How Deep was the Pre-Salt Depositional Depression in the Gulf of Mexico, and what are the Implications?

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Abstract

Part 1: Models for Gulf of Mexico tectonic evolution are now in close agreement, but debate continues regarding the elevation/depth of the syn-rift, sag, and salt depositional surfaces relative to global sea level. This town-hall style double session (presentations in Part 1 and open discussion in Part 2) will examine the end member cases for what is likely a spectrum of actual cases for sag and salt deposition. Brian Horn will state the problem and introduce synopses of the end member cases. James Pindell and Tony Heyn will summarize the case for sag and salt deposition close to global sea level, where deposition kept pace with rapid creation of accommodation such that top-salt depositional relief could have been minimal. Mark Rowan will summarize the case for a significant air- and/or brine-filled hole (accommodation partly pre-dated salt deposition) and significant top-salt depositional relief.