

5. GEOLOGY

Parts of this section are reproduced from the report:

"Golden Triangle Resources NL Main Creek Magnesite Project Magnesite Resource Estimate, June 1998" by LA Newnham.

Much of the geological information in that section is unchanged as a result of the current program.

5.1 Regional Geology:

The Main Creek magnesite deposits occur in the Bowry Formation within the Arthur Metamorphic Complex (AMC). The AMC is a major north-east structural event which transects north-west Tasmania.

The Bowry Formation consists of pelitic schists and amphibolites and hosts a number of magnetite-pyrite deposits (Savage River and Long Plains), magnesite (Main Creek-Bowry Creek) and silica deposits.

The Savage River magnetite-pyrite deposits, four kilometres along strike from the Main Creek magnesite deposit, are now widely thought to be of a marine, volcanogenic origin, or possible metasomatic replacement of carbonate.

The Main Creek-Bowry Creek magnesite deposits occur near the base of the Bowry Formation. Earlier workers have suggested the deposits are the product of metasomatism of dolomites. However this author, and others, believes the magnesite may be an ocean floor sediment of chemical origin or an evaporitic sediment overlying a mafic volcanic sea floor.

5.2 Local Geology:

The local Main Creek succession consists of a 200-400 m wide package of carbonates, termed the Carbonate Sequence, underlain by granular pyritic schists (Footwall Schists) and overlain by iron rich finer grained schists (Hangingwall Schists).

Drilling suggests the contacts between these three formations are conformable and gradational.