

ABSTRACT

PT. Gunungbayan Pratamacoal, located in Kutai Barat, Kalimantan Timur, is one of the coal-mining enterprises which continually conserve the coal energy. In order to optimize its production, the company undertakes the extension *pit*. *Pit 7T* which is almost done to be exploited, developed to become *pit 7T-ext* as the research pit. Therefore PT. Gunungbayan Pratamacoal needs a proper mining plan that must be safe and eco-friendly.

The pit is located in the Telaga Block which is still in the concession of PKP2B PT. Gunungbayan. There are found eight seams in the Telaga Block after the survey and drilling exploration have been done. *Seam 8* and *seam 7* is the only mining target, because of the thickness and the depth. The mount of coal deposit in the research pit is 680.216 tons with *overburden* 13.929.858 BCM, *stripping ratio* values 20, 47:1. These following points report about quarterly mining plan scheduled within one year. All these data compiled from *seam 7* and *seam 8*.

- a. In the first quarter, there were 162.948,9 tons of coal deposit and *overburden* amounts 3.415.116, 3 BCM, and the *stripping ratio* 20, 9: 1.
- b. The coal deposit amounts 163.801,7 tons in the second quarter with *overburden* 3.402.637, 5 BCM, and the *stripping ratio* 20, 7: 1.
- c. In the third quarter, it shows 170.219,6 tons of coal deposit with the *overburden* amounts 3.472.276, 5 BCM, and *stripping ratio* 20, 3: 1.
- d. The fourth quarter produced 183.245,7 tons of coal deposit with *overburden* 3.415.116, 3 tons, and the *stripping ratio* 19, 8: 1.

Wastedump is located in the northeast of the research pit. The loader that used in the 7T-ext pit is Komatsu PC 2000 and PC 1250 for *overburden* paired with Komatsu HD 785, while the coal used Komatsu PC 400 paired with dumptruck Iveco 380. The number of loader and dumptruck increase in the third quarter because of the difference of haul distance that getting away. Therefore it causes the productivity of conveyance decreases. Besides that, the extracted coal deposit and increasing *overburden* needs for more excavators.