



## **Drill ID and Data ID**

Transform the health of your drilling program with leading indicator information by employing high frequency, downhole data, and rock properties combined with basic physical design attributes.

What kind of data are acquired, and how can they be used?

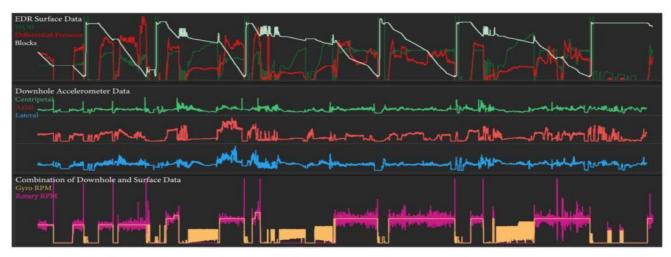
Standardized and synchronized datasets of one-second EDR surface data, downhole tri-axis high-frequency accelerometer data, and gyro data are provided for quick and easy analysis. The downhole data give information about what is physically occurring at the BHA, while the surface data provide context for what the rig is doing.

We also include physical design attributes information for drill bits, mud motors, and friction reduction devices. When this downhole data is combined with physical design attributes from the BHA, then **Physical Relationship Indicators (PRI)** can be computed. PRI examples:

- Drill bit linear distance traveled for rotary and slide drilling
- A total drill bit stress cycles (SN) number.
- Mud motor output power and mud motor efficiency.
- Mud motor external and internal component fatigue with a stress cycles (SN) number.
- Friction Reduction Device hertz and amplitude.

This PRI information, describing the physics of what is occurring, can be applied to improve drilling health through root cause analysis, limiter identification, normalized BHA component comparisons, planning calculations, automation feedback, modeling input, and in laboratory testing such as PDC cutter testing.

The vibration signals that are captured by the high-frequency accelerometers show how efficiently the rig is drilling and the health of the BHA components. Drill ID organizes the downhole data with time and depth to easily identify trends and effects that surface parameters, rig practices, and geology have on the overall health of the system. To better understand how Drill ID works, check out this post on motor health and micro-stalls.



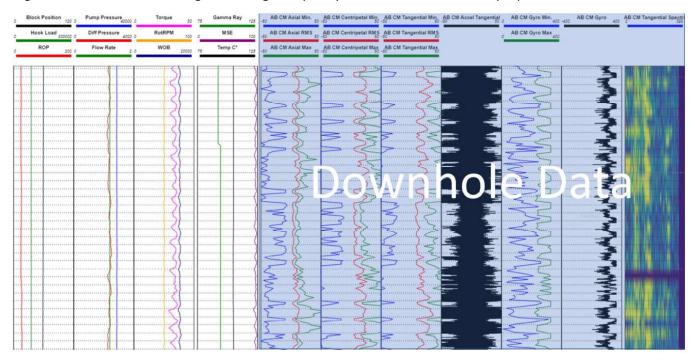
SURFACE AND DOWNHOLE DATA SYNCHRONIZED TO DEPTH FOR EASY ANALYSIS

## Results-Based Analytics, Analysis, and Evaluation Plan

Drill ID's Results-Based Analytics, Analysis, and Evaluation Plan provides the framework for you to drive improvement using downhole data. Our SME's will provide ongoing analytical and analysis methods designed to deliver timely and relevant data to better inform the decision-making process. Well to well comparisons inform engineers on what lessons learned should be lessons they consistently apply. We will advise on how to interpret the information and how to incorporate the information into your evaluation plans.

## **DATA ID Centralized Repository and Data Lake**

Data ID provides you with a multi-well database and a data lake for analytics that can incorporate downhole data collected right from the bit. Interpretation ready drilling data is stored in one place and includes downhole measurements. There is a standard export for every well that includes MSE, DoC, stand numbers, and connection numbers. Custom exports can be configured by the user. Supplemental files can be added like specification sheets, bit photos & dull grades, so they are always matched with the correct run. There is also a log viewer to visualize the merged EDR, high-frequency downhole data, and rock properties.



LOG VIEWER FOR TRACK AND TRACE VISUALIZATION OF SURFACE AND DOWNHOLE DATA

## What to expect when you sign up

At Drill ID, we understand that for all your data to be useful it must be transformed into actionable information. You will be using a singular, high-quality data stream to transform your drilling program. When you invest in a project with us, you receive continuous, expert drilling data support from beginning to end. We can customize our analytics to fit your analysis and evaluation projects and programs.

https://fractureid.com/contact-us/

