

cores of the Que River and Burns Peak Synclines. These latter rocks have been regarded as part of the Mount Read Volcanics, but because they have lithologies indistinguishable from those in the Pieman area they have been included in the Dundas Group. In addition, the shales on the Murchison Highway near Sock Creek contain fossil trilobites which equate with fossils from the Dundas rocks north of the Pieman River.

The Mount Read Volcanics are a thick acid volcanic pile forming an Island Arc System along the margin of the Tyennan Geanticline. In the Comstaff tenements they are restricted to Exploration Licence 5/63 parts 2, 3 and 4. Due to the absence of marker bands, these rocks are difficult to map, but they appear to get thinner north of Mt. Black. This may be more apparent than real since the younger rocks, forming the core of the Sophia Syncline, conceal a large proportion of the Mount Read Volcanics.

The serpentinites south of the Meredith Granite are apparently fault controlled and are enclosed in rocks belonging to both the Crimson Creek Group and the Dundas Group. The emplacement of these rocks during the Jukesian Orogeny is therefore probable.

Ordovician rocks, consisting of a basal conglomerate, sandstones and a limestone, are found only in the core of the Huskisson Syncline.

Devonian rocks within the Comstaff tenements are restricted to intrusive granites. They include the Meredith Granite, within and west of Exploration Licence 5/63 part 2, and the quartz porphyries at Mount Bischoff. The Pine Hill Adamellite is close to the south-western corner of Exploration Licence 5/63 part 6.

Tertiary rocks consist of basal gravels and a capping of basalt, the base of which is at approximately 600m above sea level, but are restricted to the north-eastern part of the area.

Glacial deposits occur as ground moraine over many of the hills south of the Tertiary Basalt, and as fluvioglacial deposits in the valleys.

The geological interpretation of the various areas, TAS/2/1697, has been plotted at a scale of 1:50 000 and replaces TAS/2/450. A section from Mt. Ramsay to Mt. Charter (TAS/2/1695) shows an interpretation of the structure and relationship of the various rock types.