ABSTRACT


Regional mapping administratively into three regions including Eastern Ungaran and Bergas District, Semarang Regency and Mranggen District, Demak Regency, Central Java Province. Ungaran regional geology has been mapped by a geologist, but in general scale. This study aims to conduct geological mapping in a more detailed scale. Geomorphology mapping area is divided into three units based on its morphogenesis, namely fluvial landform unit, denudasional structural landform unit, and denudasional landform unit. Stratigraphy mapping area is divided into five units, from the old to the young as follows: unit carbonaceous claystone unit; sanstone units, limestone units, volcanic breccia units, and units of alluvial deposits. Geological structure of this area are anticline and sincline, shear fault produced by the tectonic forces of the north-south Java direction, and shear structures. Geological history began on: Late Miocene, sedimentation environment of the ocean basins (continental slope), deposited by turbidit, carbonaceous limestone units contained tufaceous sanstone layer material is the result of volcanic origin redimentation of volcano, then still in the environment and the same process, deposited unit of sandstone. Pliocene until Plistocene phase the volcanic breccia deposited and volcanic sedimentation; when Holocene erosion process, forming alluvial deposits. Georesources of this area is limestone and sandstone mining deposits. While the potential for disaster in the form of landslides (landslide) and the crumbling rock (rock fall) on the slopes - the slopes of the hills.

Keywords: geomorphology, Stratigraphy, structure, potential