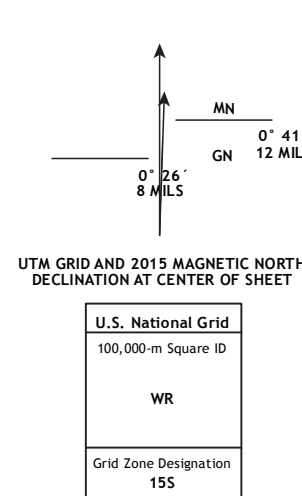
Copyright ©2006 and 2021 by the Louisiana Geological Survey

Geology by: Richard P. McCulloh and Paul V. Heinrich

GIS Compilers: R. Hampton Peele, Jayanth Ramchandran, and Jomish
George

Revision GIS: Robert Paulsell

Cartography by: Robert Paulsell



1	2	3	1 Calhoun
4	5	6	2 West Monroe North
7	8	7	3 Monroe North
		8	4 Cadreville
			5 Monroe South
			6 Chatham SE
			7 Luma
			8 Bosco

WEST MONROE SOUTH, LA
2015

This research is supported by the U. S. Geological Survey, National Cooperative Geologic Mapping Program, under USGS award number G20AC00239, 2020. 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.

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 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.