

pit area) and dipole-dipole I.P. surveys over known geophysical anomalies. See Appendix D for details of work done during 1980-81.

2.2.2 Access

Reclearing of old lines from 2N to 38N was carried out by contract cutters (Dart and Freeman) and in part by Mount Lyell field assistants. Two small new grids were established by Mount Lyell field assistants. One grid of six 200 ft. spaced grid lines was cut from a sub base line south from line 28N, 1800'W to line 26N and the second grid of two 300 ft. spaced grid lines was established from a line cut south from line 30N, 3200'W. All access work done is detailed in Appendix A.

Grid lines north of and including 26N were pegged at 100 ft. intervals using Bradshaw's Road as a base except for the Tyndall Mine area and the line 30N pit area where sub base lines were used for intermediate lines.

Grid lines south of and including line 18N were pegged at 25 m intervals using Bradshaw's Road as a base. However when referring to past work done south of line 19N it should be noted that:

- (a) Initial grid lines (established in 1967) were pegged in feet and used Bradshaw's Road as base.
- (b) Work done during 1974-75 re-established the grid lines but repegged the lines (in feet) by using two new base lines. Firstly, for lines 18N to 15N inclusive a base line was cut approximately south from line 19N, 00 to 15N. Secondly for lines 10N to 2N a base line was established from the intersection of line 9N and Bradshaw's Road, extending north to line 10N and from the intersection of line 8N and Bradshaw's Road extending south to line 2N.

2.2.3 Geochemistry

1. Soil Geochemistry - Introduction

Work consisted initially of follow-up in two known mineralised areas, i.e. line 30N pit, Tyndall Mine, and on line 16N (covering a possible extension south of the hematite carbonate unit located on strike to the north). Details of work done is listed in Appendix D. Sampling was done at 50 ft. spacing except in heavily glaciated areas where a 100 ft. spacing was used. Dried samples were sieved for a -80# fraction and then analysed by AAS for Cu, Pb, Zn, Ag, Mn and "soluble" Ba. Results are shown on Figures 4 and 20.

Further soil sampling covering known geochemical and geophysical anomalies in this area will be carried out during the 1981-82 field season.

2. Soil Geochemistry - Results

Soil sampling in the line 30N pit area showed no anomalous values in soil developed over bedrock despite moderately anomalous rock chip values from nearby outcrops (see next section). The bedrock in this area has a poorly developed soil profile with 10-20 cm of "A" horizon humus directly over the silicified bedrock. It is suggested that glaciation has stripped any previously developed weathered profile. Subsequently the high silica content of the rock has prevented sufficient weathering for full soil profile development. Hence soil sampling over bedrock may not have given a true indication of the mineralisation potential of this area. Anomalous Pb values of up to 250 ppm obtained from "A" horizon soils, developed over glacials, appear to be hydromorphic in origin.