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Within the Comstaff areas, the faulted serpentinite bodies have been shown to have enhanced cation concentrations indicating the presence of hydrothermal solutions.

A dolomite is the most common host rock for replacement hydrothermal tin mineralisation at Renison, Cleveland and Mount Bischoff. Within the Comstaff tenements, older dolomites have been identified in the Heazlewood and Ramsay areas and at Mount Bischoff. These areas have anomalous tin contents in stream sediment samples. The Ramsay area has evidence of contact metamorphism from the Meredith Granite, and a well defined high conductivity zone CS 24. In the Heazlewood area, photointerpretation has shown a circular structure which may represent a hidden granite.

In the Renison area, which is the most anomalous tin province and equates geochemically with Mount Bischoff, there are no known dolomitic horizons. However, the ultramafic bodies are chemically similar to dolomite and could therefore host replacement tin deposits. Borehole RBE 2 has intersected carbonitised serpentinite with disseminated pyrrhotite, sphalerite, chalcopyrite and pyrite. Some carbonate veins have galena in addition to the above minerals. The lead and zinc minerals may be in the form of a halo surrounding a tin rich core.

The Ordovician dolomites in the core of the Huskisson Syncline, in the north western part of Exploration Licence 5/63 part 6 and the south-western part of Exploration Licence 5/63 part 5, could host replacement tin deposits. These rocks are considered to be of low priority due to the vast thickness of sediments between the underlying granite and the outcrop of the dolomites. There is an axial plane fault which could act as a conduit.

## 5. CONCLUSIONS

Exploration Licence 5/63 was granted in 1963 and for the first five years exploration was confined almost entirely to the tin deposit at Mount Bischoff. Lack of access and thick vegetation hampered the regional mapping and sampling programme. Progress through the thick bush can only be achieved by cleared walking tracks and bulldozed roads. Helicopters are useful, but can only