

A magnetic susceptibility survey of the core produced extremely noisy results and a very high background, however, a resurvey with another instrument proved most of the core to be non-susceptable. Two small responses were obtained over the zones of tin mineralisation where pyrrhotite is slightly more common.

5.1.4. CONCLUSIONS

Detailed mapping, soil sampling and I.P. over grid areas 1 and 7 have not revealed the sources of the I.P. anomalies located by the reconnaissance survey. The low soil geochemical values and unfavourable geology suggest that the responses are probably caused by barren sulphides (pyrite/pyrrhotite etc) and/or formational changes between rock units of differing mafic content. The eastern most anomaly on the Langdon Grid (Area 9) also falls into this category. The western I.P. anomaly on the Langdon Grid is obviously caused by the pyritic sediments which were observed in the area. Despite the weak rock geochemical response from this unit, the sediments represent a potential host horizon for Rosebery type mineralisation and should be thoroughly investigated.

On the Murchison River Grid, diamond drill hole MRP 212 has intersected significant tin mineralisation hosted in the Mt. Black Volcanics and the fault between the Mt. Black Volcanics and the Farrell Group. Further drilling to the south (DDH STP 217) on E.L. 4/73 has intersected similar style mineralisation.

The tin mineralisation appears to be associated with arsenopyrite and pyrrhotite in or near zones of intense fracturing and is clearly epigenetic. Most of the area is covered by a thick layer of Pleistocene-Recent fluvio-glacial material.