



ORAL PRESENTATION

Shallow Gas Play Takes Off in West Natuna Sea, Indonesia

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The West Natuna Basin is located between the basement highs of the Sunda Shelf to the south, the Natuna Arch to the east and the Khorat Swell to the north, in the West Natuna Sea, Indonesia. The basin has had a complex structural history comprising microplate collision, intrusion, extension, inversion and wrenching. The basin can be viewed as the south-eastern extension of the Malay Graben and was initially formed as a series of separate half grabens, that with increasing post-rift subsidence eventually formed the overall basin.

Until recently, shallow biogenic gas in the West Natuna Basin was deemed to be a shallow drilling hazard. With a strong demand for natural gas, the shallow accumulations have been reconsidered as exploration targets. West Natuna Exploration limited (WNEL) the operator of Duyung PSC, recently proved the presence of a large resource of biogenic gas within the sands of the Muda Formation in the eastern portion of the PSC. The structure is a flat-topped anticline, with an extent of approximately 490 km², located above the inverted Anambus Graben in the centre of the West Natuna Basin.

The Muda Formation is of Pliocene age and is the youngest formation in the basin. Intra Muda Sands are unconsolidated and are encountered at around 1250 ft TVDSS. This paper will present some interesting subsurface findings pertaining to the understanding of the shallow gas play of the Muda Formation.