

6. IMPLICATIONS FOR WORK ON MT CHARTER PROSPECT

In applying some of the concepts developed during this study to the Mt Charter area there arises a few ideas which may be useful in interpreting data from work in this area.

Most significantly the findings give encouragement that Mt Charter is of similar structural setting to Hellyer and Que River. This is based on the situation of the prospect on the same N-S trend as the other deposits, though this trend is now displaced by the fault south of Que River. The mapped indications of fold closure support the presence of an underlying basement structure, though the structural geometry at Mt Charter is somewhat complicated by adjacent faults to the SW. The presence of the barite cap at Mt Charter could provide an interesting addition to the proposed model with the possibility that the barite is remobilised during deformation and has precipitated as a saddle-reef higher in the stratigraphy above the source mineralisation. A similar model has been proposed for the precious metal deposits on the Henty Fault, which are thought to have originated from VMS mineralisation.

It is difficult to pursue any model for Mt Charter without first reinterpreting the structure. Much of the information must come from drilling, due to lack of exposure, but more surface structural information is vital. The present mapping shows complexities that cannot be explained. Basalt Lava to the south of Mt Charter suggest a south plunging syncline strikes through the barite zone, though an adjacent F1 fold is interpreted as synclinal in contradiction of the F1 plunges (see Figure 8).

7. RECOMMENDATIONS

The most immediate implications of the results from this study are for the interpretation, or re-interpretation, of ore position targets in planned drilling. The results of this study show that important features of the structure in the Hellyer area are not evident from the outcrop mapping. Complexity due to fold interference and faulting can cause significant problems in the geological interpretation, resulting in an incorrect model of the attitude of bedding and therefore incorrect interpretation of drill targets. By more representative sampling of bedding orientations, and routine analysis of this data during interpretation of outcrop, a far more accurate model can be achieved for three dimensional geometry of lithologies. Use of the stereonet in analysing bedding planes can also provide accurate projections of apparent dip in constructing geological sections.