Gold abundances in some metasedimentary rocks of Peninsular Malaysia

WAN FUAD WAN HASSAN, MOHD SUHAIMI HAMZAH AND KHALIK HJ WOOD

Jabatan Geologi Universiti Kebangsaan Malaysia 43600 Bangi

A preliminary study was carried out on the gold abundances of some metasedimentary rock formations of Peninsular Malaysia. Samples from selected rock formations from Gua Musang, through Raub to Kuala Pilah representing the Central Belt, and from Marang and Mersing representing the Eastern Belt were collected. The samples were analysed using Neutron Activation Analysis (NAA) by MINT, Bangi. The analytical results obtained were analysed graphically using log-probability graph paper.

Result of the study shows that most of the samples were multipopulation. The main population representing the background population is usually higher than the average crustal Au abundance of 4.0 ppb. An anomalous population usually forming a smaller fraction of the sample population may have Au abundances a few times higher than the background values. This finding is significant as it indicates that the earth's crust in this part of the peninsular has higher gold abundances. The sedimentary rock formation may be the source-rock for gold mineralization in the Central Belt. If so, than it explains why the gold occurrences in the Peninsular are always away, by a kilometer or so, from the main granite bodies.