

Dallwitz (an E.Z. geologist) mapped the Emu Bay Railway near Natone Creek as well as the Williamsford road and Bakers Creek at 1:4,800 in 1946. The resultant map, which includes both factual and interpretive geology, is still valuable.

Hall (1967) presents an interpretive geological plan at 1:7,920 (10 chains to 1") based on mapping in the Natone Creek-Williamsford-Moores Pimple area. The lack of outcrop geology downgrades the usefulness of this work. The Rosebery Group is sub-divided into five units.

Outcrop mapping at 1:4,800 of the Emu Bay Railway, Pieman River and Natone Creek was undertaken by students employed by E.Z. in 1974. This mapping agrees closely with earlier mapping of the area and provides the most useful mapping of this area. Rock sample descriptions by the students (corresponding to sample locations on this map), stratigraphic assignments by C. Burton, and original field map sheets are held in E.Z. files.

Part of Natone Creek was also "fact mapped" by G. Green (of the Geol. Survey) in 1974. The outcrop geology is presented on a 1:10,000 plan showing Hercules Grid co-ordinates (imperial). The geology is very similar to other mapping of this area.

Fitzgerald (1974) mapped the Bakers Creek and Moores Pimple areas at 1:2,000 and presented a "semi-fact" geological map at approx. 1:7,850 and an interpretive map at approx. 1:5,750. This mapping agrees closely with that of Hall (1967) except that the Williamsford Volcanics are distinguished from the enclosing Westcott Argillite, and included in the Rosebery Group is a basal sedimentary unit, the Chamberlain Shale, which Hall included with the Primrose Pyroclastics.

An E.Z. 1:5,000 (Sheet 5) compilation of fact mapping in the Natone Creek area appears to be based on mapping by Dallwitz and the students and thus represents the sum total of non-interpretive mapping in this area, except for Green's.

6. GEOLOGY (Fig. 3)

Because the Natone area has limited access and was not previously considered to be of prime interest, the numerous field mapping attempts tend to be fragmentary and of a regional nature. Much of the geology is interpretive and correlations are often based on relatively few, widely spaced traverses. Thus the geology of the study area is largely unresolved.

Stratigraphy is also confused but most workers recognise the Donah Quartzite and Slate which Blissett (1962) suggests is Upper Proterozoic to Lower Cambrian. It comprises alternating quartzite, micaceous quartzite and siltstone, and hard greenish, grey or black shale. Blissett & Gulline (1961a) showed that this formation is overlain, apparently conformably, by Crimson Creek Fm. (?) Donah Quartzite and Slate, as shown on the Zeehan Sheet, lies just north of Moores Pimple but its extension to the NNE off this sheet (west of Williamsford) has never been recorded.

Although its known distribution is somewhat vague, the Crimson Creek Fm. lies west of a line from just east of Colebrook Hill to west of Moores Pimple, and covers nearly all of the area south of Moores Pimple. Loftus-Hills (1964) mapped Crimson Creek Fm. in the Natone-Colebrook area where it has sub-vertical dips ($75^{\circ}W$ to $75^{\circ}E$); a west-facing in the Pieman River at 354,300E is mentioned.