

**GOLD-BEARING, QUARTZ VEINS FROM THE AJMAL MINE  
KUALA LIPIS AREA, PAHANG, MALAYSIA**

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At present, the Kuala Lipis area is one of the most significant gold-producing regions in Malaysia with most of the gold being recovered from the alluvium. The gold-bearing horizons are confined to gravelly or sandy layers situated just on top of the local Carboniferous limestone bedrock.

However, substantial amounts of primary gold occur within the quartz veins which transect the Carboniferous bedrock. Most of these veins are steeply dipping and fault-related. One set of veins strike approximately north-south while the second set is predominantly northwest-southeast.

Gold occurs as free, disseminated grains within the milky vein quartz. Preliminary studies of polished ore sections indicated that free gold is also intimately associated with sulphide aggregates consisting of predominantly galena, sphalerite, pyrite and an unknown olive-grey mineral. Optical, chemical and X-ray diffraction studies confirmed the olive-grey mineral to be tetrahedrite, the antimony-rich end-member of the solid-solution series  $\text{Cu}_{12}\text{Sb}_4\text{S}_{13} - \text{Cu}_{12}\text{As}_4\text{S}_{13}$ . This mineral has only been reported from two other areas in Malaysia. The mineralogy and textural complexities of the ores will be discussed.

Preliminary fluid inclusion studies of vein quartz containing gold and mixed sulphides will also be presented together with a new technique for the preparation of doubly-polished thin sections.