

- 292.2 - 302.0 : Dark grey/brown deformed coarse to medium grained lithic-crystal tuff
 302.0 - 355.2 : Grey-green/orange altered fine to medium grained crystal-lithic tuff with magnetite-pyrite

The full drill log is presented in Appendix E.

23 drill core specimens were submitted for petrographic descriptions. Amdel Report GS 2001/82 is presented in Appendix D.

3. Assays

The complete hole (apart from the first 9m which is mostly glacial scree) was sampled and assayed for Cu, Zn, Ag, S, Mn and Co \pm Ag-Au fire assay. Assays are given in Appendix E. Sample preparation (crushing, splitting, pulverising) and assaying were carried out at Mt. Lyell. There were no significant results.

4. Downhole Geophysics

Downhole I.P.

DDH LS8 was Logged by M. Hutton and P. Davis on 13th October, 1981, using a downhole three-array with a dipole spacing of 2m (Figure 33). Instruments used were a Scintrex IPR-8 receiver and a Scintrex IPC-7/25W transmitter. The infinite electrode was placed beside the road at about 70m south of line 184N, 900mE (about 340m east of the drill hole collar). The transmitted current was maintained between 5 and 10 milliamps throughout the survey.

Background resistivity was between 10,000 and 100,000 ohm metres, and background chargeability was less than 20 mV/V. The major anomaly occurs between 220 m and 230 m, corresponding with the Eastern Pyrite Zone. The peak chargeability was 134 mV/V with a resistivity low of 56 ohm metre. Several chargeability anomalies (greater than 50 mV/V) occur below 230 m, corresponding with pyritic zones in altered tuffs, but they did not produce significant resistivity lows.

The geological log and the downhole IP indicate that DDH LS8 has satisfactorily tested the geophysical anomalies on (and near) line 184N.

Magnetic Susceptibility

The LS8 drill core was measured for magnetic susceptibility by M. Hutton using a Scintrex SM-5 meter. The magnetic susceptibility was recorded at 1m intervals by averaging several readings either side of the plotting position (Figure 33).

Negligible response was recorded from 10m to 226m. Below 226m values of around 10×10^{-3} c.g.s. units were recorded with the peak response at 275m (49×10^{-3}). Magnetite veinlets and disseminated grains produced the magnetic susceptibility responses.

2.2.7 Conclusions

1. The Eastern Pyrite Zone was extended to the north an additional 1.7 km from line 184N to line 248N. Geological setting and soil