

PGA-101

XRD, XRF and SEM analysis of pottery from jetty and administrative sites, Sungai Batu Complex, Bujang Valley, Kedah

MOHD HASFARISHAM ABD HALIM & MOKHTAR SAIDIN

Pusat Penyelidikan Arkeologi Global, Universiti Sains Malaysia 11800 USM Pulau Pinang
Email address: dustur_almuslimin1986@yahoo.com; mmokh@usm.my

Abstract: Archaeological excavation at Sungai Batu Complex exposed iron smelting workshop and monument sites. Both of the older monuments and iron smelting workshop dated at 6th Century BC. The monument sites functioned as a ritual, river jetty or dock and the administrative buildings for the dock. One of the important artifacts found during the river jetty and administrative buildings excavation is the potsherds. This paper will discuss the analysis on the 15 potsherds and 17 clay samples to answer the origins of the raw material used. The composition

of potsherds and the clays was studied by using XRD, XRF and SEM at the Center for Global Archaeological Research, USM. The results of the analysis showed all the potsherds were made from local clay. Therefore, this shows that the population at Sungai Batu Complex during this early civilization period knew the location and the quality of raw materials for pottery making.

Keywords: Sungai Batu Complex, early civilization, pottery, clay