

(4) Stratigraphy(a) General

The top of the Demons Bluff Formation at 5747 feet (K.B.) was 140 feet lower than predicted and the Eastern View Coal Measures top (6170 feet K.B.) was 32 feet higher than predicted. The primary objective of the well was sands in the Eastern View Coal Measures at the level of the structural closure mapped on the Red horizon. This seismic event is now interpreted to lie at 7607 feet (K.B.), 235 feet lower than expected. However closure at this level towards Poonboon-1 is proven and critical closure to the north is still believed to exist.

Log correlation between Poonboon-1 and Nangkero-1 is excellent in the lower part of the Torquay Group and within the Demons Bluff Formation.

(b) Stratigraphic DescriptionOligocene to Miocene Torquay Group 293-5747 feet (K.B.) (Thickness 5454 feet)

The formation was not sampled above 693 feet (K.B.) nor was it logged above the 20 inch casing shoe at 643 feet (K.B.) but it is presumed to extend to the sea floor (293 feet K.B.).

From 693 feet to approximately 1890 feet (K.B.), the dominant lithology is unconsolidated bioclastic calcirudite consisting mainly of bryozoal debris with fragmental and complete pelecypods and gastropods, rare echinoid spines and foraminifera, in part with interstitial calcilutite. A glauconitic, fossiliferous, marly siltstone is interpreted to occur from 1890 to 2940 feet, where there is a fossiliferous calcarenite down to 2990 feet (K.B.). Below this, glauconitic, fossiliferous, silty marl occurs to 4420 feet and calcareous siltstone to 5122 feet (K.B.).

No attempt is made here to subdivide the Torquay Group as encountered in the well, however, Taylor (see Appendix 1.a) correlates a faunally barren unit from 5122 to 5747 feet with the "Angahook Formation", considered by Raggatt and Crespin (1952) as a member of the Demons Bluff Formation.

The top of the Demons Bluff Formation is placed at 5747 feet on the basis of good log character correlation with Poonboon-1 and other wells in the Bass Basin.