

Increasing Waste Material on Top of Coal Seams Magnifies Inefficiencies

CHALLENGE

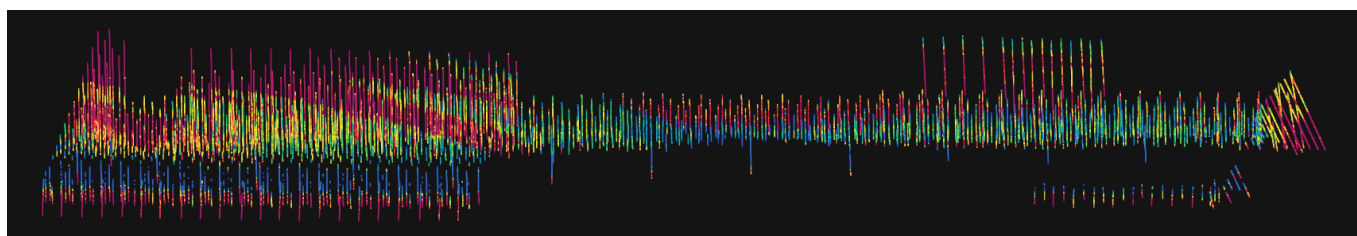
Lack of coal seam precision causes redrills due to under drilling or backfilling due to over drilling through the seam. Bulk density and natural gamma radiation is costly with lengthy turnaround times. Slow feedback loops and lack of precision drive up costs and hurts the mine's bottom line. These shortcomings are magnified with challenging geology and typically negate any gains in precision.

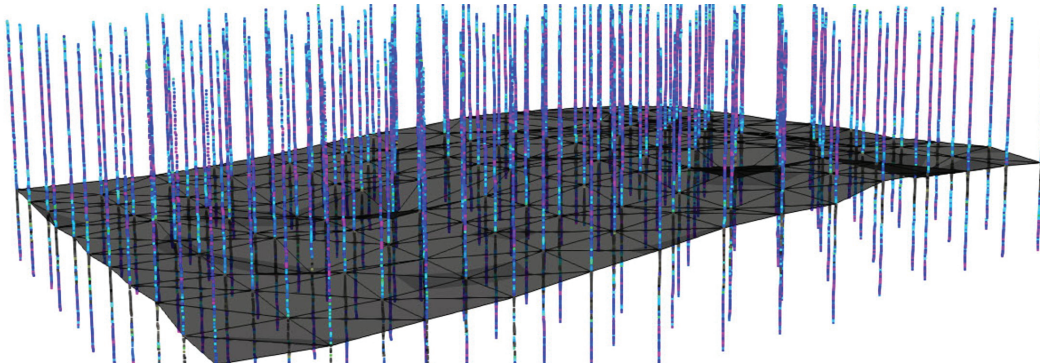
DataCloud Increases Coal Seam Detection's Speed and Reliability

SOLUTION

A typical coal mine can recover an estimated \$7.5M/yr loss with real-time coal seam detection. Our software, MinePortal transforms production blast hole drilling data into real-time coal seam detection.

MinePortal automatically identifies the boundary between overburden and coal, helps generate recommended "stand-off" distances, and predicts the depths of coal in subsequent benches.





REAL-TIME ROCK INTELLIGENCE

The power of cloud computing allows MinePortal to ingest and process information in real-time while applying our proprietary geostatistical and machine learning algorithms.

Identifying geological structures during production, such as the coal seam, can remedy the loss of productivity from complexity.

Teams can plan drilling with recommendations for “stand-off” distance from the coal seam, eliminate unnecessary blast damage, and minimize waste material, dilution, to downstream processing.

MinePortal’s ability to accurately identify and recommend the top of the coal seam minimizes coal loss. Consistent and timely seam detection improves reliability and productivity of planning, drill, and blasting activities.

OUR HYBRID APPROACH

We develop digital solutions, we apply data science, and we know mining. Our hybrid approach is key to our clients’ success.

No matter how far along you are on your digital transformation path, we can assist. We complete all projects with our geostatisticians, machine learning geologists, data integration specialists, mining engineers, and industry experts.

We help mine sites exceed their production goals by continually optimizing from the drill to the mill. Our digital solutions automate modeling and reporting and integrate site-wide data sources. The analysis helps identify bottlenecks in production and which geological features and performance factors are causing them.