ABSTRACT

PT. Madjid Tansri Energy is a coal mining company located in Gunung Megang, District of Muara Enim, South Sumatra Province. The Company has completed exploration in block "Z" and then the company requires the estimation of coal resources and reserves planning for coal mining. The data obtained are in the form of data exploration drill data were then analyzed to be known description of coal deposits and coal tonnage.

The method used is of Cross Section Method with Rule Of Gradual Change calculations comparing the extent that using calculation of area rule Simpson 1/3 with Simpson rule 3/8. The purpose of this study is to compare large coal resources using area calculation rule Simpson 1/3 with Simpson 3/8.

In study 2 found that coal seam has a thickness of 0.99 -11.72 m. Seam is part of the Formation Muara Enim. Seam has a strike N 285 $^{\circ}$ E and dip 4 $^{\circ}$ -14 $^{\circ}$. Seam is formed by layering moves toward the Northwest with a slope towards the Northeast bedding.

Coal resource tonnage by the method of cross section calculation of area rules using Simpson's 1/3 is 39.038.131,6 tons and to rule Simpson 3/8 amounted to 39.267.068 tons. A difference a result of calculation resources used calculation of area rules Simpson 1/3 and rules Simpson 3/8 is worth 228.936,4 tons.

Viewed from the National Standardization of Indonesia (SNI) SNI 5015-2011, the coal in the research area including the condition of geology moderate a distance of a point of information \leq 250 yards with the category of measured coal resourced.

Needs to be done calculations coal deposit in the area of research and technical research by mining, economy, marketing- law, the environment, social and government regulation document to the preparation of a feasibility study on a mine. To get the result of reckoning reserves that more accurate, it takes the stage exploration more detailed again by means of a narrowing the distance between a drill hole which is about ≤ 100 m.