2.3 SELINA-DORA (M. J. Hutton)

2.3.1 Introduction

The Selina-Dora area covers part of a belt of Cambrian volcanics and sediments which lies between the Tyndall Range (to the west), the Sticht Range (east), Anthony River gorge (north) and Lake Spicer (south) (Figure 2).

Previous exploration work within this area was carried out by R.T.A.E. in 1958-59 and by Mount Lyell in 1969-73 and in 1980. The details of this work are given in the E.L. 9/66 Annual Report, 1979-80.

A comprehensive review of the geophysical data (Bishop, 1980) delineated five anomalous zones worthy of further work:

(i) Selina area: a magnetic anomaly along the eastern contact of the Jukes Formation body. In profile this anomaly was similar to the magnetic response over the western pyrite zone drilled in 1971-73 (D.D.H.'s LS4-7).

(ii) Selina area: the I.P. anomaly over the western pyrite zone was not closed off to the north. A magnetic anomaly was also present to the north of the zone.

(iii) Selina area: Dighem anomalies along the eastern margin of the grid.

(iv) Rolleston area: I.P. anomaly A2 (Omnes, 1970) on lines 40N to 56N was located east of a pyrite-magnetite zone drilled in 1970 (D.D.H.'s LS1-3). An old working on line 48N contained disseminated pyrite-galena.

(v) Dora area: R.T.A.E. detected one major and several minor Turam anomalies. I.P. anomalies on lines 110S to 136S coincided with the major Turam anomaly but the area is covered by glacial moraine of unknown thickness.

The work recommended to test these anomalies involved:

(i), (ii) and (iii): Complete coverage of the Selina Grid with gradient array I.P., detailed ground magnetics over the magnetic anomalies.

(iv) Soil sampling on lines 40N to 56N, prior to a decision on whether to undertake some geophysics (I.P., electrical soundings, seismic).

(v) Electrical soundings or seismic refraction to determine the thickness of the moraine.

During 1980-81 most of the exploration activity was on the Selina Grid, including 31.54 km of grid re-cutting and pegging (lines 80N-184N), soil and rock geochemistry, gradient array and dipole-dipole I.P. and minor ground E.M. On the Rolleston Grid 2.47 km of line re-cutting and pegging (lines 40N-56N), soil and rock geochemistry and dipole-dipole I.P. were carried out. On the Dora Grid 5.15 km of line re-cutting and pegging (lines 120S-144S) was achieved. Details of work done is presented in Appendix E.

Re-assaying of drill core for Cu, Pb, Zn, Ag, Co and S continued. A few zones with Ag values greater than 5 g/t were detected in LS2 and LS3 but they are not significant.