

# innovation

## Development of a Research Report and Characterization Database of Deepwater and Ultra-Deepwater Assets in the Gulf of Mexico

**Client:** Research Partnership to Secure Energy for America (RPSEA)

**Location:** Gulf of Mexico (GOM)

**Objective:** Technical Focus Direction, Incentives, Needs Assessment Analysis, and Concepts Identification for Improved Recovery Techniques

In 2010, Knowledge Reservoir led and directed this milestone research project for the federally funded RPSEA with primary project participants Louisiana State University and Anadarko Petroleum Corporation.

The project identified improved recovery opportunities in the early stages of field development planning, such that facility and well designs can be optimized to take advantage of those opportunities. Additionally, opportunities for improved recovery in producing fields were assessed, as were current and near-future technologies for improved recovery. The project included characterization of deepwater and ultra-deepwater reservoir assets and compiled and categorized key causes of trapped and remaining hydrocarbons in such reservoirs. The prioritization of technology gaps in improved recovery methods was also addressed as specifically relate to deepwater and ultra-deepwater reservoirs to identify leading concepts for future research, investment, development, testing, and deployment/application.

The project utilized current IOR/EOR evaluation work by Anadarko and its partners on the K2 Field to jump-start closing the technology gaps that have prevented application of an EOR process in deepwater GOM.

The primary outcomes of the project are advancement of understanding of improved recovery techniques, provision of a foundation for future development, and testing and deployment phases of new technology and methodology, ultimately leading to the recovery of more resources from deepwater and ultra-deepwater assets.

Download a copy of the full report at [www.knowledge-reservoir.com/rpsea.html](http://www.knowledge-reservoir.com/rpsea.html)

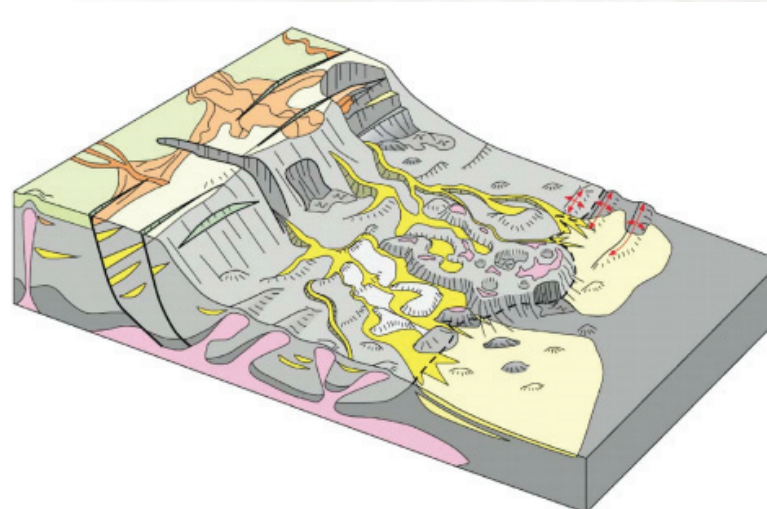


Figure 1: Depositional model for a complex slope setting. Sand deposition shown in yellow (Mayall, et al., 2010)