## Cubic® HF HIGH-FREQUENCY DRILLING DYNAMICS RECORDER



A BUSINESS UNIT OF TURBO DRILL INDUSTRIES, INC.

## CUBIC® HF

CuBIC HF, from Sanvean Technologies, is the industry's first high-frequency embedded drilling dynamics data recorder capable of continuously logging 3-axis ±200G vibration data at 800 Hz & 1600Hz. And because they are compact and designed to be embedded at any point within the BHA and drill bit, they provide continuous high-frequency measurements in the existing BHA components without adding extra lengths or compromising the mechanical integrity.

HFTO (high-frequency torsional oscillation) has become a topic gaining great attention in recent years due to the damage it causes to lower BHA components. Cubic HF sensors can be used for identification of HFTO frequency and magnitude, thus validating BHA models and simulations.

CuBIC HF can also be used in conjunction with Fracture ID to assist in the measurement of rock mechanics properties (UCS, Young's Modulus, Poisson's Ratio, stress, etc.)

## **FEATURES**

- High-frequency continuous measurements
- Compact and rugged design
- 3-Axis lateral, axial, and torsional vibration measurements
- Provides at-point measurements at the points-of-interest within the BHA and bit (i.e. at-bit and above motor power section) in all hole sizes (including slim-hole)
- Mounted on the outside diameter of equipment to measure actual accelerations that can influence drilling efficiency and equipment damages
- Simple and easy-to-read data output allows for quick decisions on parameter or BHA changes.

## **BENEFITS**

- No additional BHA length or BHA connections. No risk of washing.
- Embedded into existing BHA tools and bits
- No field personnel required (automatic trigger on/off with RPM on/off)
- Allows comparison of BHA and third party HFTO reduction tools to evaluate magnitude reduction of HFTO
- Fast memory download for rapid turnaround times
- Can also be used in conjunction with Fracture ID rock property analysis

