2.6 BASIN LAKE (P. Komyshan)

2.6.1 Introduction

Work during the 1981-82 season consisted of mapping, minor rock chip sampling and reclearing of old lines for a "Genie" ground E.M. survey.

2.6.2 Access

Reclearing of lines 00S to 36S was completed by contractors Mallinson and Smith. For details see Appendix J.

2.6.3 Geochemistry

Rock chips were collected during routine mapping traverses in the Leech Hill and Eastern areas of the Basin Lake Grid. Samples were routinely assayed for Cu, Pb, Zn, Ag, Mn and "soluble Ba" by A.A.S. following perchloric acid/nitric acid digestion. Pyrite rich samples from Leech Hill were also assayed for Au by fire assay. Rock chip analyses and sample locations are presented in figure 53. — not shown on Fig. 53

Rock chip sampling of siliceous andesitic pyritic tuff over Leech Hill gave no significant anomalous values, with the exception of the most easterly sample within cleaved interbedded tuffaceous shale and andesitic tuff containing disseminated pyrite (100ppm Cu, 180ppm Pb, 760ppm Zn).

Assays of up to 900ppm Zn, 3ppm Ag,from an iron accumulation over a hornblende feldspar porphyry intrusive, are not considered significant.

2.6.4. Geophysics

1. Dipole-Dipole I.P.

Scintrex carried out a dipole-dipole I.P. survey (with a 200ft dipole spacing) on line 78S to better define a gradient array chargeability high and corresponding resistivity low (at 5500'W) located in 1974 (see Howland Rose 1974), and also to test possible masking of the gradient array survey by glacial till in the vicinity of DDH BL1. Chargeability and resistivity data is presented on pseudo sections (see Figure 56).

A classic "trouser leg" anomaly was recorded on the chargeability pseudo section centred at 5500'E (see Figure 56), with damping of N=1 and N=2 values by the presence of glacial till. A peak chargeability response of 78mv/v was recorded at N=6 below 6200'W, possibly enhanced by a minor disseminated source to the East. A resistivity low of 181 ohm-m was recorded at N=5, below 5900'E. The major part of the anomaly is probably due to black shales (encountered in BL801).