

L.S. 9 1313m

Sample Number : 10979Identification : Quartz-sericite-pyrite schist with evidence of pre-metamorphic quartz-pyrite fissure veinsDescription :

The hand specimen is a 15cm length of drill core about two-thirds of which is very light grey, fine-grained rock with mottles and veins of pyrite and with foliated greenish yellow streaks of sericite aligned at about 40° to the core axis. The other third is dominated by patches of pyrite.

A staining test revealed no K-feldspar.

In thin section the least pyritic portion of the core is seen to consist of moderately to heavily strained, sutured, anhedral quartz (commonly 0.05 to 0.5mm in size), abundant foliated, relatively coarse sericite and a significant amount of subhedral pyrite (about 0.05 to 0.3mm in size). Some sericite occurs in streaks. Pyrite occurs both as disseminations and in heavily strained quartz veins. An approximate mode is :

60-70%	quartz
25-35%	sericite
3-5%	pyrite

The heavily pyritic regime represents similar rock except that there is an abundance of subhedral pyrite (up to 0.7mm) associated with deformed, elongate quartz grains in structures confidently interpreted to represent deformed quartz-pyrite fissure veins. An approximate mode is :

55-65%	quartz
20-30%	sericite
10-15%	pyrite

Comments and Interpretation :

This sample is a quartz-sericite-pyrite schist. It is interpreted to represent an intensely metasomatized rock which has been sheared during metamorphism. Prior to metamorphism it consisted of quartz, sericite and disseminated pyrite with fissure veins of quartz and pyrite. There are no remnant textures or minerals which reveal anything about the nature of the precursor rock which experienced such intense silicification, sericitization and pyritization.