

Description of Map Units

- QUATERNARY SYSTEM**
- HOLOCENE**
- Ha** **Holocene undifferentiated alluvium**—Undifferentiated deposits of small upland streams; unconsolidated alluvial deposits of minor streams and creeks filling valleys incised into older deposits, with textures varying from gravelly sand to sandy mud.
  - 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 deposits**—point bar deposits underlying meander belts of the Ouachita River.
- PLEISTOCENE**
- PRAIRIE ALLOGROUP, UNDIFFERENTIATED**
- 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 orange-brown coloration.
  - Ppl** **Upper Prairie Allogroup**—Younger of the Prairie Allogroup temporal phases. Alluvial deposits of ancestral late Pleistocene streams.
  - Plu** **Upper Lapine alloformation**—stratigraphically higher sequence underlying the lower 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.
  - Pll** **Lower Lapine alloformation**—stratigraphically lower sequence underlying the higher 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 orange-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.
  - Plr** **Lapine alloformation, relict beach ridge**—relict shoreline ridges formed on depositional surfaces of the Lapine alloformation. Grayish very fine to medium sand, in places clayey and/or gravelly, weathering to tan, yellowish brown, orange-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.
- TERTIARY SYSTEM**
- EOCENE**
- CLAIBORNE GROUP**
- Ecc** **Cockfield Formation**—generally very fine to fine sand of 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.
- 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).

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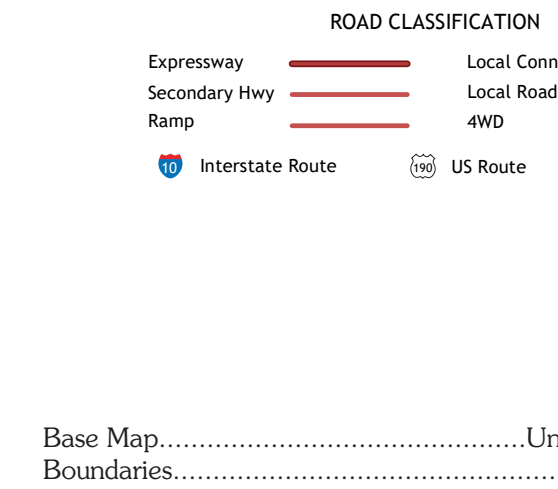
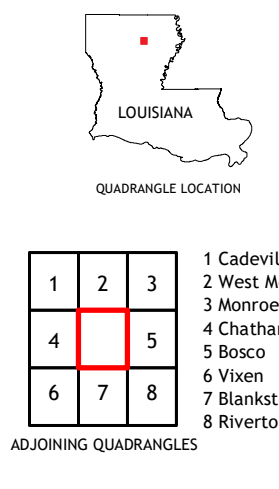
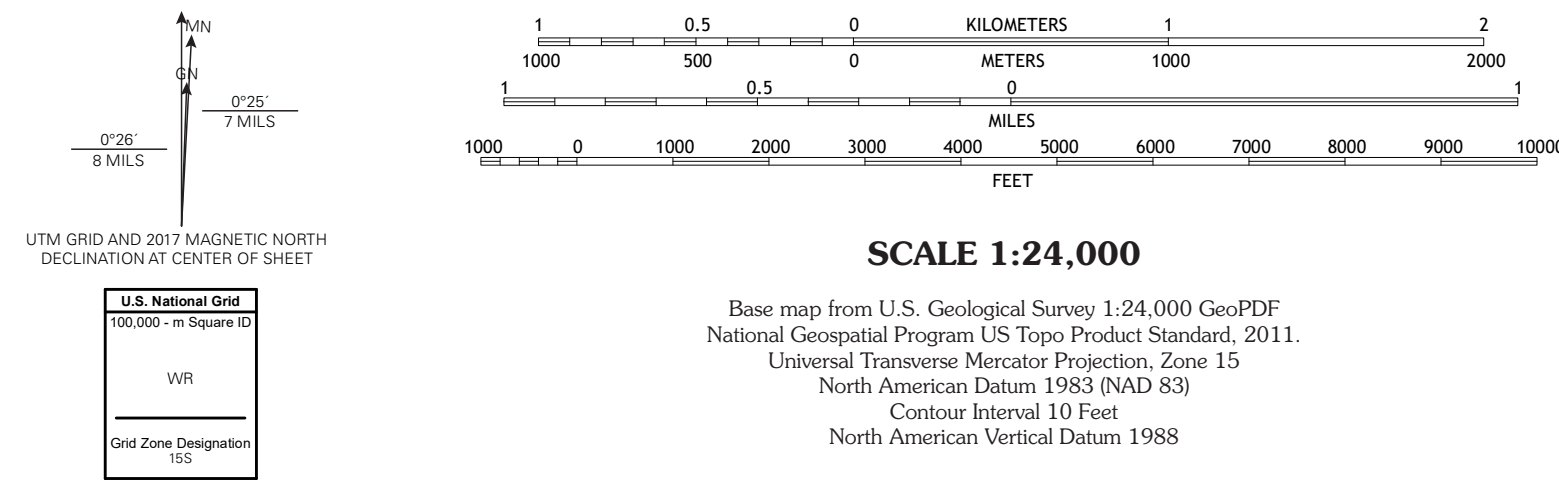
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Base Map.....United States Geological Survey, 2020  
Boundaries.....LADOTD, 2007  
National Elevation Dataset, 2008 - 2011  
Hydrography.....National Hydrography Dataset, 2002 - 2017  
Names.....GNIS, 1980 - 2017  
Roads.....U.S. Census Bureau, 2017  
Wetlands.....FWS National Wetlands Inventory 2021

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**Geologic Map of the Luna 7.5 minute quadrangle  
Caldwell and Ouachita Parishes, Louisiana**