

## **ABSTRACT**

*PT. Saptaindra Sejati (PT. SIS) is one of mining contractor companies in PT. Adaro Indonesia. PT. SIS jobsite Adaro Mining Operation (ADMO) is the biggest jobsite in PT. SIS. PT. Adaro Indonesia uses surface mining system with open pit method. PT. SIS has three different pits in jobsite ADMO i.e. North Tutupan pit, Central Tutupan pit, and Wara pit. Coals from the pits are gathered in Run of Mine (ROM) before they are sent to the port for being crushed and loaded in coal barges. From those three pits, there are 4 active ROMs i.e. ROM 20, ROM 17, ROM WARA 2, and ROM 13. Coals are distributed from the ROM to port by passing hauling road for about 84 km. Therefore, PT SIS mobilizes 185 units of Double Trailer Volvo FH-16 and 6 units of Wheel Leader Komatsu WA800.*

*The problem is the company cannot reach its target production of 77.000 tons/day of coals sending from the ROMs to the port on April. Although 6 units of Wheel Leader Komatsu are able to load 78.505 tons/day, Double Trailer Volvo FH-16 units only transport 68.194 tons/day. It occurred due to the speed of Double Trailer Volvo FH-16 is under SOP (Standard Operating Procedure) so it makes the transportation equipment rotation becomes longer.*

*To reach the target production, it is needed to increase the speed of Double Trailer Volvo FH-16 to 47km/h in each ROM. It is increased from 40km/h to 45km/h in ROM 20, from 41km/h to 45 km/h in ROM 17, from 38 km/h to 45km/h in ROM 13 and from 35km/h to 45km/h in ROM Wara 2. After these optimalization, the production target of 78.074 tons/day has been achieved.*