Myanmar Deepwater Clastic System Study and the Related Reservoir Potential

Tian Yuan Yuan¹, Gill Abhi¹, Lo Jun Kai¹, Simon Mann¹, and James Ostrikoff¹

¹Shell Myanmar Energy Pte Ltd, Yangon Branch, Myanmar

ABSTRACT

Myanmar's deepwater offshore is considered to be one of the last remaining exploration frontiers in Asia. Shell Myanmar has equity in multiple deepwater blocks in the offshore Bay of Bengal and in 2015/2016 acquired extensive 3D seismic data. The deepwater depositional system in the Bay of Bengal is largely uncalibrated, and the utilization of global analogue datasets and Shell's seismic facies and geometry analyses provides a practical tool in the prediction of reservoir distribution and quality. This will help in assessing the overall potential of deepwater depositional systems in Myanmar offshore. The Bengal Fan is the largest deepwater clastic system in the world and is supplied mainly from the Himalayan hinterland via several river systems. It covers an area of approximately ~3,000,000 km2, with a sedimentary column up to 21 km thick (Subrahmanyam et al., 2008; Basu et al., 2010). Consequently, when comparing Bengal Fan seismic facies to existing (smaller) analogues and simplistic deepwater depositional models, assumptions and estimations of reservoir presence and quality should be derived with care.