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Photogeological evidence suggests the existence of a possible porphyry intrusion near the centre of the fold axis north of Burns Peak (CR 3/13). "Porphyry" is recorded from the Silver Falls Mine, the latter being located at or near the western contact of the porphyry (exact location not known - could not be seen on the aerial photographs).

The Rosebery Group appears to be partially conformable with the Dundas Group and Crimson Creek Formation in the area south of Rosebery, but unconformable, or at least disconformable, relative to the same formations, north of the Pieman River.

### 3. South of Henty Fault

In this area relationships between various sequences are not clear because of extensive cover by Ordovician Owen Conglomerate and Pleistocene glacial deposits; however, a number of distinct units can be recognized.

#### (a) Anthony Creek Volcanics \* (Success Creek Phase?) (€ps)

These are exposed as a strongly cleaved narrow belt along the western faulted contact of the pre-Cambrian Tyennan Metaquartzite.

They are regarded as being late pre-Cambrian to early Cambrian in age and probably represent the first sedimentary deposition and volcanic activity in the newly formed rift valley, becoming the lowest unit in the Mt. Read Volcanics. They are composed of quartzites with argillaceous and pyroclastic intercalations. The sequence is called Sticht Quartzite by some workers.

#### (b) Murchison Volcanics \* (€p) and Murchison Granite (€gm)

The Murchison Volcanics outcrop as a north-south striking, steeply east-dipping sequences of rhyolite and porphyry flows, and sill-like intrusive bodies that are underlain in part by elongate concordant bodies of granite-adamellite. The latter is termed granite though it has the superficial appearance of intrusive porphyry in hand specimen.

\* name proposed by this author