Gold and REE distribution patterns in Tasik Cini volcanogenic massive sulphide deposits

G.H. Teh¹, Sharul Amin Ahmad¹, Mohd. Suhaimi² & Abd. Khalik HJ. Wood²

¹Department of Geology, University Malaya, 59100 Kuala Lumpur ²Unit Tenaga Nuklear, Kompleks Puspati, Bangi 43000 Kajang

A study was made of the rare earth elements (REE) in the volcanogenic massive sulphide deposits in the Tasik Cini area, Pahang Darul Makmur, to see whether their distribution patterns can serve as hydrothermal tracers during ore genesis.

Taking advantage of the neutron activation analysis (NAA) technique, gold (Au) was also analyzed to see its vertical and lateral distribution pattern so typical of volcanogenic exhalative massive sulphide deposits.

Results of the study show certain patterns and relationships between REE and gold distribution in different parts of the massive sulphide ore bodies due in part to the ore minerals present, the nature of the hydrothermal solution and the water-rock interactions.