

SUMMARY

An exploration programme has been carried out on the gridded areas of Exploration Licence 5/63, Part 4, comprising of Pinnacles (EAA Grid), East Chester (EAB Grid) and Chester (EAD Grid). Exploration techniques utilised comprised geological mapping, surface geochemical sampling, ground magnetometer surveys, self potential surveys, costeaning and costean channel and chip sampling. (TAS/2/1586, 1408).

Previous geological mapping and follow up exploration programmes in the individual grid areas had indicated an extremely variable sequence of rocks within this portion of the Mount Read Volcanics. The 1977/1978 exploration programme has gone a long way to elucidating the regional stratigraphy and structure. Geological mapping in the area separating EAA and EAD, and adjacent to EAB, has indicated that the EAB sequence can be extended into the EAD grid area, but the mineralised portion of the Pinnacles grid area has been tectonically removed.

Exploration of the Pinnacles area since the presentation of Report TAS/9 by G.K. Krummei has consisted essentially of checking rock types and structures. The area can now be integrated into the regional structure.

The East Chester grid has been explored in detail, including mapping of the complete grid, geophysical testing of favourable zones and costeaning of anomalous areas. The exposure afforded by the costeaning programme has been most useful in elucidating the regional structure. A weakly mineralised zone of siliceous (cherty) tuffs, containing up to 4.55% Zn, 33% Ba and 19.8 g/t Ag and minor Pb and Cu, was exposed in the 2540S access track, and has been traced southwards by costeaning. No major sulphide zone was exposed, but the horizon represents a favourable target for further detailed exploration.

Exploration in the Chester grid area comprised geological mapping, ground geophysical surveys and limited costeaning of the north-west portion of the grid. Outcrop over the acid volcanic sequence was minimal, so the correlation of units is not possible. Outcrop of the sediments west of the Owen Shear is reasonable on the steep east bank of the Marionoak River valley. No definite targets have been outlined in the area, but more geophysical testing will be recommended.

The regional interpretation indicates that the sequence in the Chester grid faces and dips steeply east, as stated by