

ABSTRACT

IUP. Tanah Urug Ngadimin is an Exploration IUP. which processes landless commodities for mining activities located in the area of Hargomulyo Village, Kokap District, Kulon Progo Regency, Special Region of Yogyakarta. To find the potential of soil corp resource and resource estimation needs to be done. Resource estimates play an important role in determine the quantity, quality and easy of commercial exploration of a sediment. Resource of estimates are several methods that can be used to estimate the amount of soil resources such as polygon methods, contour methods, cross section methods or the other geometry methods. The scientific of method used is the cross section method. This cross section method was chosen because this method is simple, easy to apply, easy to understand, easily adapted to all mineral deposits, and the estimated completion time is fast, and for application to sediment deposits which generally have high homogeneity.

The problem that is the need for estimation of soil crop resources to determine the magnitude of soil crop quantity in the research area, which can be estimated by the cross section methods with rule of gradual changes and rule of nearest point. Limitation of the problems in this study are the method used to calculate soil crop resources using the cross section method with rule of gradual changes and rule of nearest point and modeling the soil crop resource used to AutoCad 2007 software.

The results of parameters obtained such as geological data, map of scale, outcrop, test pit, and limited level of confidence. The classification of resources is included the classification of inferred mineral resources.

The result of calculation using cross section method with guidance rule of gradual changes obtained by volume equal to 763.497,69 m³ while with rule of nearest point is obtained equal to 763.499,05 m³. The results of the cross section rule of nearest point method resulted in a larger volume of resources than the rule of gradual changes.

This difference can occur because the calculation of soil crop resources with the gradual changes the distance between the incisions in the distance of two incisions adjacent to each other and it takes two sections to get one volume. While on the rule of nearest point the incision position is in the middle and has the same influence distance ($\frac{1}{2} L$) to the left and right of the incision line, and it takes one cross section to find one volume. In other words the influence of analytical interpretation on both methods is not comparable. The result of soil crop estimate pessimistic is 763.497,69 m³.