ABSTRACT

The estimation of resources obtained through the calculation and the analysis towards the data of the details exploration that is the drilling data. The estimation of resources was performed in order to find out the estimated amount of tonnage of coal resources and then will continue with calculation of stripping ratio at research area. The location of mapping which is located in the area of the concession of PT. Raja Kutai Baru Makmur is 176 Ha, which is located in the village of Kutai Lama, Sub-district of Anggana, District of Kutai Kartanegara, East Borneo province.

The aim of this research is to apply the Cross Section method to determine and to estimate the amount of coal resources in the research area.

The method used in this research is observation in the research area using the estimation of reserve method by comparing between the Cross Section of a gradual change and Cross Section of nearest point.

Expected results of this research is to be able to determine volume of overburden, seam A, interburden and seam B, determine coal tonnage, and stripping the ratio (SR).

Measured Resource that calculate by using the Cross Section method of being based on rule of gradual change obtained amount of seam A tonnage is 1,306,918.35 ton and amount of seam B tonnage is 540,591 ton, so the total tonnage coal is 1,847,509.35 ton. The volume overburden and interburden that obtained is 9,596,094 BCM with SR 5.19:1.

The Cross Section method was based on rule of nearest point obtained amount of seam A tonnage is 1,367,026.90 ton and amount of seam B tonnage is 561,940.96 ton, so the total tonnage coal is 1,928,967.86 ton. The volume overburden and interburden that obtained is 9,896,220.45 BCM with SR 5.13:1.