

Petroleum Systems of the Philippines: Service Contract 47, Offshore Mindoro

Rahman, Ramlee Abdul, Azmir Zamri, and Paul Joseph Reyes Bernabe, Petronas Carigali Overseas Philippine Operations, Kuala Lumpur, Malaysia

Petronas Carigali Overseas Sdn. Bhd. (PCOSB) is the operator for Service Contract 47 (SC 47) which covers an area of over 14,600 square kilometers. The exploration block spans the offshore areas east and south of Mindoro Island in the Philippines and presents itself as one of the more attractive regions for petroleum exploration in the country. It is situated within the Palawan microcontinental block that was rifted from the Asian continent in Late Oligocene, and which now hosts the commercial oil and gas fields in the Philippines.

Although relatively less explored, five out of the seven wells drilled in Offshore Mindoro have hydrocarbon shows. A small discovery in 1994 flowed oil from Miocene fluvio-lacustrine clastics and has demonstrated the existence of a valid petroleum system. Organically-rich source rocks of similar age have been penetrated. It is also believed that because it shares the same tectonic history with the Northwest Palawan basin where a number of discoveries have been made, analogue petroleum systems may also exist in Offshore Mindoro.

The collision of the Palawan rifted fragment with the Philippine Mobile Belt in Middle Miocene resulted in a variety of deformational styles and created structures which now form attractive drilling targets. Among the play types identified by PCOSB are Miocene thrust platform carbonates and fluvio-deltaic sandstones in wrench-faulted anticlines. A well has been programmed late this year to test one of the prospects in SC 47.