

Pressure Study of the Wilcox and Lower Miocene

Deepwater Gulf of Mexico

THIS STUDY UTILIZES THE FOLLOWING IHS PRODUCTS

- Gulf of Mexico Formation Pressure Database
- Parametric Temperature Database
- Enerdeq Well Summary Reports
- Biostratigraphy data
- Wireline suite including:
 - Gamma Ray
 - Sonic
 - Resistivity
 - Density

Overview

Although a number of high-profile discoveries have been made to-date (Cascade, St. Malo & Jack), dry holes continue to be drilled and many penetrations continue to encounter highly-pressured formations. This significant new study and the high quality data used in its compilation provide a comprehensive and authoritative picture of formation pressure distribution and its causes within the study area. This information provides a valuable calibration to in-house pressure interpretations thereby reducing exploration and drilling risk.

Dataset

After extensive data-mining for wells available in the study area, 149 wells were selected for inclusion in the study based on pressure data quality and geospatial distribution. A total of 49 wells penetrate the Wilcox reservoir, the remainder encountered Lower Miocene sediments. These sedimentary sequences were mapped above and below salt canopies.

In addition to reinterpreted formation pressures and temperatures, fracture pressures and mud pressures from these wells, additional IHS data resources were used to develop this study; digital LAS data (i.e. Gamma Ray, Sonic, Resistivity and Density), corrected deviation surveys, Enerdeq Well Summary Reports and well header information, correlated biostratigraphical data and a Parametric database, containing log header and BHT information.

