

ABSTRACT

Tamapole Village, District Muara Jawa is one of the main areas in Kutai regency suspected of having a large coal reserves. It is observed from the Tamapole stratigraphic conditions which included in the Balikpapan, Kampung Baru and Pulaubalang Coal Bearing Formation. Nowadays, many coal deposits have been identified and exploited by the government and the investors. The coal deposits which one that have not been exploited it's because the lack of information of potential sediment as well as investments that must be spent to take advantage of this coal reserves potential.

According to the observation and data processing from the research area, the potential coal resource is divided into 3 (three) blocks, that is Block-A as much as 599.032,05 tons with average calories around 6.826 Kcal, Block-B amounting to 482.576,93 tons with an average calorie around 6.724 Kcal and Block-C as much as 315.927,55 tonnes by 6.593 Kcal calories. According to the data quality of the three blocks of coal, then coal prices ranged from 59,01 – 64,89 U.S. \$ / ton. To exploit the potential of the coal spent about 4.366.012,25 U.S. \$ per year for each block.

Based on the analysis results of the Ministerial Decree on the Area of Mining Prospect Criteria, Blocks A, B and C region is classified to the Main Prospect of Mining Area (WKKPU). Coal transporting from the mine site is planned to use a special way based on East Kalimantan Provincial Regulation No. 10 of 2012. From the Break Even Stripping Ratio (BESR) calculation, Blok A, B and C is worth using Surface Mining System for the mining activity. From the results of BESR sensitivity analysis to the coal price changes, Blocks A, B and C are sensitive with coal price changes.

The results is expected to be used as consideration to continue the research into more detailed stages and can be used as reference in the preparation stage of the feasibility studies research and provide benefits to the community and government of Tamapole Village.