

observed where H_N values have been less than 180% of normal. This anomaly form due to its high H_N and coincident predominantly external (positive) current flow, is diagnostic when observed. An example of such a response is the Mt. Windarra pyrrhotite nickel, copper deposits in Western Australia.

TYPE E (FIGURE 4) Theory has always predicted that massive sulphides should show no IP effect, but invariably the disseminated material surrounding massive zones are sufficient to show the body up clearly. Over a number of Western Australian pyrrhotite nickel deposits, the massive, conductive, electrically continuous sulphides *are not* surrounded by any significant disseminated halo. Thus, little or no material is available for storing the induced polarization charge. However, the substantial normalised magnetic field which is invariably very high indeed (certainly in excess of 200% and as high as 400%) is the diagnostic feature. To date responses of such magnitude have never been observed over electrolytic conductors, even in the world's most conductive environments in Western Australia's salt lakes belt. However, such cases will inevitably be recorded therefore caution is needed in evaluating this rare anomaly type.

Modification of Anomaly Form by the Environment:- It is important to realise that each of the above anomaly forms is modified by the environment occurring immediately above the chargeable source. Two such cases are shown to illustrate the modification in the form of the chargeability anomaly which occurs. Both the sources show no contrast with the enclosing host material as per Type B.

In Type F (Figure 5) the source is covered by dessicated sands. Thus the return external current *cannot* flow above the body. Thus the external current flows *under* the source and/or around the sides of the source. The observed induced polarization