## Perubahan batuan dinding berkaitan dengan permineralan emas di Penjom Gold Mine, Pahang, Malaysia

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Penjom in Kuala Lipis, Pahang, is an active mining area. The bedrock of the area consists of volcanoclastic rocks (tuff and lithic tuff) and sedimentary rocks (sandstone, siltstone and limestone), being part of the Permian Gua Musang formation. The volcanics and sedimentary sequences are later being intruded by microgranite, rhyodacite and quartz veins. The main mineralization in the area is gold, associated with pyrite, chalcopyrite, galena, arsenopyrite and sphalerite which is generally found in the alteration zones. Wall rock alteration in Penjom is due to the interaction of hydrothermal activity, igneous intrusions, quartz veins and fault zones. Three dominant types of alteration recognized are silicification, argillic alteration and chloritisation, marked by a prolific development of secondary minerals over the primary minerals. Silicification is marked by the development of secondary quartz, generally around the intrusions. Argillic alteration is marked by the development of clay minerals such as montmorillonite and illite and limonite generally around the intrusions and fault zones outside the silicified zone. Chloritic alteration is marked by the presence of chlorite, epidote and carbonate, developed generally in the outer-most zone outside the silification and argillic zones.

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