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Exploration Potential for Stratigraphy Trap in Abu Field, Malay Basin

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Malay basin province has high potential of being a good lacustrine shale source and reservoir rocks. It is Oligocene - Miocene basin situated between eastern part of Peninsular Malaysia and Vietnam, in the southern part of Gulf of Thailand. Area of study located at Block PM 318, Abu Field which are 290 km north – east from the Kemaman supply base Terengganu's offshore. Several exploration wells been drilled; however were suspended for development plan due to the oil reserve calculation was under economic criteria. Abu prospect has a low structural relief so the closure is small. Therefore, the purposes is to re-evaluate the hydrocarbon potential in Abu field focusing on Early to Middle Miocene succession stratigraphic feature.

Interpretation and recognition of stratigraphic feature using 3-D seismic data requires good understanding on structural geology, geophysics and stratigraphy. Identification of prospect undergo several methods such as seismic interpretation, well log correlation, attribute analysis and spectral decomposition. Based on analysis, a huge channel deposition can be observed in Group I-50 and Group H. Structural modelling also aids the interpreter insight into the seismic image and reduce uncertainty of the field.

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