

6.4.4 Diamond Drill Hole Geophysics - Magnetic Susceptibility data has been routinely measured on all SCOA diamond drill holes. Selected drill holes from Mt. Lyell drilling (ML 3A) and Comalco (SMD 4, 5, 9, 10, 11, 13, 16 and 24) have also been tested. These results have been used in interpretation and modelling of magnetic data from the Shepherd and Murphy area and other magnetic anomalies located in the regional aeromagnetic survey. Susceptibility ranges for the various rock types are:

Wrigglite - (15 000 - 40 000) x 10⁻⁶ cgs units.
Pyrrhotite skarns - (10 000 - 18 000) x 10⁻⁶ cgs units.
Sphalerite skarn - (80 - 500) x 10⁻⁶ cgs units.
Garnet skarns - (1 000 - 3 000) x 10⁻⁶ cgs units.
Diopside skarn - (10 - 1 000) x 10⁻⁶ cgs units.
Moina Sandstone - (0 - 30) x 10⁻⁶ cgs units.
Gordon Limestone - (10 - 60) x 10⁻⁶ cgs units.
Basalt 0 - 300 x 10⁻⁶ cgs units.

Three array down hole I.P. surveys were carried out on drill holes SMD 9, MD 35, MD 38 and MD 39. Reports by Scintrex are included in Appendix 3.

A summary of the downhole results are as follows:

DDH SMD 9 : A low resistivity zone of 2 ohm m to 50 ohm m was intersected from 95 m to 105 m. Chargeabilities were not measured across this zone. This interval coincides with a magnetite - actinolite - biotite skarn occassionally rich in pyrrhotite (to 100% over 10 cm).

Other high chargeability zones of 90 m volts/volt were measured at 52.5 m and 70 m in zones of massive limestone. Resistivities however, are high at upto 1200 ohm m.