Paper B3

Characterisation of gold mineralisation, Sungai Charah – Cini Timur area, Pahang

Teh Guan Hoe*, Nurul Fatehah and Hazel Hamilson

Geology Department, University of Malaya
Email Address: tehgh@um.edu.my

The Sg Charah-Cini Timur area is bounded by longitude 103 02'E to 103 05'E and latitude 3 15'N to 3 18'N, SE of Tasik Chini and about 90km from Kuantan. The area is dominated by Carbo-Permian metasediments of the Mersing Beds which consists of slate, phyllite and quartzite.

Gold is encountered in quartz veins as primary eluvial or colluvial gold on hillslopes or as alluvial gold in adjacent streams and rivers. Jets of water are directed at and around loose material along quartz veins along hillslopes and foothills and gold is recovered by panning or simple mobile palongs. Ore material from certain hillslopes were ground on site in mini grinders and then recovered in mini palongs. Gold was panned from 2 hillslopes in the Cini Timur area whereas in the Sungai Charah area gold was panned from 2 hillslopes and an alluvial mine.

Binocular study show that physically the gold grains in the Cini Timur area are angular to rounded in roundness and prismoidal to discoidal in sphericity with average lengths of 1.17 - 3.64 mm and widths of 1.39 - 2.02 mm. The gold grains recovered in the Sungai Charah area are subrounded to angular in roundness and have subprismodal to subdiscoidal sphericity with average lengths of 0.3-3.0mm and widths of 0.5 - 4.0 mm.

EPMA analyses show that geochemically the gold grains from Cini Timur area have 4 main sets of fineness values of 601.5 - 663.9, 720.1 -744.9, 754.0 - 799.6 and 808.6 - 843.1. The gold grains from Sungai Charah area, however, have 2 main sets of fineness values of 852.2 -883.1 and 900.7 - 932.0.

Warta Geologi (Newsletter of the Geological Society of Malaysia), Vol. 36, No. 2, April-June 2010