

due to logistical problems of laying the latter. Several anomalies are evident - specifically at 150 N and 400 N (coincident with magnetic and weak Max-Min 100 m anomalies) and at 1380 N and 1520 N (conductive overburden?). Neither the Bismuth Creek Fault nor the pyrrhotite skarn are conclusively evident, with coincident typical galvanic responses. (Refer plans D/MZ01/049, 139).

MMR - The survey was carried out by Scintrex over both lines. No anomaly was conclusively detected over the BCF. The data were inconclusive with no apparent correlation to the known geology. A possible negative anomaly is present around SMD 9 and MD 35 poorly correlating with the pyrrhotite-magnetite skarn. (Refer plans D/MZ01/050, 051).

CONCLUSIONS - The magnetics appears to be the only method for conclusively and directly detecting the pyrrhotite/magnetite mineralization at a depth of about 100 metres on Line 1. It must be concluded that the total amount of sulphide present is small judging by its lack of response to surface electrical methods (downhole measurements in SMD 35 show maximum chargeabilities of 40 to 70 mv/v from 82 to 122 metres with a background of less than 20 mv/v. Resistivities are the order of 1000's with a narrow zone of 10 v at 105 metres).

The IP/Resistivity survey indicated the Bismuth Creek Fault convincingly. However, the other electrical methods appear to have been very affected by the apparently conductive near surface clays in weathered basalts, so that the anomalies in general appear to indicate variations in surficial conductivity rather than bedrock conductors. This is of importance when applying the results to the planning of geophysical surveys elsewhere over basalt.

Certain anomalies as a result of these surveys do however still require a geological explanation: