

**Irong Barat B multiple scenario analysis — application at EMEPMI**

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Irong Barat Field, located offshore Peninsular Malaysia, is an east-west trending complexly faulted anticline covering an area of 8,000 acres. The field was discovered and appraised by 13 exploration wells. The initial development of the Irong Barat A drilling program took place in 1984, followed by an infill-drilling program in 2000.

This paper describes the application of multiple scenario analysis to mitigate risks and challenges associated with the Irong Barat B drilling program.

The Irong Barat B drilling program is a 6-well program, which began in May 2003. The primary objective reservoir in the program is thin and highly laminated. Geologic risks include structural and OWC uncertainties, reservoir heterogeneity and the potential for water-bearing sandstone to be present beneath the objective reservoir. Key challenges in the program included the need to confirm the position of the OWC in the thin reservoir sand and the need to maximize the length of completion in a laminated reservoir in order to achieve high  $k_b$  to ensure optimum production rates. Multiple scenario concepts including responsible use of batch completion were utilized in both well design and completion strategy in order to optimally address these challenges, enable additional cost optimization and to maximize program economics.