

1. SUMMARY

This report details the results of exploration in E.L. 49/82 at Beulah, Northern Tasmania during the twelve months to August 29, 1984.

Exploration during this period has concentrated on evaluating the economic potential of the acid-intermediate volcanics, which are confined to the southernmost part of the E.L. near Beulah, for massive sulphide mineralisation (Figure 1).

The work programme comprised an initial regional stream sediment geochemical survey to relocate and confirm anomalies re-interpreted from past exploration activities in the area. This was accompanied by geological mapping at 1:25 000 scale over selected parts of the Sheffield 1:63 360 geological sheet and an airborne electromagnetic survey totalling 360 line kilometres.

Anomalies located during the geochemical survey related to units of basic - intermediate pyroclastics and epiclastic sediments. Best values were 2145 ppm Pb, 430 ppm Zn, 120 ppm Cu in localised fractures with associated minor quartz veining from Anomaly 1 (see Section 8.2.2). All other anomalies were interpreted as having a similar origin, that is, weak Pb, Zn mineralisation structurally controlled and confined to minor shears/fractures within the host rock. These could represent leakages from more deep-seated massive sulphide bodies.

The geological mapping identified a Cambrian intrusive-extrusive complex comprising quartz feldspar hornblende porphyry of rhyolitic/andesitic composition intruded by small bodies of a quartz diorite which in places tend towards gabbro in composition. Weak tourmalinisation and silicification with associated elevated gold, silver and lead values are associated with the intrusives.