

ABSTRACT

According to astronomy, the PT Marga Bara Tambang located at coordinates $101^{\circ} 57' 35,9''$ BT to $101^{\circ} 58' 9,3''$ E and $1^{\circ} 34' 7,9''$ LS to $1^{\circ} 35' 11''$ LS with the Mining Business License (IUP) covering an area of 200 hectare. Location of drilling in central part of the West, direction of drilling according to *dip* of *seam* coal with general direction $N295^{\circ} E/15$, based on the results of drilling and *outcrops* there is one *seam* with *apparent thickness* is 1.3 meters - 6 meters. *Seam dip* between 8° - 14° from North to South. topography with lowest elevation 100 m dpl and hill with highest elevation 140 m dpl. Distance point information according to the geological conditions of the area of research that is moderate. Drill hole spacing ± 50 meter. According to Amendment 1-SNI-13-5014-1998 then coal research areas can be classified into *Measurable Resource*. Assessment by using *Cross Section Standard* method (*Rule of Gradual Changes*) and *Cross Section Linear* method (*Rule of Nearest Point*) both obtained same results for the estimation of coal volume is 396.042,2262 tonnage. While Calculation with *Polygon* method obtained for the estimation of coal volume is 374.284,293 tonnage. Calculation of the volume *overburden* based on *Cross Section Standard* method (*Rule of Gradual Changes*) and *Cross Section Linear* (*Rule of Nearest Point*) both obtained the same result is $2.554.038,287\text{m}^3$, While the calculation volume of *overburden* with *Polygon* method (*Area of Influence*) is $.340.610,787\text{m}^3$. The difference results estimation volume of coal is 21.757,5969 tonnage *Stripping ratio* by using *Cross Section Standard* method (*Rule of Gradual Changes*) and *Cross Section Linear* method (*Rule of Nearest Point*) obtained the same result is 6.4: 1 while using the *Polygon* method (*Area of Influence*) is 6.25:1. Both of that result is smaller than specified *stripping ratio* by the company 8:1.

Keyword : *overburden, seam, dip, cross section, standard, linear, rule of gradual changes, rule of nearest point, polygon, infarea of influence.*