

2. Maturation limits for the onset and cessation of hydrocarbon generation from resinite-poor terrestrial organic matter are located at the following depths in Pelican-5 sequence:

	<u>VR</u> %	<u>Depth</u> m
top of gas window	0.55	2160 (Eocene)
top of oil window	0.70	2775 (Eocene)
base of oil window	1.35	3975 (Cretaceous)

3. Good quality, mature, oil and gas-prone Type II-III kerogen is present in the Eocene and Paleocene sections of the Eastern View Coal Measures, as follows:

<u>Age/Principal Lithofacies</u>	<u>S<sub>1</sub>+S<sub>2</sub></u> kg h <sup>2</sup> c/t	<u>HI</u> mg S <sub>2</sub> /g TOC	<u>VR</u> %
Eocene/coal	6-366	150-430	0.5-0.85
Paleocene/coal and carbonaceous shale	6-171	100-360	0.85-1.15

The major exinites are resinite and suberinite (Eocene) and sporinite (Paleocene).

4. Although now post-mature for oil generation (HI = 55-175 mg S<sub>2</sub>/g TOC; VR = 1.15-1.7%), Cretaceous shales are rich in micritised bituminite (up to 85% of DOM) and therefore were important potential sources of liquid hydrocarbons at an earlier stage of their burial history.
5. Paraffinic condensate recovered on test from an Eocene reservoir (2786-2790 metres depth) is relatively immature (source VR = 0.69%), and originated from adjacent coals.
6. Bitumen reported in cuttings from 2300-2800 metres depth was derived from a gilsonite mud additive. On the other hand, trace amounts of oil observed throughout the Eocene-Cretaceous section examined are (like the condensate) expulsion products of indigenous hydrogen-rich exinite macerals.

## 6. REFERENCES

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