Petroleum Potential of the Deepwater West Calamian, Northwest Palawan, Philippines

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The deepwater West Calamian block opens up a new frontier area for petroleum exploration west of Palawan island, Philippines. It is a relatively underexplored but promising area in the hydrocarbon-producing Northwest Palawan Basin. Although no wells have been drilled in the block, it lies in close proximity to the big Malampaya oil and gas field.

West Calamian is characterized by northeast-southwest trending subparallel extensional fault blocks which formed a series of half grabens considered to be the main controlling factor in the development of the petroleum system throughout the NW Palawan. Source rocks for the petroleum accumulation in the NW Palawan are believed to have been developed mostly within these half-grabens. The significant reservoirs and petroleum traps, the Nido Limestone carbonate build-ups which include Malampaya, Nido and Matinloc, developed on the highs of these fault blocks.

Potential kitchen areas have been identified in West Calamian that would provide hydrocarbon charge to several mapped structures. Petroleum plays include carbonate build-ups and folded sequences of the Nido Limestone and clastic plays within the syn-rift and pre-Nido sequences. The seal is provided by the thick clastic section of the overlying Pagasa Formation. Adjacent economic hydrocarbon accumulations provide evidence of a working petroleum system in the area.