

















#### IV. CONCLUSION

The Blasting Design will apply the blasting technique applied to the West Banko Pit 1 North because the lithology of the coal deposition material is relatively the same and the location is adjacent to the West Banko Pit 2, the blasting geometry used is 200 mm in diameter, 8 m Burden, 9 m space, Depth 8 m, loading density 26.5 kg / m. Simulations with 10 m, 12 m, and 15 m for static and pseudo-static slope stability analysis on the overall slope and intermediate slope, the wider the Berm, the higher the value of the slope safety factor and the sloping the overall slope and the greater the stripping ratio. The optimum Berm condition is 12 m with a pseudo-static safety factor of at least 1.50. The selection of the 12 m Berm is taken based on the value of the safety factor in section 2, almost close to 1.5 (long term) in accordance with the Ministerial Decree 1827 of 2018. Recommendation ground vibrations with blasting effects are planned for the scale distance for the PVS value set at  $\leq 3.5$  mm / s with the explosive charge per delay having an optimum value of 50 kg with a minimum distance of 500 m. The area to be blasted is 112.59 Ha, while the area to be ripped in the western pit limit area near residential areas with a radius of 500 m is 134.04 Ha.

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