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Focus

Oil flows, deep-water hope for Timor Leste

ENI IS primed to pump 40,000 barrels a day of oil offshore Timor Leste, after starting production from its Kitan oilfield in the Timor Sea. Kitan will provide a significant economic boost for the fledgling country. Timor Leste has about $8.3 billion invested in its Petroleum Fund, but those earnings are derived from just one source – Conoco-Phillips's Bayu-Undan gas and condensate field, which lies in the Joint Petroleum Development Area (JPDA) straddling Timor Leste and Australian waters.

Under the terms of the Timor Sea Treaty between Timor Leste and Australia, the former receives 90% of revenues from the JPDA, while Australia receives 10% (*PE* 10/11 p14).

The Kitan field, in Block 06-105, contains nearly 35 million barrels of oil equivalent of proved and probable reserves, excluding the Kuda-Tasi and Jahal oil discoveries in the same permit. A run of dry offshore exploration wells means there are no further field developments on the horizon. But the Dili-based National Petroleum Authority (ANP) hopes its 2012 licensing round will lure fresh upstream investment and further commercial discoveries.

About 240 km south of Timor Leste and 550 km north of Darwin, Australia, Kitan is being produced through deep-water subsea-completion wells, connected to a floating production storage and offloading facility. The field was brought on stream within three and half years from commercial discovery, said Eni, which operates the field with a 40% stake, on behalf of Japan's Inpex (35%) and Canada's Talisman (25%). There are a number of active blocks in the JPDA, led by operators ConocoPhillips, Woodside, Eni, Oilex and Minza Oil & Gas. And an Oilex-led joint venture aims to drill an offshore exploration well during the fourth quarter. The partners are acquiring 220 square km of 3-D seismic and the data will provide infill coverage across the Tutuala lead in the north of Block JPDA 06-103.

But Petronas surrendered its Block 06-102 following disappointing drilling results, while Eni and Reliance Industries fired blanks in Timor Leste's exclusive zone earlier this year. Eni operates five permits in the exclusive area, and has a commitment to drill a second well in Block C, where it lucked out with the Cova-1 wildcat. Reliance operates Block K and also drilled an uncommercial wildcat earlier this year.

But the start-up of Kitan is a boost for the country's nascent hydrocarbons industry and Timor Leste's 2012 licensing round will offer emerging deep-water opportunities. At least two Sunrise-lookalike structures have been identified, while the Kelp Deep gasfield offers appraisal and development potential, Mateus da Costa, the director for exploration and acreage release at the ANP, told the Deepwater World Asia 2011 conference in Singapore.

Kelp Deep lies on open acreage and has reserves of between 8.4 trillion and 13.6 trillion cubic feet (cf), said da Costa. If such estimates were firmed up, Kelp Deep would be the country's largest discovery. ConocoPhillips's producing Bayu-Undan field holds initial in-place reserves of 3.4 trillion cf of gas and 400 million barrels of condensate; while the undeveloped Greater Sunrise fields have 5.12 trillion cf of gas, as well as 226 million barrels of liquids.

Mobil discovered Kelp Deep with a wildcat well in 1998, which was plugged and abandoned. The prospect lies in the Permian Hyland Bay-Hyland Bay petroleum system, on the structural Kelp High in the Bonaparte basin. The field's highly mature dry gas was assessed to be very tight and non-producible under conventional conditions at the time.

But the discovery did signal that the petroleum system was prospective. Significant hydrocarbon shows have also been encountered in other wells in this area, said the ANP. Numerous seismic anomalies have been identified at Jurassic and other geological levels in new seismic data, especially in the JPDA's northern deep waters. And several of these anomalies indicate large prospects that could contain large gas-condensate accumulations, the ANP claimed.

The 2012 bidding round will cover acreage in Timor Leste's exclusive waters and in the JPDA. Production-sharing contract (PSC) terms are almost identical for both offshore regions and include a 40:60 profit share, no limit on cost recovery and no signature bonus. The main difference is that the JPDA has no requirement for Timor Leste state participation and no domestic market obligation; while PSCs awarded for acreage in the territorial waters allow for a maximum 20% state participation and include a domestic market obligation. In September, Gualdino da Silva, president of ANP, told *Petroleum Economist* that the licensing round will likely cover all unreleased acreage in an offering of between 10 and 15 blocks. About 55% of its exclusive zone is open acreage, with about 65% of the JPDA available. The offering will be Timor Leste's second licensing round since independence in 2002. •