

Enhanced Trajectory Optimization

APPLICATION

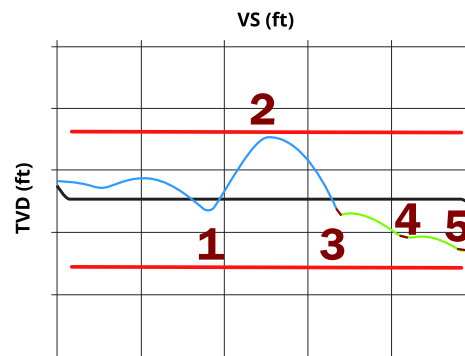
HiFi Guidance is the most advanced Bit Guidance Algorithm on the market. Unlike existing products that rely on rudimentary assumptions and antiquated framework, HiFi Guidance's core algorithms originate from space flight navigation experts. These sophisticated underlying principles have been seamlessly adapted to encompass oilfield drilling applications.

The bedrock of an accurate Bit Guidance Algorithm is knowing to a high level of accuracy the well's current location. HiFi Guidance is informed by HiFi Navigation which generates a precise estimation of the well's location along with Projection to Bit through quantification of Motor Yield and BHA Rotary Tendencies that reduce the impact of the Stockhausen Effect and Minimum Curvature modeling error.

HiFi Guidance is designed to improve the directional driller's efficiency by enabling more accurate and informed steering decisions resulting in a reduction of overall slide percentage. This approach enables the asset teams to drill more consistent wells and make prudent business decisions that ensure proper field drainage while maximizing hydrocarbon recovery.

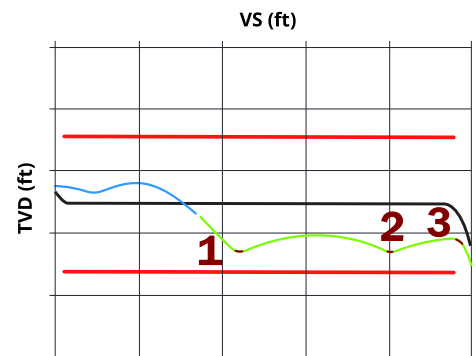


Directional Driller Without Guidance



— Well Plan — Slide Section
 — Rotation Section — Section Window
 — Drilled Path

Directional Driller With Guidance



— Well Plan — Slide Section
 — Rotation Section — Section Window
 — Drilled Path

Quantification of Motor Yield & Rotational Tendencies Paired with Look-Ahead Logic, HiFi Guidance can Eliminate Over-Steering

FEATURES

- Motor Yield and Rotary Tendency Estimations
- High-Density Depiction of the Wellbore Trajectory
- Real-Time Projection to Bit
- Real-Time Cloud-Based Application

BENEFITS

- Comprehensive Steering Recommendations Powered by HiFi Nav
- Reduce Slide Percentage up to 60%
- Improve Bit Projection Accuracy up to 30%
- Seamless Automated Data Transfer Available