

SHEET 10 REGIONAL CONTD.

Further east of this major magnetic high trend, between PPs 77 and 78 i.e. near Birch Inlet, a small segment of another major magnetic high trend is showing on this sheet and like the former trend extends south on Sheet 14. This trend has a Tertiary (Macquarie) cover, but presumably the same cause.

To the West there are some minor magnetic highs intra-Cambrian (Dundas), conforming well with faults, linears and lithological boundaries.

The E.M. contours are complex over both Cambrian and pre-Cambrian, west of the major magnetic trend (PPs 54 to 75) and flattish to the east over the Cambrian Dundas, becoming more complex again over Tertiary Macquarie sediments.

Within the complexity over the Cambrian and pre-Cambrian areas it is possible to discern some regional trends although somewhat discontinuous. Two of these E.M. high trends 10/3 and 10/4 faithfully follow parallel portions of the major magnetic trend discussed above.

The other most significant one closely follows the NE-SW trending Cambrian-pre-Cambrian junction fault (compare PP 71 - PP 52 for approximate location) and has been designated 10/7 and 10/5 in certain portions.

There are several other correlations of E.M. trends possible, some of which are discussed in detail below.

DETAILED:

10/1: North west of PP 49 (NW corner of the sheet) there is an E.M. high anomalous area consisting of a NE-SW trend, one ratio 1.38, more or less parallel to, but displaced to the east from, a major fault and parallel with the regional magnetic trend, together with an E.M. high to the west, ratio 1.1, large, broad with steep gradient on low frequency, occurring at the intersection of the major Cambrian-pre-Cambrian junction fault with another fault.

On magnetics there is a suggestion of a disturbing effect which might be continuing from or isolated from a minor magnetic high to the east. There is a further possibility of some spurious effect here arising from magnetic control or sheet joins.

The favourability is somewhat lowered by possible correlations with altimeter record.

10/2: In Cambrian Dundas, north of PP 49, a magnetic anomaly, with magnitude of the order of 400 gammas, occurs between two linears. Near the eastern linear some correlation of an E.M. high trend with ratios of the order of 0.5 is possible. Near the peak of the magnetic high an E.M. anomaly, with ratio