

The Cretaceous sediments intersected in Pelican-5 have fair to good organic richness. The good organic richness of these sediments is attributable to organic rich shales and carbonaceous shale.

3. Source potential for the generation of liquid hydrocarbons generally ranges from fair to excellent in the Tertiary section of the EVC (exinite contents 10-40% DOM contents 10-60%). Source potential for gas generation is generally excellent (vitrinite contents 25-90%).

The Cretaceous sediments have fair to excellent source potential for the generation of liquid hydrocarbons due to the presence of bituminite and lamalginite rich bands.

4. Free oil is present in a large proportion of the samples examined. The majority of this oil is thought to have been generated in situ. This is supported by the abundance of exsudatinite in these samples and the similar fluorescence colours of the exsudatinite and oil. The apparent lack of migrated hydrocarbons may be related to low reservoir porosity and permeability.
5. Bitumen containing small accumulations of light oil is present in a large proportion of samples in the interval 2169-3366 metres depth. This bitumen is likely to be a contaminant (gilsonite) from the drilling mud.
6. Reflectance measurements taken on some Cretaceous sediments are influenced by reworked vitrinite (Table 1; Figure 1).

REFERENCES

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