

Upper Eocene siltstone and shale of marine origin lie with apparent unconformity upon Mid-Eocene and older rocks of continental origin in the central part of the Bass Basin.

Oligocene - In Esso Bass-1 the Oligocene period is represented by 1600 feet of marine clastic and pyroclastic rocks.

The base of the marine Oligocene sequence in the central Bass Basin is marked by a thin (30 feet at Esso Bass-1) tuffaceous poorly sorted tightly cemented sandstone. The remainder of the section consists of argillaceous siltstone, silty mudstone, and minor sandstone with the exception of 235 feet of pyroclastic 'tuffite' in the upper part. Seismic evidence indicates that this tuffite interval is more extensive laterally than the upper tuffite zone of Miocene age.

Miocene - At least 3000 feet of Miocene rocks were drilled in the Esso Bass-1 well, from the surface casing shoe to a depth of 3775 feet. The Lower Miocene is made up of fossiliferous calcareous shale overlain by a thick (550 feet) tuffite interval; the Mid-Miocene is represented by marl, calcareous mudstone and skeletal calcarenite and the Upper Miocene entirely by skeletal calcarenite.

Pliocene-Pleistocene - Strata of the Pliocene-Pleistocene age were not observed during the drilling of the Esso Bass-1 well. Doubtless, strata of this age is present in the interval drilled prior to setting surface casing at 860 feet.

- (3) Stratigraphic Table - The succession as shown below is based on lithology, paleontology, and log analysis. These units can be tied to seismic marker reflections which can be traced across the basin. At this stage, no formation names have been applied to these units.

<u>Unit</u>	<u>Age</u>	<u>Top</u>	<u>Bottom</u>	<u>Thickness</u>
Calcarenite	Upper-Mid Miocene	above 860	1950(-1919)	1090+
Calcareous Mudstone	Mid Miocene	1950(-1919)	2214(-2183)	264
Marl-Calcareous Mudstone	Mid Miocene	2214(-2183)	2535(-2504)	321
Tuffite	Miocene	2535(-2504)	3090(-3059)	555
Shale	Lower Miocene	3090(-3059)	3775(-3744)	685
Shale & Sandstone	Oligocene	3775(-3744)	4020(-3989)	245
Tuffite	Oligocene	4020(-3989)	4260(-4229)	240
Shale, Siltstone & Sandstone	Oligocene	4260(-4229)	5377(-5346)	1117
Shale & Siltstone	Eocene	5377(-5346)	5935(-5904)	558
Sandstone, Siltstone & Shale	Eocene-Paleocene(?)	5935(-5904)	6380?(-6349)	445
Sandstone, Siltstone, Shale & Coal	Upper Cretaceous	6380(-6349)	7717(-7686+)	1337+

(4) Stratigraphy

No sample returns above 860 feet.

Miocene

860-1950 Calcarenite: loosely consolidated, light grey, fine to medium grained, made up chiefly of calcareous fossil fragments, bryozoa, pelecypods, gastropods, and foraminifera, with a slightly argillaceous micritic matrix.