

A number of the zones within the EVCM of Yolla-1 were composed of igneous extrusives, with one thick zone of intrusive. The extrusives were recorded over the intervals 2413 m to 2422 m and 2567 m to 2580 m and consisted mostly of dark grey pumice and cream-white tuff. A porphyritic rock consisting of feldspar phenocrysts in a glassy to cryptocrystalline groundmass was observed in the upper zone. A dolerite/gabbro intrusive, dated as Late Oligocene to Early Miocene, was penetrated over the section 2584 m to 2651 m, and is probably related to the Miocene pyroclastics encountered from 1237 m to 1305 m within the Angahook Formation.

Basalt (3031 m to 3351 m)

A thick sequence of amygdaloidal basalt was encountered at the base of the EVCM through to total depth. The basalt varied relatively fresh to extremely altered throughout the sequence, commonly altering to a mixture of carbonates, chlorites, silica and zeolites. The basalt is commonly fractured and veined, a feature noted in Core No. 2 and on the electric logs. The pervasive alteration and fracturing may be due to prolonged exposure between flows.

K/Ar dating of a relatively fresh sample of basalt gave a minimum age of 54.1 Ma, the true age being probably Late Cretaceous to Early Paleocene.

The basalts seen in Yolla-1 appear very similar to those encountered in the lower part of Aroo-1.