

Mass Transport Deposits of the Northwest Sabah Deepwater: Characterization from Seismic and Borehole Data

Algar, Sam¹, Paul Crevello², Jon Roestenburg³ (1) Murphy Sabah Oil Company, Kuala Lumpur, Malaysia (2) Petrex Asia Reservoir & Stratigraphy Group, Kuala Lumpur, Malaysia (3) Geotransformations Pty Ltd, Perth, Australia

Mass Transport Deposits (MTDs) make up a significant proportion of the sediments in the deepwater Sabah Trough off Northwest Borneo. Both modern and ancient MTDs have been recognised in seismic data and penetrated in numerous wells. This paper will discuss the characterisation of these MTDs and assess their relation to basin processes and reservoir deposition. Preliminary seismic observations indicate that the MTDs vary in scale from units that are hundreds of metres wide and tens of metres thick to bodies that amalgamate to form areas in the hundreds of square kilometers with thicknesses of hundreds of metres. Penetration of these deposits in wellbores in which image log data and conventional cores were taken has further constrained the make up of the MTDs and their relationship to reservoir sandstones. Both debritic facies and coherent slump facies are recognised within the MTDs. Work is underway to further constrain the genetic link that the MTDs appear to have with the hydrocarbon bearing reservoirs in this prolific but relatively underexplored deepwater basin.