

Sabio
Drilling Insights
 Your roadmap to performance



**CLEAN, MATCHED
DATA**



**DETAILED IN-BIT
MEASUREMENTS**



**HIGH RESOLUTION
BENCHMARK WELL**



**AUTOMATED DRILLERS
ROADMAP**



**CONTINUOUS
IMPROVEMENT**

Drilling performance challenges

Your drilling cost is higher than you expect.

You collect volumes of data in your operations and it is a challenge to structure and analyze the data in a way that makes sense. This often time-consuming manual analysis rarely tells you how to improve drilling performance or consistency.

Predictions that come from this type of effort may or may not be reflective of what is actually happening downhole. Data analytics based on surface data alone can overlook downhole dysfunctions that are limiting potential drilling performance.

Drilling performance solutions

Baker Hughes believes the solution is to combine surface and downhole data with powerful analytics and visualizations to deliver impactful insights.

The new **Sabio™ Drilling Insights service**, from Baker Hughes allows you to plan, and execute a single well, multiple wells, or an entire field campaign using actionable insights based on structured data. The Sabio Drilling Insights single well service utilizes

Applications

- MultiSense HD in-bit vibration measurement module
- Single run deep-dive service powered by drilling insights platform
- Multi-well drilling optimization projects for defining best practices of parameters, connections, directional control, and reaming

Benefits

- Reduced Invisible Lost Time (ILT)
- Reduced Non Productive Time (NPT)
- Faster penetration rates and lower drilling costs
- Delivers high-resolution composite benchmarks for speed and efficiency
- Captures in-bit vibrations and performance by formation
- MSE, Horsepower analysis
- Provides parameter recommendations
- Produces reports with actionable insights

our cloud based digital ecosystem combined with relevant surface drilling parameters and high frequency in-bit dynamics data from our **MultiSense™ HD modules** to enable engineers to generate actionable insights that improve drilling performance.

MultiSense HD is self-contained and self-activated with multi-axis sensors that provide a detailed description of stick-slip, whirl, torsional and axial vibrations for in-depth analysis of both on-bottom and off-bottom activities.

Sabio Drilling Insights delivers insight driven analysis for best practices of drilling parameters, connection practices, directional control, and reaming.

The backbone of the ecosystem is the scalable cloud based data storage and analytics platform containing

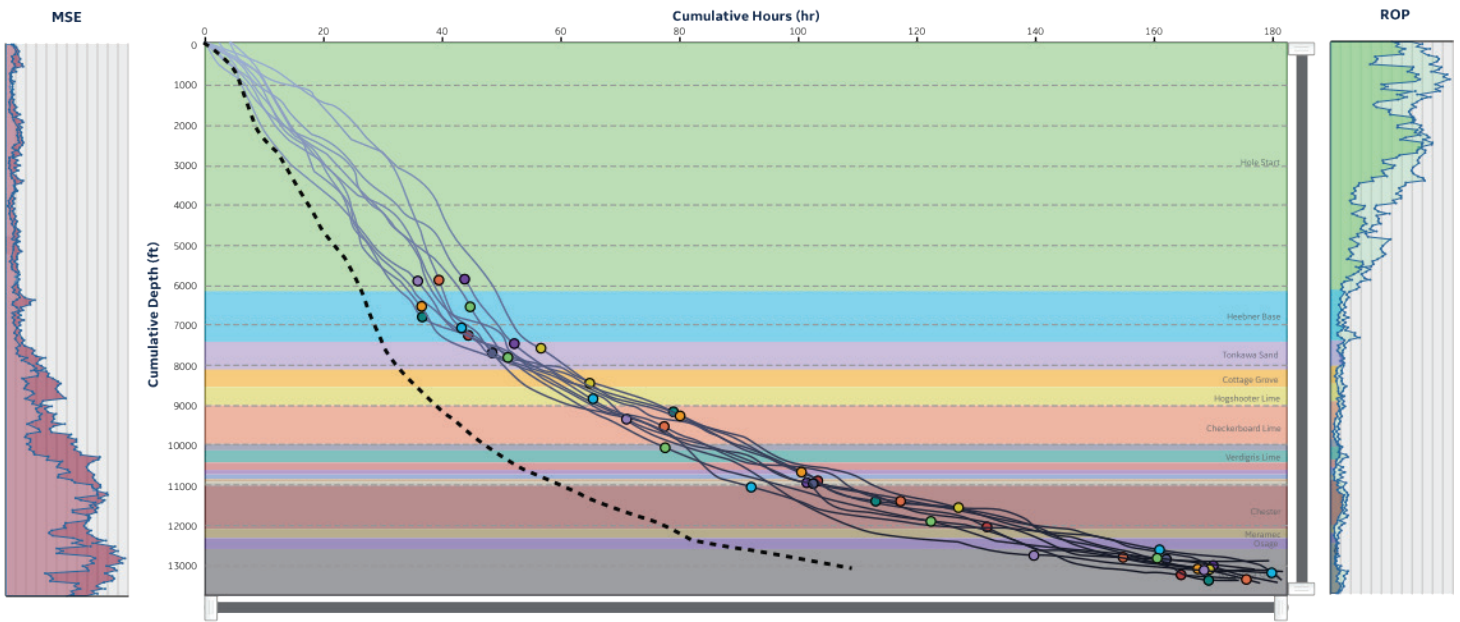
proprietary algorithms that organizes, cleans and matches the data-streams. What you get is powerful analytics and visualizations that provide the basis for recommended actions based on the performance metrics generated by the system.

The Sabio Drilling Insights multi-well service organizes data for multiple wells to deliver a high-resolution best benchmark well. The system visualizes performance and economics for each bit run and deliver enhanced formation level statistics and limiters. The output becomes a driller's roadmap to guide the rig staff to drill optimized wells.

Contact your Baker Hughes representative to learn how Sabio Drilling Insights can improve performance on your next well.



Multi-sense HD module provides an understanding of bit rotation and vibrations with a statistical summary every 3 seconds.



Quickly construct high-resolution composite benchmarks and generate optimized parameter recommendations with user scalable resolution. Compare full well or interval performance metrics for speed, efficiency, drilling system health, wellbore quality, and economics.



SPEED



EFFICIENCY



HEALTH



QUALITY



ECONOMICS

