

sandstones and micaceous quartzites with minor siltstones and shale. The sandstones are recrystallised, almost cherty, within the one metre zone underlying the No. 3 Carbonate.

3.2. No 3 Carbonate

The No. 3 Carbonate is the main ore bearing horizon at Renison. Away from the mineralised areas it is comprised of fine grained grey dolomite with minor quartz, talc and tremolite. Where mineralised, it consists of 50-70% sulphides with disseminated quartz cassiterite and rare fluorite. The main sulphide is magnetic pyrrhotite with traces of chalcopyrite, sphalerite, galena and stannite. Patches rich in pyrite and arsenopyrite also occur. The tin occurs mainly as cassiterite with an average grain size of 70 microns - thus it is invisible to the naked eye, yet the average grade of this ore-body is 1.8% Sn. Under the lens the cassiterite is seen to be yellow in colour and columnar in crystal form.

At the margin of the pyrrhotite ore there is a narrow zone of manganese siderite with disseminated pyrrhotite and coarse grained recrystallised dolomite. Coarse grained magnetite dykes also occur, but are rare. The contact zones with the footwall, hanging wall and unmineralised dolomite are sharp and distinctive. The pyrrhotite ore may take up the full width of the carbonate bed, and there is not any noticeable decrease in width nor drop in grade away from the Bassett-Federal Fault.

3.3. Renison Bell Member

The Renison Bell Member is very similar to the Dalcoath Member but contains a greater proportion of shales. This rock unit hosts the "Two Point Five" orebody (so called because it lies between No 3 and No 2 Carbonates). The mineralisation consists of veinlets and disseminations of cassiterite, arsenopyrite and pyrrhotite with quartz and tourmaline, in brecciated quartzite. The grade of this orebody is 1.3% Sn. It is limited to a zone adjacent to the Bassett-Federal Fault.

3.4. No. 2 Carbonate

The No. 2 Carbonate is similar in all respects to