

## ABSTRACT

Needs for industrial materials of *tanah urug* in Indonesia are estimated to be quite high, such as housing construction needs and the construction of other construction sectors. *Tanah urug* mining business is one of the efforts to fulfill the needs of *tanah urug*. Resource estimation is needed to know the quantity of *tanah urug* resources.

This research was conducted to classify and estimate the quantity of *tanah urug* resources in the IUP Miftah Farid located in Temon Wetan Village, Temon District, Kulon Progo Regency, Daerah Istimewa Yogyakarta Province.

The estimated amount of *tanah urug* resources is obtained by processing research data on topographic maps using AutoCad 2007 Software by making a cross section on each incision.

The results of calculations using the cross section method with the rule of gradual changes guidelines obtained volume of 1,311,122.44 m<sup>3</sup>. Whereas the rule of nearest point guideline is obtained for 1,311,187.07 m<sup>3</sup>. The difference between the calculation of the *Tanah Urug* resource estimate is 64.63 m<sup>3</sup> or 0.005% of the smallest volume. The results of the calculation of the method of cross section rule of nearest point produce a greater volume of resources compared to using the rule of gradual changes guidelines. This difference can occur because in the calculation of *tanah urug* resources with the guidance of gradual changes the distance between the incisions is located at the distance of two incisions that are close together and two sections are needed to get one volume. Whereas in the rule of nearest point the incision is in the middle and has the same influence distance ( $\frac{1}{2}$  L) to the left and right of the incision line, therefore only one cross section is needed to find one volume. In other words the effect of analytical interpretation on the two methods is not comparable.

*Tanah urug* resources in the study area are categorized as inferred resources based on the classification of resources with information obtained through testing wells conducted by the company.