

Paper 13**Geological constraints in the development of the Bayan Field,
offshore Sarawak East Malaysia**

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The Bayan Field is located 80 miles NW of Bintulu, in sub-block 4Q-21 of the Balingian geological province, offshore Sarawak. The field was discovered in 1976 by the exploration well BY-1 based on 2D seismic acquired in 1968 and 1974. 3D seismic was acquired in 1986 after the first drilling platform BYDP-A was installed.

The field is a tectonically complex structure, comprising NW-SE trending anticlines dissected by predominantly E-W striking and mainly south facing normal faults which divides the field into various fault blocks. The field may be subdivided into 3 major development areas namely North, West and Northwest Bayan area. The productive reservoirs comprise Early Miocene (Cycle II) lower coastal plain to delta plain deposits.

A total of 13 appraisal wells were drilled to determine the prospectivity of various fault blocks. Some 1,065 feet of cores were taken in the field. The main development constraints are the structures, channel sands development and the trap mechanism.

The subsequent 3 platforms and wells were planned using the 3D-seismic data. Horizontal wells were drilled to optimise oil recovery from thin oil rim reservoirs.

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