

5.2.1 Footwall Schists:

The Footwall Schists consist of dark gray granular schists, containing abundant bands of quartz and pink feldspar, and variable amounts of magnetite. White, cream and gray carbonate beds are common near the contact with the Carbonate Sequence. Nominations of the Carbonate Sequence-Footwall Schists contact is often arbitrary and based on overall abundance of carbonate.

The Footwall Schist sequence is strongly pyritic with fine-coarse euhedral pyrite often present in the 5-10% range. In drill holes MC 56 and MC 57 the carbonate rich upper section also carried significant chalcopyrite and minor associated gold.

The Footwall Schists are frequently vuggy, water worn, very broken and rubbly. Drilling often encountered high water flows on the gradational contact with the Carbonate Sequence, especially in the central and northern sections of the Main Creek deposit.

5.2.2 Hangingwall Schists:

Little is seen of the Hangingwall Schists at Main Creek because most drill holes collar close to the contact with the Carbonate Sequence. However, where observed in drill holes or road exposures, the Schists appear to be a sequence of green-gray-purple fine grained rocks, with thin interbeds of carbonate. They are locally very iron rich with occasional development of abundant magnetite-pyrite mineralisation.

It is probable that these schists are equivalent to those which host the magnetite-pyrite deposits at Long Plains to the south and Savage River to the north.

5.2.3 Carbonate Sequence:

The Carbonate Sequence is now interpreted by this writer as being a succession of primary sedimentary carbonates, dominated by magnesite with lesser dolomitic units. These sediments have been strongly deformed and altered as a result of tectonism associated with the Arthur Metamorphic Zone.

Minor, and very discontinuous, fine grained schist units are present within the Carbonate Sequence and may have originally been either fine grained sediments and/or volcanics.

Relict bedding observed in a number of dolomitic units suggest bedding is now approximately parallel to schistosity.