

Cerebro™ Electronic Data Capture System

OBTAINING REAL-TIME DATA FROM THE BIT TO IMPROVE DRILLING PERFORMANCE

OVERVIEW

Obtaining crucial information is key when analyzing a drill bit's performance. Not just any information will help provide a clear picture of what has happened downhole, but having accurate and high-speed measurements, over the entire run, from the bit itself is as good as it gets. The Halliburton Drill Bits and Services (HDBS) product service line (PSL) now has a system that provides this critical information.

The Cerebro™ electronic data capture system gives the industry's best high-speed look at data from the bit. Data alone, however, cannot tell you what is happening. To do this, the data needs to be processed and analyzed, and the Drill Bits and Services PSL has utilized the Halliburton InSite® platform and the algorithms contained in it to help identify what will ultimately improve performance in an interval.

While this data is good to help understand what has happened in an interval, the goal is to see issues happening in real time and to then make a change to resolve or improve them. To improve efficiencies, the Cerebro system is an important first step in getting real-time communication from the bit in order to make a change in drilling parameters on the surface or to the drill bit itself downhole.

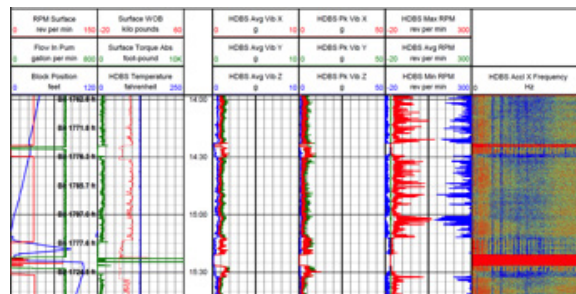
FEATURES AND BENEFITS

The Cerebro system utilizes a unique API pin to hold a sensor package in place. The API connection adds no additional length to the bit and still provides two square inches of total flow area (TFA) on a 4.5-inch API connection.



HAL124106

The Cerebro system gives reliable, high-data-rate measurements of inclination, vibration, rotation, and the earth's magnetic field movement around the bit. These measurements are in three different axes, at 1,000 Hz, for up to 150 hours of run time.



HAL124105

The API pin setup allows for runs to be chosen either with the sensor or without it, depending on the operator's needs or requirements. This gives the Drill Bits and Services PSL the flexibility to be ready for a data capture run when needed on the optimal bit for the application.



HAL124104



HAL124103

The Drill Bits and Services PSL's DatCI™ network is now pushed into the data capture field. The DatCI teams will set up, install, and capture data as the opportunities arise. Their extensive knowledge of applications helps to ensure that the data is driving performance.

For more information, contact your local Halliburton representative or visit us on the web at www.halliburton.com

Sales of Halliburton products and services will be in accord solely with the terms and conditions contained in the contract between Halliburton and the customer that is applicable to the sale.

H013070 11/18 © 2018 Halliburton. All Rights Reserved.