

The Kikeh Field, Sabah, East Malaysia

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The deep water area of Sabah in East Malaysia had, for many years, been thought to be essentially gas prone and hence of limited commercial importance. With the discovery of the Kikeh Oil Field in 2002 a new perspective was provided on the deep water potential of Sabah, overturning long held ideas regarding the commerciality of the area. The Kikeh field is a thrust related anticline trending North East to South West. The thrust faulting has inverted the deep water sediments and provided structures for hydrocarbon accumulation. The reservoir sands which make up the field are interpreted to be deep water basin floor deposits and are separated from one another by thick (100's m) Mass Transport Deposits (MTD's).

The sands and MTD's are thought to be related to tectonic uplift of the hinterland and slope failure and are considered to be genetically related, with the MTD's not only controlling subsequent sand deposition, by forming seafloor topography, but also eroding underlying reservoir intervals. These complex depositional relationships present significant technical subsurface challenges, made more difficult by the poor seismic imaging caused by the presence of a large gas cloud over the field.

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