

ABSTRACT

Apu river and Pabelan river flow in Sawangan Subdistrict until Mungkid Subdistrict in Magelang regency directly adjacent Boyolali regency. These rivers accommodate material cold lava eruption of Mount Merapi in the form of sand and rock that is one of the natural resources that exist in Magelang regency. This sandstone resource needs to be calculated because it will be a mainstay of many parties, both for government and the community surrounding Magelang regency.

Resource potential sandstone in the study area is calculated by cross section method (*cross section*). Volume calculation using the rule of gradual changes (*rule of gradual changes*) so every two cross sections will result in one volume. Calculated volume into two broad based cross section and the distance between the two cross sections, using the area average formula (*mean area*) or the truncated cone formula (*frustum*).

Analysis of the calculation results of the resource potential in the area of research, according to Taylor and Steven (1983) based on geological characteristics, classification of resources, and the amount of sand and stones then Apu River and Pabelan River there are 2 categories of potential resources. The medium potential category of sandstone resource (*Moderate Potential*) contained in Apu-1 section to Apu-7 section and Pabelan-7 section until Pabelan-13 section, while the high potential of sandstone resources (*High Potential*) contained in Pabelan-1 section until Pabelan -6 section.

Results of the calculation of sandstone resources in Apu River and Pabelan River were obtained 18,721,786.95 m³ of indicated resources and 9,429,611.18 m³ of measured resource.

Keywords : River, Resources, Potential