

ABSTRACT

PT. Mitra Tala has an Operating Production of Mining License of 2.659 Ha. Based on the calculation of reserve which is done in the North Pit, it is found that the total reserve is 536.782 tons with cover ground of 2.095.523 BCM. The targeted production which is determined by the company is 100.000 tons/year with 6:1 of stripping ratio. Coal mining in PT. Mitra Tala based on geotechnics recommendation with geometry such as, the height level 10 m, the width level 5 m, and single slope 60°.

The obtained result for the coal production scheduling and cover ground in the research area which is done in each year during 5 years are:

1. The first year, the coal production is 109.597 tons, the stripping of cover ground is 646.821 BCM with 5.9:1 of stripping ratio.
2. The second year, the coal production is 106.911 tons, the stripping of cover ground is 444.041 BCM with 4.15:1 of stripping ratio.
3. The third year, the coal production is 104.423 tons, the stripping of cover ground is 462.321 BCM with 4.43:1 of stripping ratio.
4. The fourth year, the coal production is 112.214 tons, the stripping of cover ground is 255.177 BCM with 2.27:1 of stripping ratio.
5. The fifth year, the coal production is 103.637 tons, the stripping of cover ground is 287.163 BCM with 2.77:1 of stripping ratio.

The overproduction per year is about between 3%-9%. A hauler that is used is Bulldozer Komatsu D 85. Excavator that will be used to strip the cover ground material is backhoe Kobelco 480 LC, it takes 1-2 units/year with its reserve 1 unit/year to replace the tool that is in repair. A transport to carry the cover ground is dump truck Scania P 380, it takes 4-10 units/year with its reserve 1-2 units/year to replace the tool that is in repair. A digger and loader that will be used to dig the coal is backhoe excavator Komatsu PC 200, it takes 1 unit/year with its reserve 1 unit/year to replace the tool that is in repair, a transport that will be used to carry the coal is dump truck Hino Dutro 130 PS, it takes 4 units/year with its reserve 1 unit/year to replace the tool that is in repair. The hoarded cover ground in the 1st-5th year was done in the dumping area which is located on the north of North Pit. The width of the transport road is 11 m for the straight road and 18,3 m for the curved road.