

## **Hidrogeochemistry of salt lick in Segaliud Lokan forest reserve, Sandakan Sabah**

### **ABSTRACT**

This study characterizes a series of salt licks located in Segaliud Lokan Forest Reserve and describe their physical geochemistry properties as early findings. The geology background of this rainforest primarily made of Kulapis Formation which consist of sandstone, mudstone and shale. The rock unit also comprises of mixed rocks or *mélange* with rock blocks of different ages and origin, commonly embedded in shale matrix. Five (5) salt licks have been identified in the area which is hydromorphic type. Soils, water, and rock samples were taken from each salt licks as well as control soils samples. The ranking order of the concentration of major elements in salt lick soil are Ca> Mg>K>Na. Whereas the average ranking for trace element are Mn> Pb>Cu>Zn>Ni>Cr>Co. Water samples taken high in Mg: 1183.99 mg/L, Na: 3950.09 mg/L, Ca: 5245.62 mg/L, and K: 579.37 mg/L which follows the ranking Mg> Na> Ca> Kl. Mineralogical content in soil samples were acquired using XRD method which results in the present of quartz, clay and iron oxide.