

(b) Minor quartz-tourmaline fissure veins in the Heemskirk Granite, which relate to sulphide rich lead-zinc veins with a zonal pattern in the surrounding sediments.

All the deposits appear related to Devonian granitoids, and it is probable that a major batholith underlies much of the region, with only the upper levels visible as a series of stocks. The intrusion level of the batholith appears to be epizonal, with the dominant control of mineralisation relating to brittle fractures and favourable replacement horizons in the sediments."

The geophysical recognition of potentially tin bearing granites has been presented by Webster (1982), Collins et al (1981) and Slade (1982). The data presented by Webster examined the magnetic and gravity expression of tin bearing granites in central N.S.W.; Collins et al (1981) assessed the ground radiometric and magnetic susceptibility of Tasmanian granitoids including the west coast tin granites; and Slade discussed how regional airborne magnetic and radiometric data can be integrated with gravity results to identify the tin granites in the New England area of N.S.W. Unfortunately the regional aeromagnetic survey over the west coast of Tasmania was flown without the inclusion of a radiation spectrometer, therefore the presentation of radiometric data will depend upon open file data plus the results of Collins et al (1981). The gravity and radiometric results are discussed separately. For this section of the review only the magnetic data has been interpreted.

Mt. Bischoff

The regional aeromagnetic data over the old Mt. Bischoff workings (Figure 14 & Plate 3) show a "Y" shaped magnetic high coincident with the mine. The source of the high has been interpreted as dolerite dykes which are associated with the mineralisation. The magnetic susceptibility tests carried out by Collins et al (1981) showed the porphyry dykes to be non-magnetic. The porphyry dykes originate from the Meredith Granite, 7 kilometres away and cut across a major skarn-type anomaly at the granite contact. It was anticipated that over so long a distance there would be evidence of this feeder system however, as the porphyry bodies are non-magnetic and located in a magnetically active area, (skarn and basalt anomalies dominating the region), it was not possible to identify a magnetic link between the Meredith Granite and the Mt. Bischoff mineralisation. The "Y" shaped magnetic anomaly is located in an area of relatively non-magnetic host rocks which have been mapped as undifferentiated sediments in the Dundas Trough.

A second possible interpretation of this non-magnetic zone surrounding the Mt. Bischoff anomaly would be the existence of a non-magnetic granite at depth, as per Taylor (1979), and the source of the tin mineralisation.