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Mineral asset valuation of Kimberley Mine for divestment purposes

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Abstract

Divestment is always an option for each and every mining operation. It only becomes a viable option if in the hands of the current owner when a point is reached where the life of mine is limited and continued depletion of the remaining mineral resources cannot be achieved due to economic considerations.

Kimberley Mine, a diamond mine, is finding itself in this situation. The research study was focused on determining a divestment range where divestment can be considered by the current owner, to handover the going concern to a new owner. The new owner will be able to extend the life of mine through the adoption of a different operating model to enable economic extraction of the current marginal and sub economic mineral resources.

The long term analysis of supply and demand of diamonds indicates an opportunity associated with the predicted long-term gap between declining supply and demand growth. This gap will enable diamond producers to take advantage of future pricing increases. It is envisaged that this in turn will impact on the viability of existing marginal and sub economical diamond mineral resources and operations, such as Kimberley Mine, whether it be in the hands of De Beers Consolidated Mines Proprietary Limited (DBCM) or an envisaged new owner. The study also determined that the Kimberley Mine operational entity is a current going concern with a good business case in the hands of a potential new owner prepared to make material operational cost adjustments. It is logistically well located, with very good supporting infrastructure both at municipal and provincial level. The Tailings Mineral Resource (TMR) operational complexity is comparatively low in relation to underground operations and is well equipped with industry aligned best practice equipment, machinery, and human capital.

Based on the literature review of the main valuation methods and research conducted on historical comparable transactions, there is value for a new investor in Kimberley Mine. The asset package as envisaged offers a very attractive revenue stream between 2017 and 2018. The economic viability of TMR 29 has been demonstrated through the adoption of a “small miner” fit for purpose

operating cost model and could extend the life of mine to 2030. This will enable the economic extraction of an estimated 4.5 million carats from the remaining TMR's.

Based on the comparable transaction methodology for TMR operations the divestment value that could result in a suitable positive outcome for both the current owner and the potential future owner resides in the range ZAR 287 million to ZAR 527 million. The discounted cash flow analysis proved that the new owner models can deliver a positive net present value with asset acquisition prices ranging between ZAR 324 million and ZAR 527 million. Lastly, the Monte Carlo simulation results reflect a medium to high probability of success for the "small miner" new owner scenario and return on investment. The study concluded that the current owner must target a divestment price commencing at ZAR 527 million for negotiation purposes.