out first to form the material of pegmatite veins. The separation of these constituents left the solutions relatively enriched in lime, carbon dioxide, iron, sulphur, potash, and gold, and their reactions with the wall rocks caused the formation of replacement deposits whose principal minerals are calcite and auriferous pyrite.

There is little direct evidence to connect the gold of the Davidson property with the porphyry, except the fact that the veins are confined within the intrusive mass. However, the proof that the neighbouring stock, which is petrographically identical with the Davidson porphyry, carried gold, renders the conclusion inevitable that the gold of the Davidson property was also a magmatic constituent. The differentiation has here continued uninterruptedly to the stage in which the mineral constituents of the magmatic solutions are silica and gold, and these are deposited as quartz with native gold.