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(b) Primrose Pyroclastics (6pp)

Sedimentary layers within these pyroclastic rocks and their southern equivalents, the Queenstown Pyroclastics, are hosts to pyritic-copper lodes at Mt. Lyell, and pyritic-lead-zinc lodes at Hercules, Rosebery and the Chester-Pinnacles area.

The Primrose Pyroclastics consist of vitric, crystal and lithic tuffs, pyroclastic breccias, siltstone and black shale lenses, and quartz-sericite-chlorite schist derived from the pyroclastic rocks (Braithwaite, 1974). A more detailed description of the Pyroclastics is given by Green and Williams (1975).

Based on the geology of the Rosebery area (Braithwaite 1974, E.Z. personal communication), the pyroclastic formations have been divided into foot-wall and hanging-wall sequences, the latter being distinguished in hand specimen from the former by the inclusion of lithic fragments from the mine host sequence (Green and Williams, 1975; Williams, personal communication).

South of the Henty Fault the Primrose Pyroclastics are regarded by previous workers as being continuous with the Queenstown Pyroclastics, which extend south from the fault (see below).

North of the Henty Fault the Primrose Pyroclastics are unconformably overlain by the Mt. Black Volcanics in the east and may be partially conformably with the Dundas Group and Rosebery Group in the west. Photogeological evidence suggests that the contact between the Pyroclastics and the Mt. Black Volcanics may be partially faulted in the vicinity of Rosebery.

To the north the Primrose Pyroclastics are overlain (?) unconformably by the Rosebery Group and probably disconformably by the Bulgobac Group. The relationship of the pyroclastic rocks with the latter is not clear as the contact is partially obscured by other units, and younger glacial deposits.

A rhyolitic to dacitic lava sequence is interbedded within the pyroclastic formation in the Chester area. Farther north in the Burns Peak-Pinnacles area there is a massive rhyolite unit (Burns Peak Rhyolite) (see below). The relationship of this rhyolite mass to the pyroclastic rocks is unclear as it only interfingers with them south of Burns Peak. North of this locality the rhyolite is under- and overlain by sediments of the Bulgobac Group.