Production drill rig optimisation

This is made possible by production reporting; the first step in Epiroc"s optimisation programme, while the real value is created as the ...

Consequently, the concept of hybrid machine learning with multi-objective optimization can (1) enhance the speed and accuracy of providing drilling modeling and 2) ...

This PetroKnowledge training course will showcase reservoir modeling and drilling operations, basic well engineering calculations and conventional ...

Interwell"s production optimisation solutions are designed to enhance oil and gas recovery, prevent water influx and stop water production. By isolating or ...

The article discusses innovative methods to optimize drilling rig efficiency through advanced materials, real-time data, automation, skilled operation, and safety measures to ...

Methods for Petroleum Well Optimization: Automation and Data Solutions gives today"s engineers and researchers real-time data solutions ...

That"s why it"s critical that we not only deliver dependable efficiencies and optimization opportunities in how we drill but also deliver the wellbore quality ...

Drilling is an expensive and technology-intensive activity, which consumes a major part of an oil exploration and production (E& P) company"s budget. A concerted effort is ...

Abstract: The optimal selection of drilling rigs is crucial for the rational arrangement of drilling rigs in multi operation teams, the improvement of moving operation management level, and the ...

Northparkes Mine operates both underground (Block Caving) and open cut mines on their mining leases which cover 1630 hectares of the 6000 hectares of land owned in the area. The open ...

The chapter presents a study that deals with the improvement of "drilling productivity" taking into account many of the factors. It benchmarks drilling performance of own ...

The prop erties of fragmentation, such as size and shape, are very important information for the optimisation of production drilling and blasting

This chapter focuses on optimization of rig move/mobilization time, which is considered as unproductive rig

time, so as to ensure more time for on-bottom drilling and ...

Abstract and Figures Drilling performance monitoring and optimization are crucial in increasing the overall NPV of an oil and gas project.

Drilling and blasting are the two most significant operations in open pit mines that play a crucial role in downstream stages. While previous ...

The core objective of this study is to deliver a general review of the well design optimization processes and the available studies and applications to employ the well design optimization to ...

Optimized drilling involves the selection of operating conditions that will require the least expense in reaching the desired depth, without sacrificing requirements of personnel safety, ...

Rate of penetration (ROP) is the key factor affecting the drilling cycle and cost, and it directly reflects the drilling efficiency. With the increasingly complex field data, the original ...

The Simba E70 S, Epiroc"s new long-hole production drill rig for medium to large-sized drifts, offers more than cutting-edge automation features and excellent drilling quality. It ...

Drilling and blasting play vital roles in opencast mining. These operations not only affect the cost of production directly but as well and significantly, the overall operational costs.

Four different optimization scenarios were explored to determine the optimal drilling parameters, surface rotary speed (RS) and weight on bit (WOB), to enhance the drilling ...

Halliburton delivers superior drilling performance to reduce time to first oil, enhance reservoir knowledge, and maximize production. For optimal drilling, ...

Long hole drilling underground has come a long way since "down the hole" surface drills were first taken underground. The underground miners have progressively developed the use of long ...

Drilling plays a pivotal role in mining operations as the initial stage of the production cycle, laying the foundation for the entire process. The performance of the drilling process and the ...

The optimization of drilling, completion, and production performance is a key component of field development and management. A variety of optimization models and methods can be used in ...

Oil and gas big data is now an extremely viable method for drilling optimization. Today, oil and gas companies are tapping the vast amounts of data generated ...

Production drill rig optimisation

Multiple supervised and unsupervised artificial intelligence techniques have been adapted and applied for real-time drilling monitoring and optimization purposes. This chapter ...

This paper investigates the causes of low effective utilisation of the production drill fleet at the Telfer Underground Gold Mine, as measured by the percussion hours per shift. The first part of ...

Below is an overview of some key elements of drilling practices, their importance, proper application, and the risks of ignoring them. By integrating these practices, drilling operations ...

Drilling is one of the most crucial operations in the petroleum industry, hence the prediction of drilling performance is important for cost and efficiency estimation in project ...

On average, trim blast optimisation without line drilling demonstrated an improvement in wall conditions. Based on the initial seismic test results, combined with the wall assessment results ...

The rise of technologies such as Measurement While Drilling (MWD) and Logging While Drilling (LWD) has further exacerbated the data explosion in drilling operations, providing vast ...

Web: https://kwa-andries.co.za