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FORMATION EVALUATION BY QUARTZ GAUGE FMT TOOL

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Detailed formation pressure evaluation was made in Exploratory well utilizing Quartz Gauge FMT (Formation Multitester).

To determine the fluid distribution in 1-0.5 m accuracy, the formation pressure reading is required to be in 0.1 psi accuracy. The resolution of Quartz Gauge FMT is 0.1 psi which is sufficient for such purpose and reliability of the pressure reading of the Guage is also very high.

The pressure gradients of gas, oil and water were recognized. The result of pressure interpretation matches the hydrocarbon showings and DST results. It is suggested that formation pressure may give more reliable information on fluid distribution than resistivity logs. In one of the interval, an oil pressure gradient was recognized where high Sw (almost 100%) is calculated. The interval produced 1000 bbl/day of water-free oil at DST.

Perforation intervals of DST were selected to avoid gas zones determined by pressure interpretation. The results of DSTs confirmed that no gas zone was perforated and supported the interpretation based on pressure survey.