

B. MASSIVE PYRRHOTITE SEARCH.

(a) Aim:

Gravity traverses were attempted over drill hole SMD 9 (with pyrrhotite mineralization) and over Scintrex M.I.P. 'D type' anomalies as a trial to determine whether gravity was an effective exploration tool for massive pyrrhotite.

(b) Method:

Readings were taken with the Soden meter along grid lines 100W, 00, 100E, 150E, 200E. Data was corrected for drift, free-air and latitude.

(c) Results:

Results are plotted on drawing TAS-78-122. Some interpretive notes are on the drawing. Data and computation sheets are on file in the Devonport office.

The profiles indicate that no significant pyrrhotite bodies can occur at the M.I.P. anomalies; in fact weak negative anomalies occur even over hole SMD 9 and these are consistent with sink holes/caverns in the limestone. This confirms our previous interpretations, (Section 13).

Samples of granite, greisen, basalt, calc-silicate rock, limestone, pyrrhotite skarn, wriggilite hornfels and sandstone from core were sent to the Mines Department for density measurements in case densities were needed for gravity modelling. Data is in Appendix 22. No modelling has yet been carried out.

(d) Conclusion:

The gravity method is judged to be an effective method of detection of heavy bodies like pyrrhotite but magnetics are a quicker easier and cheaper method. Gravity surveying could be a useful tool to detect skarn bodies which have no associated magnetite, pyrrhotite, or other sulphides i.e. those skarn bodies which would not be easily "seen" by I.P. and magnetics.