

## **Combined 3D Seismic Velocity Inversion and 2D Basin Modelling for Pore Pressure Prediction of a Deepwater Block, Offshore Rakhine Basin, Myanmar**

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### **ABSTRACT**

The Offshore Rakhine Basin of Myanmar enters a new phase of deepwater frontier exploration. Historical exploration of the shelf alludes to several working petroleum systems but success has been hampered by difficult drilling conditions. The key to unlock the potential of the deepwater and to ensure successful future exploration requires lessons learnt from the past incorporated in future operations. The Rakhine Basin fill is dominated in the deepwater by the Bengal Fan, one of the largest sediment accumulations on the planet, sourced from the massive Ganges-Brahmaputra Delta to the north. Fast sedimentation rates, coupled with the oblique subduction of the East India Plate, create a variable pressure regime with sparse well data to calibrate (Racey and Ridd, 2015). This geological configuration has created a need to apply best practice pore pressure prediction to extrapolate from the shelf to the frontier deepwater domain.