

Paper B9

An investigation by variable pressure scanning electron microscopes (VPSEM) of primary gold from Selinsing Gold Mine, Pahang, Malaysia

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Characterization of primary gold in Selinsing Gold Mine, Pahang has been done using the variable pressure scanning electron microscopes (VPSEM). The VPSEM has been found to be a very useful technique in the characterization of gold samples. VPSEM study shows that the gold samples in the Selinsing Gold Mine, Pahang are associated with other minerals such as arsenopyrite, pyrite, rutile, scheelite, FeAsS ± Pb mineral, iron oxides and a range of trace minerals that include chalcopyrite, tetrahedrite and sphalerite. VPSEM analysis also shows that Au composition ranges from 89.20% to 89.30% with 10.70%-10.80% Ag in the gold samples. The presence of Ag being seen as non-uniform replacement of Au in the gold alloy.