

A detailed proton precession ground magnetic survey was carried out by Scintrex Pty. Ltd. over the Howard's Anomaly Grid from line 19N to 26N using a station spacing of 50 ft., reducing to 25 ft. in areas of high magnetic gradients. The area covered is listed in Appendix B and contour plans are shown on Figure 15.

Older volcanics in the western half of the grid show only local sporadic highs and lows correlatable only locally, between adjacent lines. Local variability in the proportions of hematite and magnetite in tuffaceous sediments from the eastern section of the intermediate crystal tuff sequence has not enabled use of magnetics to delineate marker horizons as suggested in Meares, et al, 1980. Tyndall Group rocks to the east show a strong magnetic response within rhyolitic ash flow tuffs at its boundary with older volcanics to the west (see Figure 15). Meares, et al, 1980, suggested a  $15^\circ$  divergence in magnetic trend between the Tyndall Group sequence and the older volcanic sequence. There is not sufficient evidence from this closer spaced survey to support this hypothesis.

### 3. Max-Min E.M. Survey

A horizontal loop E.M. system (trade name Max-Min) survey was carried out by Geoterrex Pty. Ltd. over the eastern sections of the Howard's Anomaly Grid from line 22N to line 26N (see Appendix B for area covered). A coil separation of 150 m with a station interval of 50 ft. was used. The survey attempted to test and locate an E.M. anomaly detected during a Turam survey carried out by Rio Tinto in 1958.

The Max-Min system anomalies were weak and poorly defined, but located the Turam anomaly (see Figure 16). Bishop (1981a), who details results of the Max-Min survey, suggests that the strong Turam response was caused by strong conductive ground conditions, due to moraine cover (see Fig. 19 for geology of the area) and the mode of the Turam system. The suggestion that the faulted contact between the Owen Conglomerate and the Tyndall Group contributed to the Turam response (Bishop 1981b) is not supported due to the noncoincidence of the Max-Min anomalies and the interpreted position of the Great Lyell Fault (Fig. 17).

Due to discouraging results from this survey and the lack of supporting geological and geochemical evidence for mineralisation, further work in this area is not recommended.

#### 2.1.5 Diamond Drilling

One diamond drill hole, HA5, was drilled by Associated Diamond Drillers to test the southern extension of Ag bearing hematite carbonate rich rocks located in D.D.H. HA4 and D.D.H. HA3 to the north (see Meares et al 1980 for details). A minor gradient array I.P. chargeability anomaly located at line 19N, 1250'W was also tested. See Figure 18 for drill hole profile.

##### D.D.H. HA5

Collar location: 10 m south of line 19N, 500'W  
 Collar R.L. : 509 m A.S.L.  
 Bearing :  $270^\circ$  magnetic  
 Inclination :  $-50^\circ$   
 Hole length : 297.5 m  
 Commenced : 1st June, 1981  
 Completed : 3rd July, 1981 (195.0 m as at 24th June, 1981)

*Collars  
Plotted on Fig 19*

##### Summary of HA5 Core:

0-12.0 m: Glacial tills and gravels