

Raukumara Block Offer



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OFFSHORE RAUKUMARA BASIN

The Raukumara basin lies at the northern end of the East Coast Basin. Exploration for commercial hydrocarbons of the Basin is yet to begin. Satellite radar imaging indicates a number of potential oil seeps which along with many high amplitude direct hydrocarbon indicators (DHI's) on the seismic suggest that there is an active Petroleum System operating in the offshore Raukumara Basin. The size of the areas with DHI's suggest they potentially contain large volumes of oil and gas. This is consistent with the East Coast Basin with its known source rocks of marine origin with good oil potential and well as gas potential are present. There are many oil and gas seeps over the onshore region.

Unlike most of the East Coast the Raukumara Basin is a relatively undeformed depocentre that occupies a marine plain that extends to the north-northeast from the northern coast of the Raukumara Peninsula. The 25,000 sq km depocentre extends about 300 kms north and is around 100 kms wide, bounded to the east by the East Cape subduction ridge and to the West by the Kermadec Ridge. Water depths range from the coast to more than 3,000m at its northern termination

Two recent industry standard seismic surveys reveal that a thickness of over 11 kms of sediment are present in this basin which is made up of 3 megasequences. The deepest is a well bedded basal section with an upper, more variable unit separated by a wedge of chaotically bedded material. As the Raukumara Basin has not been drilled the stratigraphy has been correlated to the onshore geology. Onshore a similar set of sequences occur with the older marine Cretaceous and Paleogene units separated from a Neogene succession by an allochthonous series of thrust slices emplaced around the time of initiation of modern plate boundary tectonics.

Onshore during the Late Cretaceous and Paleogene passive margin development, deposition was dominantly fine grained, but with large volumes of sandstone deposited associated with transgressive sheets and lowstand basin floor sands. These correlate into the offshore. The Paleogene-Neogene boundary is marked by the emplacement of the allochthon. Onshore sand units derived from the allochthon were among the early Neogene deposits. Neogene turbidite sands are common onshore and some have good reservoir properties. Neogene turbidite facies are interpreted on seismic data from the offshore.

The Crown is now offering two substantial blocks up to explorers for staged work programmes. In return it expects explorers to propose aggressive work programmes to explore the potential of this significant new region.

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- [Data Map of 2D Seismic \[9.6 kB PDF\]](#)

- [GNS Consultancy Report 2008 \[9.5 MB PDF\]](#)
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