



date: 3-6-82

Memorandum to: I. Mathieson, W.C.M.

from: J. R. Bishop

Subject: Interpretation of Dighem Magnetics

Summary

A deep seated magnetic body was interpreted beneath Colebrook Hill. It is centred beneath 537150N; 375160E and strikes 140° (AMG), with dip 80° to the SW. It is a wide (200m for a susceptibility of .01), tabular body with its top at 150m a.s.l. assuming a (constant) flight height of 550m.

Background.

A deep drill hole is planned beneath Colebrook Hill: its siting will be partly based on magnetics. Ground magnetics has proved to be very noisy (see Bishop, 1980a) although a simplistic interpretation did define a deep NW-SE ^{troughing} tabular magnetic source (Bishop, 1980b).

A Dighem survey was flown over the Natone area in Feb. 1981. The magnetometer was at a nominal 50m above ground level: although the actual flight height varied considerably (usually much higher), a discrete anomaly has been defined over Colebrook Hill (Figure 1). The Dighem results were presented on 1:10,000 topographic map with a contour interval of 25 γ .