

ABSTRACT

PT. Kaltim Prima Coal is one of mining companies move in coal mining. PT. Kaltim Prima Coal located in Sangata District, Kutai Timur Regency, East Borneo. PT. Kaltim Prima Coal is used Mining Surface System. The removal overburden activity used combination of digging and hauling equipment (Liebherr 996S and Dumptruck Hitachi EH4500) to disposal area with distance 3.400 meters.

Using fuel targets are 195 liter/hour. Actual using fuel by Dumptruck are 233,63 liter/hour. Out of target production caused by another segments of the road has a high slope and uneven road conditions. Effors to increase production targets used several ways. First make improvement at Loading Point while there are undulations that have an impact on the high usage of RPM so it must do smoothing back (re-grade) road using auxiliary equipment Grader. The fuel usage before the improvement of 233.63 liters / hour and after the improvement was reduced to 224.03 liters / hour. The fuel ratio to overburden production is also reduced, before the improvement of 0.95 liters / BCM and after the improvement to 0.91 liters / BCM. Second way make improvement to the slope of the road. Slope of the road segment B-C and E-F in excess of standart. The fuel usage before the improvement of 233.63 liters / hour and after the improvement was reduced to 216.43 liters / hour. The fuel ratio to overburden production is also reduced, before the improvement of 0.95 liters / BCM and after the improvement to 0.88 liters / BCM. The last way used combination of improvement the slope of the road and improvement at Laoding Point about undulations. The fuel usage before the improvement of 233.63 liters / hour and after improvement was reduced to 209.37 liters / hour. The fuel ratio to overburden production is also reduced, before the improvement of 0.95 liters / BCM and after the improvement to 0.85 liters / BCM.

Another way to reduce the materials usage can also give insight to the operator to be more work optimally so that achieving the target fuel that has been set by the company.