

Crone electromagnetic, magnetic and self potential anomalies. The highest tin values recorded were in a 3m sample, collected from 140.5m to 143.5m in Costean 3200N A, which analysed Cu 10 ppm, Mn 1.8%, Ni 465 ppm, Pb 420 ppm, Zn 575 ppm, Sn 370 ppm. The rock type is dolomitised serpentinite with disseminated (relict?) chromite. In Costean 3200N B, the highest value was in a 4m sample, collected from 60m to 64m in talc chlorite schist, which analysed Cu 150 ppm, Mn 1400 ppm, Ni 325 ppm, Pb 1250 ppm, Zn 555 ppm, Sn 250 ppm.

The values in the channel and chip samples collected from Costean 3600N (plan TAS/2/1561) were uniformly low. The best being in a 4m sample, from 40m to 44m in deeply weathered manganiferous conglomerate, which analysed at Cu 110 ppm, Mn 1.05%, Ni 60 ppm, Pb 540 ppm and Sn 40 ppm. The weathered bedrock values do not substantiate the anomalous soil geochemistry on grid lines 3400N and 3600N. Weathered and leached hydrothermally altered conglomerate, with quartz-tourmaline-pyrite-pyrrhotite-arsenopyrite-?cassiterite in veinlets, is exposed in a cutting on the road north of the costean. A grab sample of this rock analysed at Pb 200 ppm, Zn 700 ppm, Cr 200 ppm, Mn >1%, As 50 ppm, Cu 50 ppm, Co 150 ppm, Ag 0.5 ppm. Mineralisation of this style must therefore be fairly localised as no sign of it was found in Costean 3600N.

Grab samples of mineralised, and possibly mineralised, rocks were collected from a number of localities on the grid. Sample number, rock types and values are listed in Appendix II. An extensive rock sampling programme was carried out in the Grid 4 pits, trenches and costeans. The metal values in the carbonates and related rocks are erratically dispersed. The sample values of the carbonate rocks collected are summarised on page 45.

The tin values are sub-economic, but sufficient to account for the soil geochemistry. The chromium values are of particular interest in that they are indicative of ultramafic rocks. This supports the geological evidence that the carbonates are derived by carbon dioxide metasomatism of serpentinitised ultramafics, and were not originally sedimentary limestones.