ABSTRACT

PT. Kaltim Prima Coal is one of the largest mining companies in Indonesia engaged in coal mining. Mining area owned by PT. Kaltim Prima Coal (PT KPC) covering 90,960 ha located in Sangatta and Bengalon, East Kalimantan.

The problem in this research is related to the beginning of the limitation of open pit mining (Pit Limit), especially Pit-J. Therefore it is very unfortunate if the area of Pit-J is just stockpiled just because there are still seam-seam coal that can still be optimized to be mined. In order to support it, it is necessary to support good mine planning by using Auger method in Highwall wall area of Pit-J and outcrop which is considered potential to be mined.

To know the amount of coal resources still contained in Pit-J PT. Kaltim Prima Coal, it is necessary to do coal modeling for next stages of coal reserve assessment on mining planning by Auger method. The conclusions of this research are:

a) Coal geometry parameters consist of 6 points.
b) There are 20 seams conducted by appraisal using the Cross Section Method with the Rule of Gradual Change Guidelines. The result of the coal reserve assessment resulted in a measured resource of 6,340,859,161 Ton.
c) Obtained 9 seams planned for mining by Auger method. Seam-seam are: Seam P2, NU, PN, MD, B2 BN, PU, PL, L2.
d) From the data processing of the method, obtained the volume of mining plan of 1,622,860 Ton.