

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.
- PLEISTOCENE**
- PRAIRIE ALLOGROUP**
- Ppl** **Irene alloformation**—alluvial deposits of the middle Pleistocene ancestral Mississippi River and local fluvial equivalents of Florida Parishes streams in southeastern Louisiana. Where mapped, this unit is blanketed by both Florala and Sicily Island Loess or loess-derived colluvium.
- INTERMEDIATE ALLOGROUP**
- Pib** **Bentley alloformation**—dissected alluvial deposits of early Pleistocene streams of primarily the Red River in central Louisiana. The unit 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**
- EOCENE**
- Ecs** **Sparta Formation**—Lightish colored massive to bedded sand, cross bedded in places, with interbedded clays, glauconitic sands that weather to concretionary ledges, and some thin interbeds of lignite or lignitic sands and shales. Though no detailed depositional characterization is available, the unit overall shows aspects broadly suggestive of deposition in environments transitional between continental and marine.
 - Ecr** **Cane River Formation**—Brown silty clay with basal glauconitic, fossiliferous silt, which may weather to ironstone locally. Fine-grained overall texture and the presence of glauconite are suggestive of deposition on a shallow, muddy shelf.
 - Ewc** **Carizzo Formation**—Well rounded, very fine to medium, glauconitic quartzose sand, commonly cross bedded, in places feldspathic and/or containing petrified wood (Anderson, 1993, p. 73; Anderson, 1960, p. 84). Where exposed in the area northwest of Shreveport in northwestern Louisiana, it contains abundant quartz granules and consists of sandy granule conglomerate in places. Ranges in color from reddish orange to, in more-weathered outcrops, a deep-maroon limonitic sand containing abundant ironstone.
- PALEOCENE-EOCENE**
- WILCOX GROUP**
- PEW** **Wilcox Group, undifferentiated**—Heterogeneous suite of strata comprising gray to brown lignitic sands and silty to sandy lignitic clays, many seams of lignite, and some glauconite and limestone. May include small outcrops of overlying Carizzo Sand of the basal Claiborne Group in some places.
 - Pwcb** **Cow Bayou Formation**—dark brown lignitic silt and clay, with interbedded gray to brown clay, silt, and fine sand.
 - Pwd** **Dolet Hills Formation**—fine to medium, gray to reddish brown massive sand, with silt and clay lenses and thin lignite interbeds.
- PALEOCENE**
- Pm** **Midway Group, undifferentiated**—laminated, fissile silty clay and clayey silt, of dark gray to black coloration weathering to brown. Exposed at surface only in northwestern Caddo Parish and on Prothro and Rayburns salt domes in Bienville Parish. A whitish reworked leached kaolinitic clay is localized along its upper contact with the overlying Wilcox Group in places, such as in an area in Caddo Parish southeast of Mooringsport and directly east of Walnut Bayou where clay of the Midway is mined for brick production.
- CRETACEOUS**
- Ku** **Upper Cretaceous, undifferentiated**—fossiliferous limestone and marl. Surface exposures comprise only small outcrops on Prothro and Rayburns salt domes in Bienville Parish. On the Prothro dome the lithology of exposures consists of lime mudstone; fragmentary vein calcite in float indicates the mudstone is transected by calcite-filled veins. Fossils on this dome include the oysters *Exogyra costata* and *Pycnodonte conevia*, and the shark *Squalicorax* sp.
- Open Water**
- Contact**—includes inferred contacts.
- Normal fault**—identity and existence certain, location accurate. Ball and bar on downthrown block.
- Concealed fault**—identity and existence certain, location concealed. Ball and bar on downthrown block.
- Local Roads/Federal Highway/Interstate Highway**
- Streams**
- Topographic Contours**
- References:**
- Anderson, 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).
- Anderson, 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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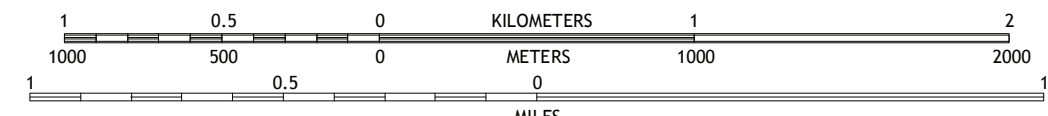
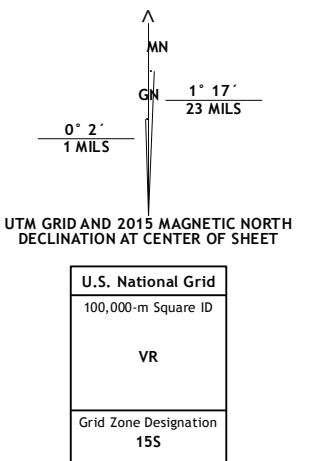
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CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

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 10 Feet
North American Vertical Datum 1988



QUADRANGLE LOCATION

1	2	3
4	5	6
7	8	9

ADJOINING QUADRANGLES

- 1 Jamestown
- 2 Sparta
- 3 Bienville
- 4 Roy
- 5 Saline
- 6 Martin
- 7 Chestnut
- 8 Goldonna

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Ashland 7.5 Minute Geologic Quadrangle
revised 2019