

## **ABSTRACT**

Gunung Kidul is rich district which has many potential natural resources. There are many potential resources that not have been explored which can be used. Along with the period development, physical development like industrial and building is increasing rapidly. One of the deposits that can be used is limestone which is located in Rejo Hill in Ponjong Sub district. Gunung Kidul District, Special Region of Yogyakarta.

This research has purpose to estimate the resources in Rejo Hill with Cross Section and Contour method. Highest elevation limit is 325 meters above sea level and the lowest is 260 meters above sea level. Limestone resource estimation calculation is done helped by software Autocad 2007. Based on the Cross Section Method calculation, the resource is 13.265.876,98 Tons and 12.596.453,72 Tons in Contour Method. Based on the calculation, the resource result with Cross Section Method is higher than Contour Method. The difference of the calculation in two methods is 669.423,26 Tons with percent relative 0,05 %.