

It is not envisaged that suitable reactive rocks such as limestones or dolostones occur at depth along the Ring River Fault. However the presence of carbonated ultramafics (T8606) coupled with the possibility of tensional cavities developed either on the Ring River Fault itself or localised where prominent north-west trending lineaments cut this fault is of significance. This latter structural environment suggests the possibility of steeply plunging pipe-like bodies with the result that surface extent or expression of such bodies may not be significant.

The Myrtle Grove Fault : Likewise deserves further attention. This inferred fault separating the Serpentine Hill Complex from the basalt/dolerite complex, may likewise have acted as a locus for epigenetic mineralising solutions. Points to note in this connection are the anomalous soil geochemistry on Line 2500N and the anomalous manganese-rich ironstone sample (T8610). Again reactive rocks along the fault are unlikely to occur, other than the possibility of talcose and carbonated ultramafics.

Contact between basalt/dolerite complex and polymict breccias : should be carefully investigated both from the point of view of possible exhalative Cu/Zn rich ores and/or epigenetically introduced ores. Points to be noted are:-

1. Porosity and competency contrasts between the basalts and the underlying breccias, some of which approach orthoconglomerates;
2. Anomalous soil geochemistry in the vicinity of the contact on Line 2100N;
3. Possibility of high-level intrusive plutonics beneath sediments as evidenced by contact metamorphosed, and minor hydrothermally altered sediments at 1600m on the "Ring River Road (T9006).

RECOMMENDATIONS

Because of the close proximity of GAP west to the operating mine of Renison Bell the area requires additional geochemical, geophysical and where necessary geological mapping. Firstly a full interpretation of the geophysical magnetic data, including identification of the Ring River and Myrtle Grove Faults and an estimation of their attitudes, is required.

Completion of C horizon geochemical soil sampling on some of the grid lines is necessary.

Current work has delineated three zones of interest namely:

Ring River Fault;

Myrtle Grove Fault;

Sediments along the eastern margin of the basalt/dolerite complex.

Structurally, the Ring River Fault is the most important feature on the lease. The SW extension of this fault runs out of the western margin of GAP west into the Renison Bell lease. If possible this SW extension should be mapped and where possible samples collected for geochemical analysis.