

Magnetic Interpretation: (See Appendix A - "Magnetic Interpretations - Colebrook Hill Grid Area")

The Colebrook Mine anomaly, the Olympic-Athenic Anomaly 1 and the Olympic-Athenic Anomaly 2 have been examined in detail while others have been subjected to more cursory examination.

The Colebrook Mine Anomaly was first examined by Dr. J. Bishop. (Bishop, 1980 and Appendix A - 1). He used aeromagnetic data or intensely filtered data as the basis for simple 2D modelling techniques. He interpreted a wide, deep magnetic dyke with some thinner near surface features as the possible source of his profiles.

This interpretation was superceded by a detailed examination of the ground magnetic data by R. Richardson (Appendix A - 2).

He found that:

"The aeromagnetic anomaly over Colebrook Hill represents no more than the combined magnetic effect of an area of narrow pyrrhotite veins, the anomalies of which add together to produce a relatively broad and isolated anomaly at flying height." He interpreted "a large number of thin magnetic sources which extend from near surface to probably considerable depth".

The Olympic-Athenic Anomaly 1 was also examined by R. Richardson who stated, "The anomaly is interpreted as being due to a thin (10-30m wide) and steeply dipping tabular or lensoid body. The top is approximately 10-20m below ground surface. Magnetic susceptibility is consistent with measured susceptibilities of pyrrhotite from previous drill holes (i.e. 0.003 - 0.01 cgs)"(see Appendix A - 2).

The Olympic-Athenic Anomaly 2 was interpreted by D. Leaman (see Appendix A - 3). He concluded:

"The magnetic anomalies observed are related to a large number of small, relatively shallow sources which may be expected to be discontinuous along strike and in depth extend."