

SHEET 18 DETAILED CONTD.

interesting correlations between E.M. anomalies and near surface structural trends, providing information on and substantiation of the logical character of the E.M. technique.

In the pre-Cambrian terrain on this sheet it appears that the N-S trending magnetic highs coincide with valleys and lithological units composed predominantly of Quartz-Mica-schist whilst the ridges consist essentially of metaquartzites.

18/6: About mid-way between PPs 18 and 19, in the pre-Cambrian, the E.M. high trend with ratios from 0.5 - 1.0 conforms with strike and magnetics. The best ratio of 1.0 occurs at a flexure in the magnetic trend.

Whilst there is the possibility of topographic or drainage effects, this small broad series of anomalies undoubtedly correspond to a conductor in the vicinity as there exist lower response for lower altitudes on neighbouring portions of the chart.

18/7: Occurs in a valley (compare just east of PP 19) coincident with a magnetic high of 80 gammas and a creek. Ratios are of the order of 0.9. At the south end of the magnetic anomaly there is a transgressive trend to the east, which appears to be coincident with probable faulting on air photos. At the north end, E.M. and magnetic trends terminate together more or less in the vicinity of complex magnetics.

18/8: Just east of PP 19, there are three E.M. anomalies which coincide exactly with a lithological junction. The northern-most one has a ratio of 0.83. There is no suggestion of an anomaly on the next two flight lines whilst on the following two to the south small unratiod highs appear. From air photos the anomalies lie on the western side of a cliff and, even if not actually caused by the junction itself, would appear to arise from some structural feature trending in the same direction.

18/9: Just east of 18/8, are two good ratioed E.M. anomalies which, whilst occurring on top of a ridge, coincide also with a fault indicated by detailed photo-interpretation.

18/10: To the south and slightly east of 18/9, an E.M. anomaly falls on the magnetic low transgressive trend near the 18/9 fault, having a ratio of 3.0 and 1.2 degrees magnitude on L.F. at 670 feet. It is a large broad anomaly in the neighbourhood of noisy L.F. trace and very small H.F. correlation with drainage or topography is possible.