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GEOPHYSICAL REPORT RENISON GRID

A. BACKGROUND

The Renison grid has been covered by an Input aeromagnetic program and ground magnetic surveys. Selected portions of the grid have also been examined by IP, EM, and SP. The foregoing are listed in order of extent of coverage. Parameters of the various surveys are listed in Table 1.

B. RESULTS

Input Survey:

Three Input anomalies are located within the grid area. These are GAK, GAL, and GAP. They all have expression in the IP and/or EM data.

Magnetic Survey:

The line spacing is too large to permit meaningful contouring of the ground magnetic data. In fact there is also some difficulty even in confidently correlating anomalies from one line to the next. The current interpretation of the data differs substantially from the interim assessment shown on plan TAS2/764.

The following significant features are evident in the data (refer to plan TAS 2-766.)

Zone A: This zone is comprised of a number of magnetic anomalies which cannot be correlated from line to line but are spacially close together. The amplitude of the anomalies ranges from moderate (200nT) to very large (4000nT). Basalt has been mapped in the vicinity. It undoubtedly is the source of anomaly A.

Zone A₁: This zone may be a part of A but does appear to be a single independent anomaly. The source lies at some depth (150+ metres).

Zone C: The portion of this anomaly located south of the most northerly east-west fault consists of a single anomaly the origin of which is more than 100m subsurface. North of the fault the zone appears to consist of at least two parallel anomalies. The amplitude of these is less possibly because of a decrease in the width of the source. The depth of burial could also be less - about 50 to 75m.

Zone D: This anomaly is due to a source at or near surface on line 1800N and appears to plunge northward. The dip is steep and to the west. Outcrop in the area is limited due to glacial overburden. That which has been observed is siltstones and sandstones of the Crimson Creek Formation.

Zone E: The anomaly plunges south. The source is near surface on line 1200N. It appears to be 15m or less in width. The location is coincident with a contact between basalts and Crimson Creek conglomerates. No other magnetic anomalies occur in this geologic situation.

Zones H and J: Zone H lies close to the eastern margin of the western ultrabasic (Zone R). It is offset several times by faults. Anomaly J in the north is in a similar position but smaller in amplitude probably because it has a narrower source. The signature of both anomalies is distorted by the large amplitude anomaly due to the ultrabasic. At one location anomaly J coincides with a mapped gabbro. The geology of the rest