

A Comparison of Renison Bell and Cleveland Mine Geology to Ring River Grid
Geology and Exploration Implications:

Table 1 summarises the geology of the three areas comparing lithology of sedimentary rocks, igneous rocks, mineralisation, structural controls to mineralisation and mineral zoning. The geology of Renison Bell and Ring River Grid geology show the most similarity, which is not surprising considering their close proximity to each other. As stated above Success Creek Group and Rosebery Group are equivalent successions, however at the Ring River area the Rosebery Group appears more diverse in composition. In Table 1 tie lines drawn between Renison Bell Shale, and Munro Creek Slate, and Dalcoath Quartzite and Stitt Quartzite imply a further correlation between groups. The correlation of the Stitt Quartzite and Munro Creek Slates to formations at Renison Bell which are immediately overlain by orebodies has exploration importance.

Structural controls to ore genesis at Renison Bell and Cleveland have exploration implications. The Basset Federal fault at Renison Bell acted as a feeder to the orebodies. The implications is that the faults in the Ring River area formed before granite intrusion and may have acted as feeders to cassiterite mineralising fluids not exposed at surface.

Mapping metal zoning does not appear to offer much potential for initial exploration in the Ring River area.

The absence of greisen in the Ring River area is not necessarily a detraction from its exploration potential. The vertical extent of greisen mineralisation tends to be rather limited, and only in the order of 100-200 metre (G. Smith, 1979). Potential for detection of greisen at depth exists.