

A Seismic Review of Depositional Systems of the Southern Rakhine Basin, Myanmar

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ABSTRACT

Woodside Energy (Myanmar) Pte Ltd (“Woodside”) and its joint venture participants (JVPs) have a large acreage footprint in the Rakhine Basin, offshore northwestern Myanmar. Woodside operates three permits in the south of the basin and is a participant in a further three permits in the north. In conjunction with its joint venture participants, Woodside is rapidly furthering its understanding of the deepwater geology and hydrocarbon potential in the region following recent exploration drilling successes in both the northern and southern basin, and through interpretation of recently acquired high-specification 3D seismic data. Detailed interpretation of the large legacy and modern seismic datasets has uncovered a complex interplay between two separately sourced depositional systems that make up the thick sedimentary fill of the southern Rakhine Basin, and regional plate tectonics. Large north-south orientated deepwater systems dominate the outboard western areas, while further east near the current shelf-slope break, deposition has been dominated by smaller-scale east-west orientated deepwater systems. Understanding the differences between these two systems, through a robust, data-driven regional sedimentary model is important in understanding the distribution and preservation potential of reservoirs. This presentation will use seismic examples to describe the key elements of the two main depositional systems observed in the southern Rakhine Basin.