

3D Seismic Surveys In South Makassar Basin Evaluate Deepwater Reservoirs

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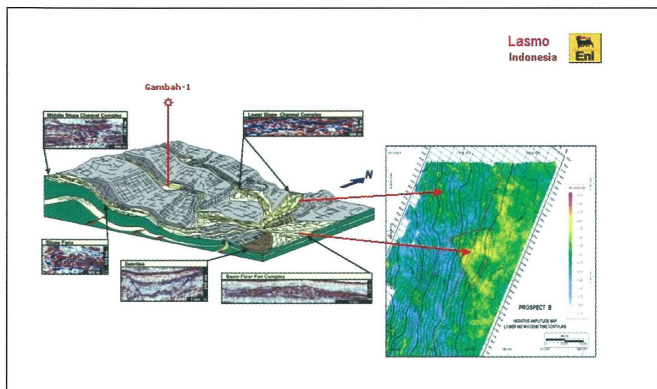


Fig. 1. Overlay of seismic TQ3D and offered blocks

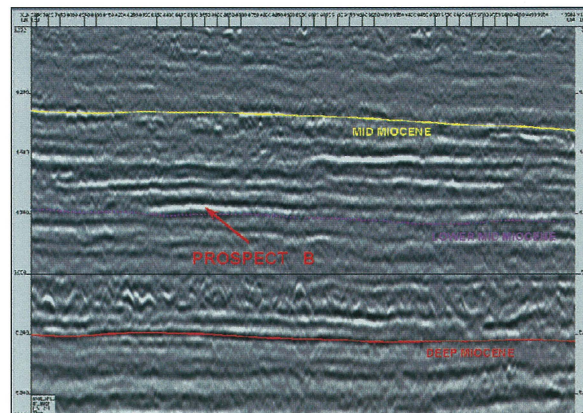


Fig. 2. Inline 850 illustrating Prospect B in Taritip Block.

Introduction

The South Makassar Basin is located in the outer side of the Kutei Basin in Makassar Strait. The structure of the South Makassar Basin consists of a simple anticline. This is clearly observed in our 3D survey. Traps are formed by anticline and stratigraphy, where multiple stacked sand reservoirs may be found. Interspersed Miocene shales cap these. Source rocks are deeper-seated shales still within the Miocene.

WesternGeco's Makassar Phase 3 Multiclient 3D survey covers a portion of the Jangeru and Taritip blocks that have been offered by the Indonesian government through MIGAS on December 2001. (Figure 1).

Seismic Interpretation and Leads in Taritip and Jangeru Blocks

Six seismic horizons have been mapped over various portions of the Phase 3 study area: Water Bottom, Mid Miocene, Lower Mid Miocene, Deep Miocene, Oligocene, and Pre Tertiary. Figure 2 is the portion of Inline 850 that goes across Prospect B. Figure 3 shows a plot of maximum negative amplitude for a window between 0 and 48 msec above the Lower Mid Miocene. The block diagram taken from Fowler et al., 2002 IPA Proceedings and all interpretation are those of WesternGeco and not necessarily those of Lasmo-ENI.

The survey has mapped highly prospective areas within the Miocene section and additional studies through AVO analyses and seismic attribute reservoir characterisation should bring a higher level of detail necessary to reduce drilling risks.

The Miocene aged section is known to contain worked and redeposited coals which provide petroleum source rocks for this area. Most importantly, the area immediately adjacent and up dip to the west has several known, large petroleum fields.

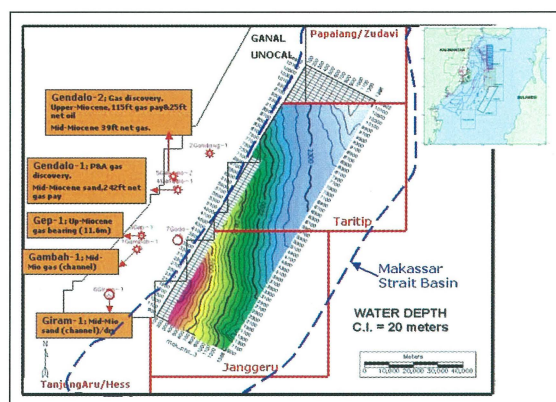


Fig. 3. Maximum negative amplitude above Lower Mid Miocene Horizon in Taritip Block.

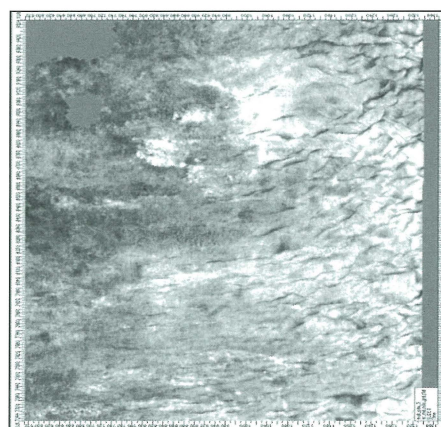


Fig. 4. Horizon Time Slice at Middle Miocene. Northeast is at top.