



Description of Map Units

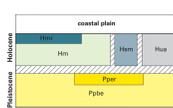
- HOLOCENE**
- Hua** **Holocene undifferentiated alluvium**—undifferentiated deposits of small upland streams; alluvial deposits of minor streams and creeks, of varying textures, filling valleys incised into older deposits.
 - Hm** **Small river meander-belt deposits**—point bar and associated overbank deposits containing meander belts of the Sabine River. These deposits typically consist of gray to reddish brown sand, silt, silty clay, and sandy clay.
 - Hm** **Meanderbelt alluviation**—Complexly interfingering and interbedded, dark-colored marine sands, sandy and shaly beach deposits, organic marsh clays, and lacustrine and bay muds. These deposits bury the surface of the Prairie and Deshayes Alluvium. The Louisiana channel plain forms the surface of the Meanderbelt Alluviation. The Alluviation extends westward along the coast into Texas as far west as Galveston Bay. Eastward it extends along to the west shore of Vermilion Bay, where it intertongues with deltaic sediments of the Terre de Haute. Southeast of the shoreline, the Meanderbelt Alluviation grades laterally into continental marine sediments.
 - Hm** **Holocene coastal ridges (cherters)**—Sandy and/or shaly ridges, of predominantly coast-parallel orientation, delineated on portions of the surface of the Holocene Meanderbelt Alluviation. They comprise beach ridges separated from each other by extensive tracts of coastal marsh. The areas mapped may include some ridges of other origin in places.
- PLEISTOCENE**
- PRairie ALLODOROP**
A diverse depositional sequence of late to middle Pleistocene deposits of the Mississippi River, its tributaries, and coastal plain streams includes terraced, broad meander-belt, backswamp, and flood-terrace, oxbow, meander, deltaic, and marine units deposited over a considerable part of the late Pleistocene (Blancan to Sangrean). 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 ALLODOROP, LATE SANGREAN**—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. Sediments at the top of the unit range from sand to clay.
- PRairie ALLODOROP, EARLY SANGREAN**—older of the Prairie Alluvium temporal phases. A diverse depositional sequence of broad plain, meander-belt, and backswamp deposits of the middle Pleistocene ancestral Mississippi River, Red River, and flood equivalents of tributary streams, and coastal plain streams. The sediments are generally fine silty clay loam, or sandy clay loam, but may include some sand and gravel in deposits of oxbow channels.
- Ppbe** **Recent Alluviation**—coastal plain deposits of late to middle Pleistocene streams; the latest alluviation and topographically highest surface of the Prairie Alluvium units of southeastern Louisiana.
- Ppbe** **relict Pleistocene coastal ridges**—low-lying ridges delineated on the surface of the Recent Alluviation. Some of these ridges are coast-parallel and others trend obliquely to the coast and radiate from the end of broad meander belts.
- Open Water**
Contact—includes inferred contacts.
Fault—dashed where inferred, dotted where concealed, quartered where indefinite.
Streams
Roads
Topographic contours
Area uplifted by salt dome

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
Copyright ©2005 by the Louisiana Geological Survey
Geology by: Paul V. Heinrich
GIS compilation by: R. Hampton Peck and Phrammagarn Vajalarnamath
Cartography by: John Sneed and Lee Pord



SCALE 1:100,000
Base map from U.S. Geological Survey 1:100,000 Digital Line Graphs (DLG) (Universal Transverse Mercator Projection, Zone 15)
North American Datum 1927 (NAD 27)
Contour Interval 2 meters
National Geodetic Vertical Datum 1929

Correlation of Map Units



PORT ARTHUR, TEXAS/LOUISIANA
29093-F1-TM - 100K



Charles J. John
Director & State Geologist

**Port Arthur 30 x 60 Minute Geologic Quadrangle
2005**

Cherters represent new mapping by the compiler based on LIDAR quarter-quadrangle images (source: Louisiana Technical Emergency Management Agency, and U.S. Army Corps of Engineers, St. Louis District, and digital orthorectified quarter quadrangle images (originator: Louisiana Oil Spill Coordinator's Office).

The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official positions, either expressed or implied, of the U.S. Government or the state of Louisiana.
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 regional geologic quadrangles are intended for use at the scale of 1:100,000. A detailed on-the-ground survey and analysis of a specific site may differ from these maps.