ABSTRACT

PT Cipta Kridatama was the contractor that moves on the field of service mining which was located in the village of Makarti, district Marangkayu, Kutai Kartanegara Regency, East Kalimantan Province. The mining system used is an open mine system and method used is strip mine.

The usage of fuel transport equipment used on the company is diesel fuel. In mining front of Liebherr R9250 (CE221) April 134,190 litre whereas in May 143,134 litres. In mining front of Liebherr R9250 (CE179) April 114,380 liters while the month of May with a total of 152,823 litres.

The problem occurs is due to the increase in fuel consumption in May compared to april.

Efforts to reduce fuel consumption by improving loading pattern reducing transport time road conditions of the rainy season and the dry season, widened the road transport width according to the standard, so it can be passed smoothly transport tool. Road transport width does not reach the minimum standard was extended in accordance with the standards. Therefore with the real constraints and reduced the width of the road transport standards then the cycle time is smaller at higher speeds could reduce fuel consumption. Cycle time is related to the speed of 16.7 mph and 11.7 mph then it happened based on fuel consumption engine round 504,27 liters/minute and 711,9 liters/minute.

The slope of the road on which allows to do a decrease on the location front CE 221 segment road 5 and 6 with a decrease of 1% decline as much fuel consumption 23,84 litres/day. On the location front CE 179 segment Road 1, 2, 10, 14, and 17 with the declining grade of 1% fuel consumption decline by as much as 29 litres/day.

Slope road on the possible to do the decline is on location front CE 221 segment road 5 and 6 into one segment 5 with decrease by 3,19% occurring thirft consumption fuel as many as 15,98 liters/day. On the location front CE 179 segment road 7 and 8 into one segment 7 with declining grade of 1,89% consumtion decline in fuel as many as 3,56 liters/day