Creek Group is slightly magnetic, and the red cherts and mudstones of the upper Success Creek Formation which host the mineralisation can be traced (Figure 8). The magnetic pattern in this area is unfortunately confused by the presence of basic and ultrabasic intrusives to the south-east. The ore body is located on a 1.5 kilometre long magnetic high striking north-east (Figure 8). The 500nT anomaly at the northern extent of the feature was interpreted by Corbett et al (1982), as the massive pyrrhotite at Renison Bell. Detail mapping of the area, Patterson et al, established the local strike direction to be north-west, including the Bassett-Federal Fault and the porphyry feeder dyke from Pine Hill. From this it is concluded that the magnetic anomaly recorded over Renison Bell is not entirely due to the pyrrhotite associated with the mineral lode. To the south-east of the mine there is a magnetic low which could correlate with the Pine Hill system however, the area also contains basic volcanics which confuse the interpretation. The regional magnetic data did not positively identify the mineralisation at Renison Bell, however it should be possible to identify locations with a similar regional magnetic expression along the Success Creek-Crimson Creek contact. Detail aeromagnetic data may be of use to trace the porphyry feeder dykes and to locate other potential dyke systems.

The B.M.R. carried out geophysical tests in the early 1950's over the mineralisation and structures to the north-west which host lead-zinc occurrences. These tests, Blissett (1962), showed there to be a coincident magnetic and self potential anomaly over the tin deposit similar to Cleveland. The area was tested with I.P. and anomalous responses were recorded over both types of mineralisation. The better results were from the lead-zinc areas to the north-west of Renison Bell.

The association between the Pine Hll Porphyry body, the Renison mineralisation and the Renison gravity and magnetic lineament should be established. This could include the Nevada Creek igneous intrusion as well as it is located on the same lineament.

Zeehan

In the township of Zeehan there are two small tin prospects which have been worked for tin at some stage. They are located on the margins of a magnetic anomaly which would appear to be at considerable depth (Figure 9). This area was flown with detail magnetics by Abminco, Sise (1983), and the results indicate that the response over the Zeehan township has some features associated with shallow sources and appeared to form an arcuate anomaly enclosing the main deeper source. The tin prospects were all located on this crescent. Unfortunately the feature does not show on the regional magnetic contours or on the stacked profiles. The anologue records were checked to determine whether the response was removed by filtering or terrain effects but the aircraft's terrain clearance was within acceptable limits and the anomaly could only be recognised as shoulders on the side of the main response. To enhance this anomaly it would be necessary to