

2. Ground EM

A ground EM survey was carried out during March 1982 by Scintrex using the Scintrex SE-88 "Genie" E.M. system in a "Slingram" mode with coil separations of 50m and station intervals of 20m, over lines 00S to 36S and 78S. For details of survey see Appendix K and data is plotted on figure 51.

The receiver measured the field strength of three signal frequencies (315, 945 and 2835 HZ) as a ratio of the (transmitted) reference frequency (105HZ). During the survey the 2835HZ frequency was not correctly zeroed.

The survey recorded only one minor anomaly at line 30S, 5900'E using a 50m coil separation, which could not be repeated with a 100m coil separation. No anomaly was recorded over a 7m intersection of massive pyrite located in DDH BL4 (at 69.0-76.0m) drilled directly below line 30S.

2.6.5 Geology

Introduction

This section deals with the geology covered by the East Tyndall, Howard's Anomaly and Basin Lake Grids.

General geological descriptions of the area have previously been made by Stevens-Hoare (1975), Sheppard (1975) and Komyshan in Meares et al, (1981). Detailed geology of the Howard's Anomaly grid is given by Walters in Meares et al (1980), and by Komyshan in Meares et al (1981). Corbett (1975) has dealt with the geology of Newton Creek and east of Bradshaw's Road.

Four major formations can be recognised in the area (Figure 52):

- Owen Conglomerate
- Tyndall Group
- Central Sequence Volcanics
- Western Sequence

Western Sequence

Within the mapped area a 200m thick unit of quartz-phyric felsic ash flow tuff is overlain by a 700m east-dipping, east-facing interbedded unit of fine-grained pale grey felsic air fall tuffs and black shales. There were no indications of possible economic mineralisation within the mapped area.

Central Volcanic Sequence

The Central Volcanic Sequence is the term that has been applied to Cambrian volcanic rocks exposed between Mt. Darwin and Red Hills which are characterised by feldspar-phyric units (Corbett et al, 1974; Corbett 1979). A 2km cross section of the Central Volcanic sequence is exposed, which is partially terminated by the Henty Fault to the north and open ended to the south beneath glacial moraine.