

CASE STUDY

Methodology and Benefits of a Drilling Analysis



✓ The Problem:

A major US Oil Company believed their in house “Drilling Analysis System” was inadequate and ineffectual. Drilling analysis (a routine practice) had not been given sufficient time and resources required to produce positive results. The lack of an organized knowledge-oriented data management system was considered to be a major drawback, resulting in drilling analysis being virtually ignored as an integral part of drilling engineering workflow.

✓ The Solution:

The Oil Company management decided that it was vital that Drilling Analysis should be an integral part of process of drilling engineering, the same way well test analysis is an integral part of reservoir engineering. The company decided further to improve their drilling performance by directing the organization into a knowledge-based structure, using acquired drilling data, analyzed and organized with the latest drilling analysis tools.

✓ The Implementation:

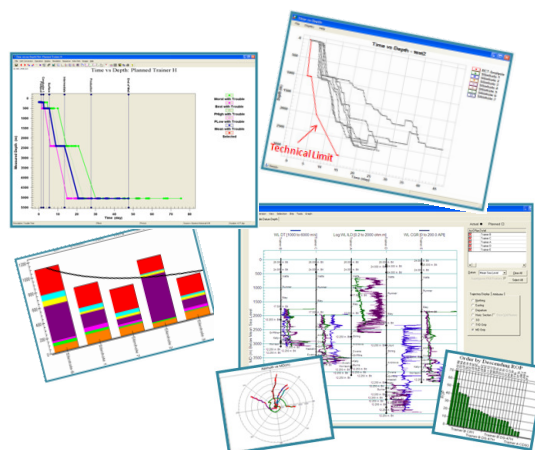
Genesis Drilling provided a drilling analysis software package with an integrated knowledge-based methodology, centered on quality controlled historical field data, focused on a continuous learning process. Statistical analysis was used to develop challenges to achieve technical limits (Best Composite Times) based on similar wells which provided significant step indicators in the process of reducing drilling costs. Best Composite Time generated from similar wells, learning curves identifying sequential drilling experience, detailed analysis of well drilling times and problems (drilling/flat time, NPT), among other techniques, served as base for a Drilling Analysis to be used for future wells.

A final Drilling Analysis Methodology was implemented; resulting in a “10 Steps Process” being established as a systematic analysis process to benchmark previous operations and define pace setters for new wells.

✓ The Result:

Genesis Drilling provided an Organizational structure focused on drilling analysis which had significant impact on overall drilling performance and costs.

Genesis Drilling established a key path for the company’s Drilling Engineering Department to benchmark future operations on. The 10 Steps Process included key components within a software package and processes to facilitate drilling cost reduction.



✓ The Tool used:

Genesis Drilling

✓ About Genesis Drilling:

Genesis Drilling provides the capability for energy companies to capitalize on historical data by identifying potential areas of improvement for future drilling operations.

www.genesispetroleum.com

Genesis Petroleum Technologies

Suite 8, 12 Brodie Hall Drive
Petroleum House
Technology Park
Bentley WA 6102
Australia