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An overview of the hydrocarbon potential of the Spratly Archipelago, South China Sea, and its regional implications for oil and gas development

J.B. BLANCHE & J.D. BLANCHE
Blanche Oil and Gas Consultants
'Tara' Laighill Place
Dunblane, Perthshire FK15 OBJ, Scotland

The Spratly Island Archipelago in the South China Sea will become the focus of exploration for hydrocarbons over the next decade, once the multi-national boundary disputes are resolved by negotiation and peaceful means by the claimant states.

International attention on the hydrocarbon potential of the area was focused by the award of the 25,155 sq km, with an additional adjacent Contingent Contract Area covering 5,076 sq km, WAB -21 Block in the Wan'an basin located 100 km to the south-west of the Spratly Islands which are claimed by China and Vietnam. Recent press reports indicate that these governments are willing to settle boundary disputes without force. The award was to the Crestone Energy Corporation from the China National Offshore Oil Corporation (CNOOC) on 8 May 1992.

Basin development occurred during the Early Paleogene as a consequence of rifting and pull apart of the south-west South China Sea producing numerous grabens and half-grabens. These contain potential source and reservoir rocks of Oligocene and Miocene age which are indicated to be thermally mature for hydrocarbon generation.

The Spratly Islands Archipelago is surrounded by prolific oil-producing areas, i.e. the Nam Con Son (Wan'an) basin of Vietnam, the East Natuna basin of Indonesia, the Northwest Palawan basin of the Philippines, the productive Luconia Shelf offshore Sarawak and the Brunei/North West Sabah basins.

By analogue with these areas, this frontier region may yield considerable reserves, possibly in excess of 1-2 billion barrels of oil.

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