

Description of Map Units

- HOLOCENE**
- Hua** **Holocene alluvium, undifferentiated**—undifferentiated deposits of small upland streams; alluvial deposits of minor streams and creeks; of varying textures, filling valleys incised into older deposits.
  - 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.
  - Hcs** **Holocene coastal swamp and marsh**—gray-to-black clays of high organic content and thick peat beds underlying freshwater marsh and swamp.
  - Hcm** **Holocene coastal marsh**—gray-to-black clays, in places with thin peat beds, brackish and salt-water marsh.
  - Hbr** **Holocene beach ridges**—low ridges composed of either sand, shaly sand, or sandy shell.
- MISSISSIPPI RIVER DEPOSITS**
- Hmm1** **Mississippi River meander belt 1—point bar deposits of Mississippi River meander belt 1**, buried by a thin layer of overbank sediments.
  - Hml1** **Natural levee complex of Mississippi River meander belt 1**—deposits of the natural levees flanking Mississippi River meander belt 1.
  - Hmc1** **Crevasse complex of Mississippi River meander belt 1**—crevasse channel and splay deposits of Mississippi River meander belt 1.
- LAFOURCHE DELTA LOBE DEPOSITS**
- Hlm** **Lafourche meander belt**—clays deposits filling the abandoned main Mississippi River channel of the Lafourche delta lobe.
  - Hli** **Natural levee deposits of the Lafourche meander-belt**—silty to sometimes sandy deposits composing the low natural levees that flank the Lafourche meander-belt and its main distributary channels.
- ST. BERNARD DELTA LOBE DEPOSITS**
- Hds** **Deltaic plain of the St. Bernard delta lobe, Mississippi River**—deposits of the deltaic plain of the St. Bernard delta lobe, Mississippi River.
  - Hdl** **Natural levee deposits of the St. Bernard delta lobe, Mississippi River**—deposits of the natural levee complex of the St. Bernard delta lobe, Mississippi River.

- QUATERNARY UNDIFFERENTIATED**
- Octu** **Low coastal terrace, undifferentiated**—alluvium underlying a coastal terrace beneath the level of the Hammond surface in the area north of Lake Pontchartrain, and consisting of gray-brown silt and very fine sand showing weak consolidation and soil development. The unit is a possible coastal equivalent of the Dawsville Alluvium, though the area recognized and mapped at the surface do not permit demonstration of physical continuity with the recent fluvial Dawsville in the Pearl River flood plain. Alternatively, the unit could represent a coastal terrace built in conjunction with a middle Holocene sea-level rise and highstand at +2m postulated by Blum et al. (2002).

- PLEISTOCENE**
- Loess** **Pocaha Loess**—colluvial silt veneer of late Wisconsin age mantling Pleistocene and older strata. Loess is shown where the total thickness is 1 meter or greater.

- PRAIRIE ALLOGROUP**
- 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 part of the late Pleistocene (Wisconsin to Sangamon). Surfaces generally show little dissection and are topographically higher than the Holocene units. Multiple levels are recognized along alluvial valleys and coast-parallel trends. The Prairie is divided into two temporal phases of deposition.
- PRAIRIE ALLOGROUP: LATE SANGAMON**—younger of the Prairie Alluvium temporal phases. Alluvial deposits of ancestral late Pleistocene streams. In the coast-parallel Prairie the unit consists of meander-belt deposits of the late Pleistocene Mississippi River, and deposits of the late Pleistocene coastal plain streams. Deposits associated with these valleys are commonly found within the upper portions of the drainage basins. Pocaha Loess blankets the surface near the lower source of the Mississippi River flood plain, and the sediments at the top of the unit range from sand to clay.
- PRAIRIE ALLOGROUP: EARLY SANGAMON**—older of the Prairie Alluvium temporal phases. A diverse depositional sequence of flood plain, backswamp, and backswamp deposits of the middle Pleistocene ancestral Mississippi River, Red River, local fluvial equivalents of tributary streams, and coastal plain streams. Where this unit is mapped near the Mississippi River flood plain, it is blanketed by both Pocaha and Sully Island Loess or loess-derived colluvium. The unit fits into the subsurface beneath the Prairie Alluvium. Late Sangamon in the coast-parallel region, but is commonly terminated above it in stream valleys. The sediments are generally clay, silty clay loam, or sandy clay loam, but may include some sand and gravel in deposits of relict channels.

- Pph** **Hammond alluviation**—deposits of middle to late Wisconsin Coastal Plain streams, blanketed by Pocaha Loess, in the Florida Parishes of southeastern Louisiana. Includes flood-plain deposits of the late Pleistocene Mississippi River, exposed in the eastern valley wall of the modern Mississippi River alluvial valley, originally defined as the Mt. Pleasant Gulf Alluviation by Auer et al. (1988). Within the western part of the Ponchatoula 100K geologic quadrangle, its constructional topography has hidden beneath a layer of Pocaha Loess. It is composed of coastal plain deposits of late to middle Pleistocene streams.
- Ppjr** **Relict Pleistocene ridges**—alluvial and alluvial-estuarine remnants (predominantly sand hills) delineated on the surface of the Hammond alluviation.
- Ppec** **Relict Pleistocene coastal ridges**—deposits of coastal-parallel ridges within the Hammond alluviation.

- Open Water**
- Contact**—includes inferred contacts.
- Fault**—dashed where inferred, dotted where concealed.
- Streams**
- Roads**
- Topographic contours**

Auer, W. J., A. T. Davison, B. J. Miller, W. J. Day, and B. A. Schumacher, 1988. Exposure of late Pleistocene meander-belt facies at Mt. Pleasant, Louisiana. *Transactions of the Gulf Coast Association of Geological Societies*, v. 38, p. 375-383.

Blum, M. D., A. E. Carter, T. Zupac, and R. Glabe, 2002. Middle Holocene sea-level and the evolution of the Gulf of Mexico Coast (USA). *Journal of Coastal Research*, v. 36, p. 65-80.

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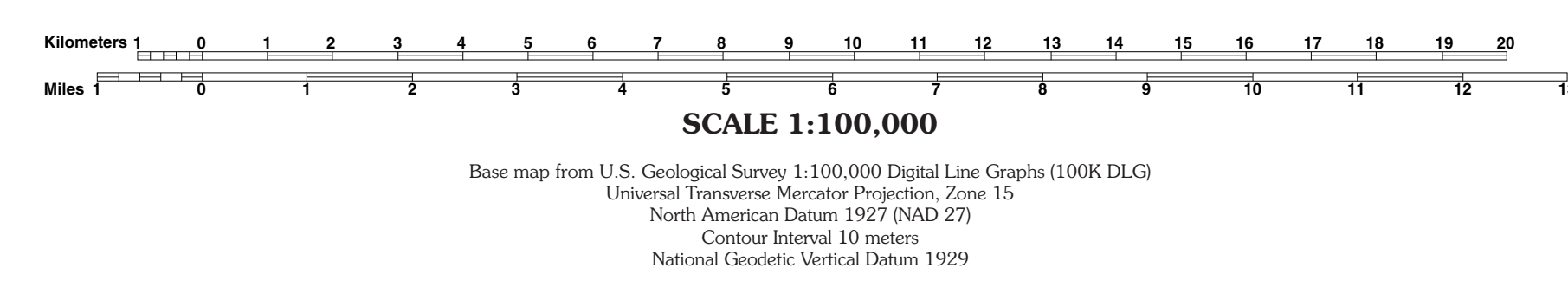
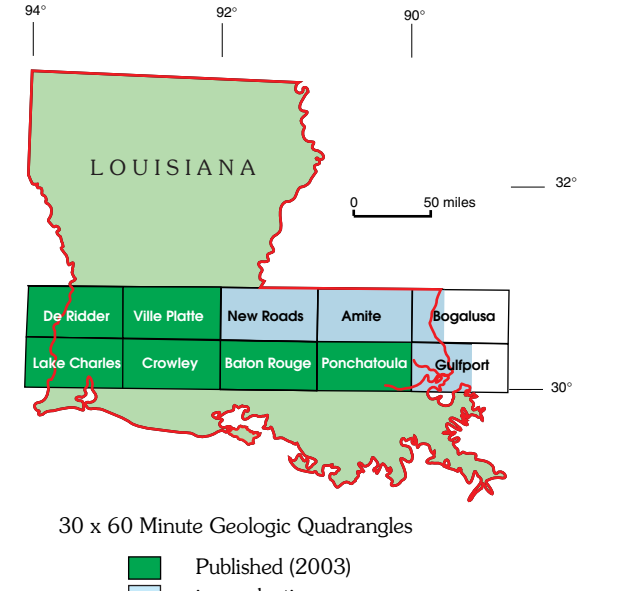
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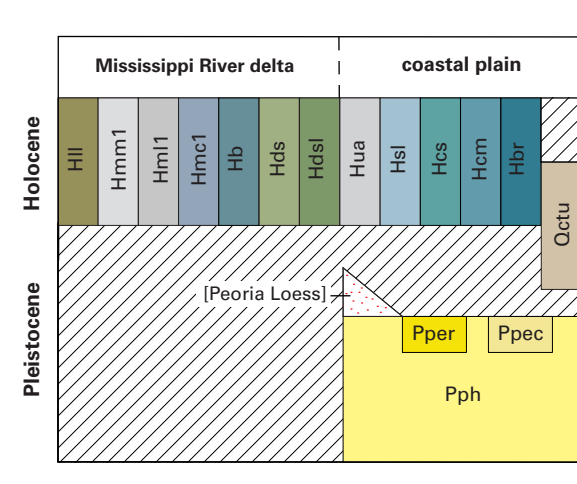
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# Ponchatoula 30 x 60 Minute Geologic Quadrangle

## 2003

Correlation of Map Units



PONCHATOULA, LOUISIANA  
30090-A1-TM - 100K



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