New Folio by the Louisiana Geological Survey of Maps and Cross Sections of the Chicot Aquifer, Southwest Louisiana

Riley Milner and Chad Fisher

Louisiana Geological Survey – Louisiana State University,
3079 Energy, Coast, and Environment Bldg., Baton Rouge, Louisiana 70803

ABSTRACT

In 2007, the Louisiana Geological Survey is releasing a series of maps and cross sections for the Chicot Aquifer in southwestern Louisiana. This has been an ongoing research project for the past five years. The study was started by selecting over 1000 geophysical resistivity well logs from oil and gas exploration and over 10,000 water well geophysical resistivity well logs and water well drillers' logs. Once the logs were selected and correlated to designate the different hydrologic units within the Chicot, the top and bottom picks were digitized in graphics software. This information was used to generate top of Chicot, base of freshwater, and a base of Chicot sediments maps.

Logs were then selected to produce ten geologic cross sections. The logs were scanned on a full-scale color scanner and saved. The scanned logs were imported into NeuraLog (version 6.0.2) software program, and each log was traced and saved. The traces were then imported into NeuraSection (version 7.0.1) where geospatial information was added. The skeletal cross sections generated in NeuraSection were displayed using the Geo-Proportional setting with a log scale of ½ in:100 ft and a horizontal/vertical factor of 50x. The final skeletal cross section was then placed in Adobe® Illustrator® CS2 for final production.

Milner, R., and C. Fisher, 2007, New folio by the Louisiana Geological Survey of maps and cross sections of the Chicot Aquifer, southwest Louisiana: Gulf Coast Association of Geological Societies Transactions, v. 57, p. 597.