

The base of the marine Oligocene sequence in the Esso Bass-1 is marked by a thin tuffaceous, poorly sorted, tight sandstone. The remainder of the section is made up of argillaceous siltstone, silty mudstone and minor sandstone. 235 feet of tuffite was encountered in the upper part of the section in the Esso Bass-1.

In Esso Bass-2 the Oligocene period is represented by 632 feet of marine sandstone, siltstone and shale and the basal sand at this locality is 328 feet thick.

Miocene

At least 3000 feet of Miocene rocks were drilled in the Esso Bass-1 well from the 20 inch casing shoe to a depth of 3775 feet. The Lower Miocene is fossiliferous calcareous shale overlain by a thick (500 feet) tuffite interval; the mid Miocene is marl, calcareous mudstone and skeletal calcarenite and the Upper Miocene is skeletal calcarenite.

Pliocene-Pleistocene

Strata of Pliocene-Pleistocene age were not observed during the drilling of the Esso Bass wells. Doubtless strata of this age lie within the interval drilled prior to setting 20 inch casing.

Geology

Stratigraphy

Stratigraphic Table.

Depth	Thickness	Age	Lithology
721-3770	3000 +	Miocene	Skeletal calcarenite, micritic limestone & mudstone.
3770-4705	935	Oligocene	Shale & mudstone.
4705-5305	600	Eocene	Shale & siltstone, with minor sandstone.
5305-5590	285	Eocene	Sandstone, siltstone & shale.
5590	-----U n c o n f o r m i t y -----		
5590-7830	2240	Eocene, Paleocene older ?	Sandstone, siltstone & shale.
7830-7978	148 +	Basement	Quartzite and metamorphosed shale.

These depths are relative to R.T. (subtract 31 feet for M.S.L. depth.)

Miocene 721-1040

Coarse calcarenite to fine calcirudite, light grey, composed of loose, calcareous skeletal debris (principally bryozoa with pelycopods, echinoids, foraminifera and gastropods). Trace of rounded to sub rounded, medium to very coarse grained quartz sand: glauconite and carbonaceous flecks and grains.

1040-1400

Coarse calcarenite to fine calcirudite as above, but light brown to buff in colour.