



ORAL PRESENTATION

Regional Review of Statoil's Indonesian Exploration Portfolio and Upside

Toril Karlberg Dyreng¹

¹Equinor, Norway

tkd@equinor.com

Equinor (previously Statoil) established a Jakarta office in 2007 to focus on the exploration of the Indonesian offshore. Since then the company has drilled seven wells, of which three were operated, and participated in the acquisition and processing of several 2D & 3D seismic surveys.

Currently Equinor's exploration activities are focused on the Aru Basin, part of what is often referred to as the West Papua Area, offshore Eastern Indonesia, where we are active in three licenses: West Papua IV and Aru PSC's as a partner and Aru Trough I PSC as operator. These licenses cover 14,000 km² of deep water (>1000 m) frontier exploration acreage.

Pre-2007 the initial exploration activities offshore West Papua were based on 2D data of variable quality and focused on the shallow water areas and the well results were disappointing. Based on the few poor oil and gas shows encountered in these wells at several stratigraphic levels, the presence of an active hydrocarbon system was most uncertain.

In 2007/8 piston cores acquired in combination with a multibeam seabed survey covering the Aru Basin encountered convincing oil seeps in the deep-water area. Typing of the oil indicated a Tertiary marine origin and the Klasafet Formation was identified as the most likely source. All observations indicated the presence of an active, oil prone, hydrocarbon system in this deep-water frontier exploration area.

The acquisition of state-of-the-art 2D seismic identified a number of promising Miocene New Guinea Limestone leads comprising large horst blocks surrounded by Klasafet source. The acquisition of additional 2D in this structurally complex area was considered to be of limited value and the first 3D survey was acquired (1700 km²) in 2010 followed in 2013 by the first deep water exploration well in the Aru Basin, Cikar-1, targeting a sizable New Guinea Limestone closure.

Due to operational difficulties, it was not possible to evaluate the hydrocarbon content of the New Guinea limestone. However, promising oil indications were encountered just before entering the reservoir and in addition, this well confirmed the source properties and excellent sealing quality of the overlying Klasafet. Furthermore, the temperature data from this well necessitated a revision of the basin model resulting in a more oil prone Klasafet source.

Encouraged by the well results, an additional 4300 km² broadband 3D seismic was acquired in order to further mature the Aru Basin prospect portfolio and identify the most optimal target for the next exploration well.