

Comments:

The Grand Prize Fault was intersected a little earlier than expected indicating that the fault shallows towards the north.

The mineralized fault intersection comprises siderite, chlorite, abundant sulphides including pyrite, chalcopyrite, sphalerite, arsenopyrite and galena, and minor cassiterite. The latter is relatively coarse grained (range 50-400  $\mu\text{m}$ ; mean 200  $\mu\text{m}$ ) and, although associated with sulphides (and carbonate-chlorite aggregates), is only incipiently sulphide locked (Appendix 3). As with GP6, the very low acid soluble tin levels indicate that essentially all of the tin is present as cassiterite.

This hole was drilled in the expectation that the Red Lead Conglomerate should be strongly mineralized and altered because it is part of the lower, down-thrown fault block A. In fact, tin values in the conglomerate are exceptionally low (range <10 to 70 ppm, mean 10 ppm). Zinc values are weakly anomalous (range 230 to 1310 ppm, mean 390 ppm). It is clear, however, that the conglomerate was sufficiently calcareous to be reactive to hydrothermal fluids as actinolite-axinite alteration is quite strong. This result suggests two possibilities:

- (1) That the hangingwall carbonates are much less susceptible to mineralization than their footwall equivalents (cf. Renison).