

serpentinites, for example, are outlined by anomalous nickel, zinc and lead and the highest tin values on the grid are on the eastern contact of the Serpentine Hill Complex.

The glacial cover acts as an impervious layer through which cations cannot penetrate, and auger drilling is ineffective through the boulders. Tin anomalies were outlined on grid 4, grid 5 and grid 0 where the glacial cover is thin or absent.

9. DISCUSSION

The Input survey covered the Renison Tin Mine and gave excellent response over both the Federal-Bassett Lode and the replacement lodes. Similar responses occur within the Comstaff Licence areas, but most of these appear to be due to serpentinites. Anomalies GAG and GAK have not been adequately explained and additional work is recommended.

Flight line 117W flew over Fenton's Prospect and produced a six channel anomaly with a ratio of 16/1.6. Anomaly GAO is in the inaccessible fluvioglacial area of the Pieman block. From experience elsewhere, e.g. BAB, the anomaly may be due to an old river channel and therefore should be checked by IP.

The area south of the Pieman River has extensive development of hornfels indicating close proximity to a granite. The large faults would be excellent conduits for hydrothermal solutions and should, therefore, be carefully explored by diamond drilling.

Age dating of galena from the Rosebery Mine gives an age for the galena of 161×10^6 years. This is somewhat later than the Proterozoic-Cambrian age which is presently accepted for the Rosebery Deposit. It is also much later than the last major orogenic episode, the Kanimblan Orogeny, with which the Devonian Granites are considered to be related. If the cations at Rosebery are related to the Devonian Granites and not to volcanogenic activity, an epigenetic origin must be accepted. Such a hypothesis makes the pyritic shales in the south-eastern part of grid GAP a very attractive target for a stratabound lead-zinc deposit.

The Huskisson Syncline axial plane fault may act as a conduit for hydrothermal solutions and replacement of the Gordon Limestone is possible. It is not regarded as