

GWF9107.009-RJS

yellow green with a moderate to fast milky cut. The chromatograph recorded the presence of methane to pentane below 1920m and hexane was observed between 1985m and 2050m. Sidewall core samples from 1949.8 and 1946.2m yielded oil saturations of 2 and 22% respectively.

Log analysis of this zone indicated only the presence of residual hydrocarbons and consequently no testing was undertaken. Log analysis by SAGASCO supports these conclusions.

**RESERVOIR:**

Excellent porosity reservoirs are present in the upper EVCM with porosities in excess of 30% and good indicated permeability from mud cake build-up as indicated by the caliper log. In the basal part of the well where the shows are reported, reservoir quality is good with log derived average porosities of 17 - 21.7% in sandstones 2-8.7m in thickness, and good permeability is indicated by mud cake build-up.

**MATURITY:**

The maturity profile in Pipipa 1 is normal until a depth of 1750m where an unusually high mean vitrinite reflectance measurement of 2.29% was recorded, indicating the presence of an intrusion near to the well location.

Examination of cuttings descriptions and logs reveals no evidence of an intrusion at the well location. Below this depth the maturity values decrease toward total depth to a value of 1.41 - 1.57%. Examination of the data from the deepest sample indicates a bimodal distribution in the measured vitrinite reflectance values indicating that either there is contamination of the sample (cuttings) from higher vitrinite reflectance zones above this depth, or that another intrusion is near to the total depth of Pipipa 1.

**SOURCE ROCK:**

No source data has been collected from samples from Pipipa 1, the nearest data occurs in the Pelican 5 well where similar source rocks probably occur. The Pipipa location is ideally located to trap hydrocarbons migrating from mature source rocks in the depocentre of the Pelican half graben.

**POST MORTEM:**

Pipipa 1 was the first well drilled on the southern margin of the Pelican half graben, and was therefore an important control point in evaluating the stratigraphy, reservoirs and hydrocarbon potential of this flank. Unfortunately the well was not drilled deep enough to evaluate the middle to lower *M. diversus* gas condensate charged reservoirs encountered down dip at Pelican Field. However, the well did establish better quality reservoirs than exist at Pelican, and also demonstrated that hydrocarbons, most likely gas condensate but possibly also oil, have migrated from mature source rocks in the deeper part of the Pelican half graben.

The presence of nearby igneous intrusions is indicated from maturity data, however as at Yolla 1, there appears to have been no detrimental effect on reservoir quality.

The opportunity for hydrocarbon trapping along the southern flank of the Pelican half graben were significantly upgraded by the results of Pipipa 1.