

Description of Map Units

QUATERNARY SYSTEM

HOLOCENE

- Hua** **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.
- Hsm** **Small river meander-belt deposits**—point bar deposits underlying the meander belts of small rivers.
- Hsl** **Small river natural levee deposits**—deposits forming low natural levees flanking the meander belts of small rivers.
- Hb** **Backswamp deposits**—fine-grained Holocene deposits of rivers, underlying the flood basins between meander belts.
- Hom** **Ouachita River meander deposits**—point bar deposits underlying meander belts of the Ouachita River.
- 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.
- Hod** **Ouachita River distributary deposits**—sandy and silty sediments occupying abandoned courses of a relict distributary system of the Ouachita River. In the Monroe area the sediments comprise yellowish to orange-brown silty very fine sand with varying though relatively small proportions of admixed clay.
- Hocs** **Ouachita River crevasse splay deposits**—sandy and silty sediments forming fanlike crevasse splays that originate from the Ouachita River. Where observed in the Monroe area the sediments comprise interlaminated gray-brown silt and organic-rich, dark clayey silt.
- Harm** **Arkansas River meander-belt deposits**—point bar deposits underlying meander belts of the Arkansas River.
- Harl** **Arkansas River natural levee deposits**—deposits forming low natural levees flanking the meander belts of the Arkansas River.
- Hard** **Arkansas River distributary deposits**—sandy and silty sediments occupying abandoned courses of a relict distributary system of the Arkansas River.

QUATERNARY UNDIFFERENTIATED

- Qc** **Quaternary colluvium**—undifferentiated colluvial deposits forming lobate to apronlike landforms.
- Qaf** **Quaternary alluvial-fan deposits**—unsorted alluvial-fan deposits.

PLEISTOCENE

- Pp** **Prairie Allogroup, undifferentiated**—a diverse depositional sequence of late to middle Pleistocene deposits of the Mississippi River, its tributaries, and coastal plain streams; includes terraced fluvial (meander belt, backswamp, and braided stream), colluvial, estuarine, deltaic, and marine units deposited over a considerable interval (Rissacoin to Sangamon) of the late Pleistocene. Multiple levels are recognized along alluvial valleys and coast-parallel trends, and are grouped into two principal temporal phases. The allogroup is undifferentiated where local fluvial terrace remnants flank the more headward portions of stream bottoms.

INTERMEDIATE ALLOGROUP

- Pib** **Bentley alloformation**—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 traced by younger subunits of the Intermediate Allogroup, and by the Prairie Allogroup and younger strata. Equivalent to the Natchez Formation of Mississippi.

TERTIARY SYSTEM
MIOCENE-OLIGOCENE

- OMc** **Catahoula Formation**—texturally heterogeneous suite of generally poorly sorted sediments comprising primarily silt/siltstone to very fine quartzite 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 tuffaceous 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 palynological age of early late Miocene for the Catahoula in its type area in eastern north 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).

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

References:

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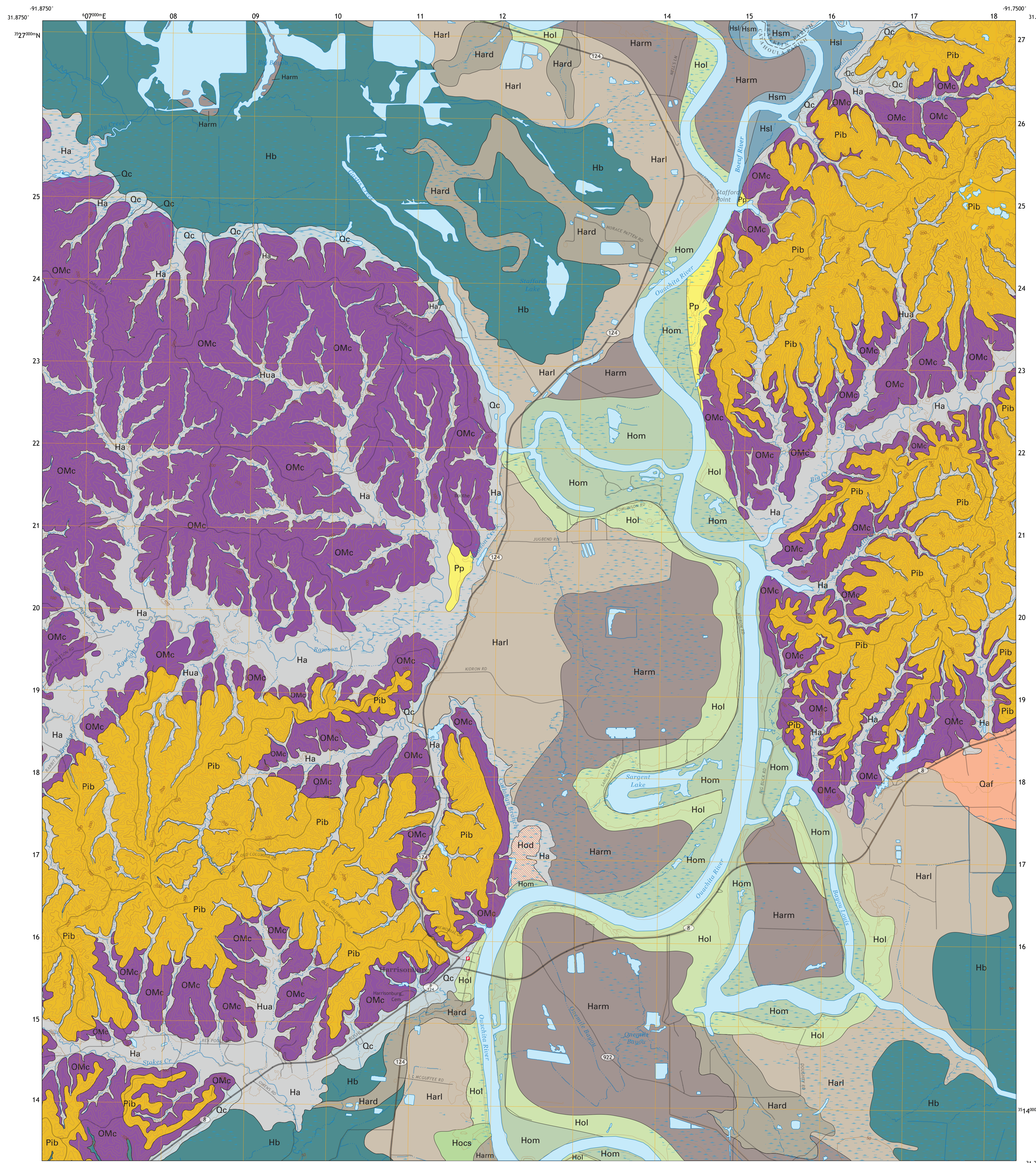
McCulloh, R. P., and P. V. Heinrich, 2002. Geology of the Fort Polk region, Sabine, Natchitoches, and Vernon Parishes, Louisiana. Louisiana Geological Survey, Report of Investigations 02-01, 82 p. plus plates and appendices (includes ten 1:24,000-scale geologic maps on one compact disc).

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Ridoks, J. M., and D. D. Gooch, 1939. Exposures of Vicksburg Oligocene fauna in western Louisiana. American Association of Petroleum Geologists Bulletin, v. 23, p. 246-253.

Wrenn, J. H., W. C. Elisk, and R. P. McCulloh, 2003. Palynologic age determination of the Catahoula Formation, Big Creek, Sicily Island, Louisiana. Gulf Coast Association of Geological Societies Transactions, v. 53, p. 865-875.



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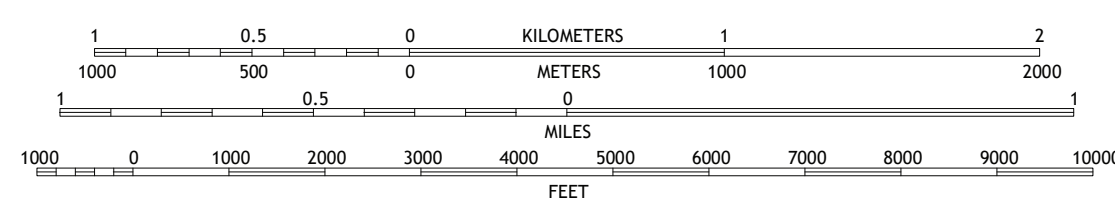
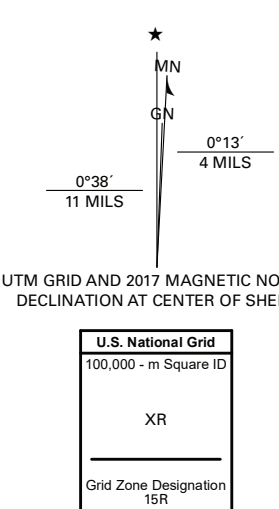
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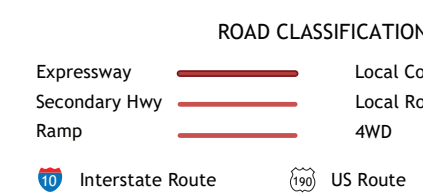
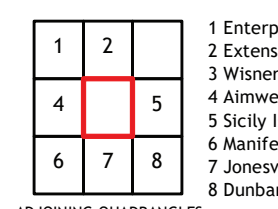
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SCALE 1:24,000

Base map from U.S. Geological Survey 1:24,000 GeoPDF
National Geospatial Program US Topo Product Standard, 2011.
Universal Transverse Mercator Projection, Zone 15
North American Datum 1983 (NAD 83)
Contour Interval 20 Feet
North American Vertical Datum 1988



Base Map.....United States Geological Survey, 2020
Boundaries.....LaDOTD, 2007
Contours.....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 Harrisonburg 7.5 minute quadrangle
Catahoula Parish, Louisiana