

2. Sandstone/siltstone unit (which appears to overlies the polymict breccias). These sediments comprise massive to partially bedded iron stained weathered sandstones and siltstones. Where bedding is apparent it strikes a little east of north and dips east at between 84-60° with facing to the east. Minor quartz veins cut the sequence in isolated occurrences. On the Ring River Road at 1740m the bedded siltstones have the appearance of being somewhat indurated (hornfelsed?). An unusual feature is that within some of the bedding planes at this locality are thin (1-10 cm thick) lithic breccia to tuff horizons, which appear to have been invaded in part by quartz-rich solutions. The resulting alteration assemblage developed along the thin bedding planes comprises quartz-epidote-actinolite-pyrite-(axinite?). It is suggested that this exposure is in close proximity to shallow buried equivalents of the Pine Hill Adamellite.

Quartz-tourmaline intrusive rocks : Exposed on the tie line 1040m are numerous cobbles of intrusive quartz-tourmaline rock, which from regional consideration marks the position of the Ring River Fault. Two textural types were collected (T8636, T8637). Both are characterised by the presence of quartz and tourmaline which appear to have replaced a former microporphyrific granitoid. The clear structural control of these rocks along the Ring River Fault suggests that they represent altered equivalents of the Pine Hill Adamellite.

Glacial Deposits : Glacial and periglacial deposits are variably distributed throughout GAP west. Good exposures (3000N 3850E) are composed of white leached siliceous cobbles and pebbles set in a clay to sandy matrix. Through much of the grid these deposits do not appear to be very thick and have been identified during grid mapping by the presence of small quartz granules set in a leached white clay.

### STRUCTURE

Structurally, GAP west is relatively simple. However, difficulties arise in attempting to integrate this area with the structural features found at a regional scale. The ultramafic/mafic plutonic rocks and spatially associated mafic lavas may be regarded as a disrupted ophiolite, which has been tilted on edge and now faces east. The western margin of the Serpentine Hill Complex is faulted against deeply weathered and leached sandstones and siltstones. The position of this fault (Ring River Fault) is marked by the sudden transition from serpentinised ultramafics through to sediments. This fault trends NNE and from a visual examination of magnetic data the structure dips steeply to the WNW. The SW continuation of this fault will intersect the SE extension of the Bassett Federal Fault zone in the vicinity of the Ring River itself. The Ring River Fault is regarded as the major structural feature in the area under discussion and tenuous evidence suggests that it may have commenced movement during Cambrian times and then been reactivated during the Devonian. This fault appears to continue to depth and has acted as a pathway for high level tourmalinised equivalents of the Pine Hill Adamellite.