Newmont Tanami Mine Reconciliation – Value added through implementation of a new web based reconciliation database

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ABSTRACT

Newmont's Tanami Operations are located approximately 550km NW of Alice springs within the remote Tanami Desert of the Northern Territory. The operation produced 496,000 ounces of gold from its Dead Bullock Soak underground operations in 2018. In the same year a new web based reconciliation database was implemented as a model for a companywide process improvement. The system now seamlessly integrates several data sources including the underground dispatch tracking system (PitRam), the site Metallurgical database and Mine Plan into one user friendly interface. This has contributed to significant time savings, a reduction in operation error and cross functional accessibility of the data.

A structured reconciliation process provides a continuous feedback loop to promote operational excellence and support a continuous improvement mindset with respect to block model estimation, reserve design and improving mining practices through shared learning. This paper outlines the three key aspects of the Tanami reconciliation process:

The performance of the **Resource and Ore Control blocks models** over the short (1-month), medium (3-month) and long term (12-month).

Stope mining performance; comparing the stope design, through to mining recovery and mill reconciliation, learnings which feed into improving future stope designs.

Mine compliance to Reserve and Business Plan; to understand the impact on life of mine planning and short term financial implications.

The ultimate goal of the new reconciliation database and system has been to provide transparency and measurement of key reconciliation metrics that have supported a drive towards continuous improvement across all functions. This has contributed to a reduction in variance between the reserve, ore control model design and material received at the process plant. This in turn has facilitated improved grade estimation and accurate short and long term planning and production forecasting.