

Case Study



Managing the Mining Contractor

Access to all the data de-risks the Owner / Operator Relationship, and provides real insight into the Management of the Service Level Agreement

THE BUSINESS PROBLEM

Like many mines, this company contracted out their drilling, blasting and hauling activities to a local mining contractor. The contract specified certain targets and limits for tons produced and grade quality, as well as clauses pertaining to mining, health and safety, environmental and other standards which had to be adhered to.

Since work was contracted out the service provider, the company found it difficult to track a variety of production KPIs – including dilution related to poor quality of mining such as overbreak and underbreak.

Surface Zinc/ Manganese Mine

+10%

Standards
Compliance

The screenshot displays the SpatialAnalyzer software interface. On the left, a search bar is present above a list of data layers under the heading "NAME". The layers include "Monthly Scan Deltas per Pit", "Monthly Scan Deltas per BlastBlock", "Monthly Floorstocks", "Designed Blastblocks for Month", "Monthly Surface Scans", "Planned Blast Blocks", "Bench Compliance", "CAS Load Points", and "CAS EndPoints". The main 3D view shows a yellow topographic surface and a red base layer. A "Properties" panel on the right shows details for a selected layer: "BlastBlockName: WPW_1050_T01_PB0", "DateProcessed: 2018/07/26 21:18:12", "Period: 201806", "Type: UnderMining", and "Volume: 2723.5965176313". A navigation toolbar is visible in the bottom right corner. At the bottom center, there is a call to action: "Click here to watch the Video".

THE MINERP SOLUTION

MineRP was configured to consume the mine design and schedule to show exactly how much material was supposed to be mined from which area at what time, as well as the exact bench shapes that should have been achieved by the contractor.

Moreover, MineRP consumed point clouds from drone surveys done post excavation.

Quantitative Measures:

With MineRP's 3D Volumetric capabilities, the mine could then do instantaneous plan vs actual mining comparisons, and indicate clearly in 3D how much overbreak occurred (that is where too much material was removed, causing dilution), and how much underbreak occurred (that is, planned, viable material left behind on the bench).

Qualitative Measures:

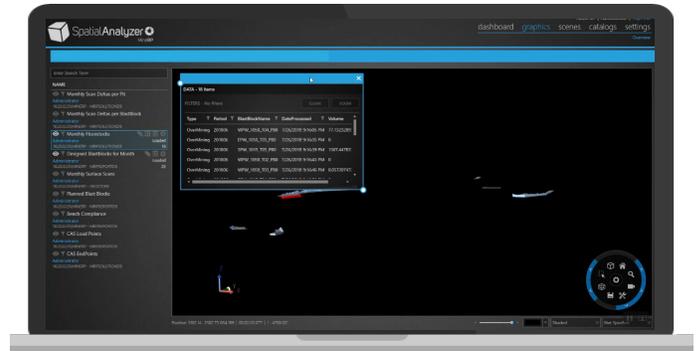
In addition to these quantitative measures, the mine was also able to introduce quality of mining measures where poor blasting or excavation shapes caused unsafe rock conditions.

THE OUTCOME

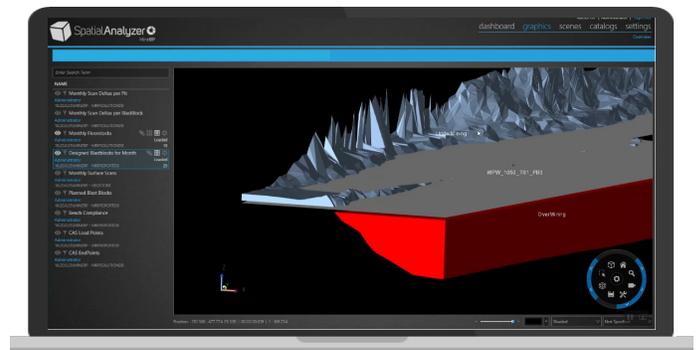
As a result of the spatial integration of data from all these sources, and the simple visualization of these KPIs, the contract could be re-negotiated to ensure that the contractor was rewarded against performance of all these metrics, not only tons produced.

The average compliance to standards and contracted outcomes was improved by 10% once everyone adopted the governance enabled by MineRP.

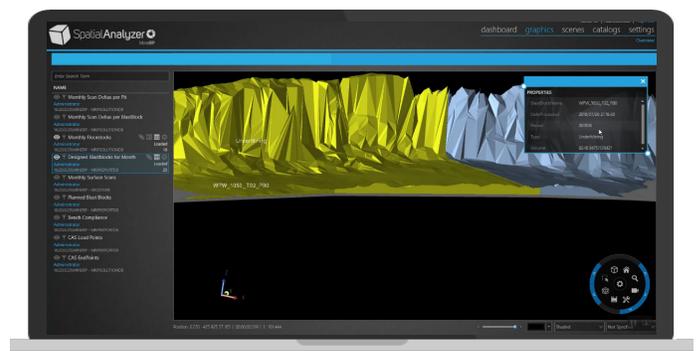
Monthly Floor Stocks



Easy Volumetric Reporting



Continuous Survey Input



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