

where it is associated with a broad arsenic anomaly. Very high anomalous values occur within sediments located near to the Ring River Fault on Line 2600N. Here values of 295, 215 and 400 ppm were obtained from 3420-3380E. In addition these high Pb values on Line 2600N are associated with anomalous Cu, Ni, Zn and As.

Geophysics

The report on the magnetics survey and the resulting profiles is to be submitted by the Anglo "in house" geophysicist.

Discussion

Debate over the origin of Renison/Bischoff style mineralisation continues unabated (Hutchison, 1979). Whilst there is some evidence from RBE 6, drilled approximately 900m to the east of GAP west, that much of the pyrite and pyrrhotite encountered within a black shale sequence is of syngenetic origin, there nevertheless are problems regarding the origin of associated Sn, Cu, Pb, Zn, Ag mineralisation. Although much of this ore deposition shows a spatial relationship with granitoid intrusions, the stratiform nature of some deposits raises the possibility of an initial syngenetic origin. Within GAP west, three areas of interest have been identified from field mapping and geochemical studies.

Ring River Fault : Of the three areas discussed below, the Ring River Fault is of particular significance for the following reasons:-

1. This fault is a long lived structural feature, which commenced activity at least during Cambrian time and has probably been reactivated several times since.
2. The fault has tapped Devonian granitoids and has acted as an intrusion pathway for high-level microporphyrific phases of these plutonics and the attendant late-phase, quartz-tourmaline bearing alteration fluids.
3. The presence of anomalous soil chemistry, for a number of elements, associated with this fault on Line 2300N and possibly on Line 2500N.
4. N.B.! The south-west extension of this fault would appear to intersect the southern extension of the Bassett-Federal Fault zone. This latter fault is a major structural feature, along which tin mineralisation occurs.
5. The intersection between these two faults is predicted to plunge approximately 50° to the north. Moreover this intersection, should it continue uninterrupted northwards, would be expected to occur at depth inside the western margin of the GAP lease from 3200N northwards.
6. An initial lineament study indicates that the Ring River Fault has been cut by a number of north-west trending lineaments. One of these lineaments is closely associated with highly anomalous soil geochemistry on the western end of Line 2600N.