Grade Control Improvements using Vulcan Integrates and Optimises

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Abstract

The Oyu Tolgoi copper and gold project is located in the Southern Gobi region of Mongolia and is being developed by Oyu Tolgoi LLC. The project is expected to be a significant contributor to regional development and is jointly government ownedThe Production Geology Team of the Mine Technical Service department used to use the 4 different mining and geology software (Vulcan, Minesight, Leapfrog and Digger) for the grade control geology. Processing data through several software have possibilities of potential errors and was not time efficient. However, a year ago we started using Vulcan for updating and dig-block outing for the Ore control block model and Leapfrog for the geological model update.

In this abstract we are going to introduce the improvements and advantages in grade control process by using Maptek Vulcan for the grade control. Firstly, Vulcan software provides grade control optimiser tool for dig-block out optimisation which helps to reduce human factor error on dig-block outs, also ore dilution and ore loss was decreased noticeably. Second, the grade control block model transferred into the SQL server that allows users to connect to the same data source at the same time and use data table for comprehensive reporting. Third, transferring the Block

model into SQL server gives many opportunities; the one of them is the Snowden Reconciler Tool. This can analyse and develop report of wide range of data from block model to final product. The reporting system becomes broader and coherent.