Drilling Software | Sophisticated Yet Simple

DEPRO®

Torque, Drag and Hydraulics Model

Overview

DEPRO is a comprehensive torque, drag and hydraulics program. Using this software, users can reduce many of the risks encountered in drilling and completion operations. DEPRO predicts the limits in the length of a horizontal well based on specific friction factors, recommends rig specifications, and evaluates the required weight to set a packer. For hydraulics, DEPRO covers downhole circulating pressures, surge and swab, equivalent circulation densities (ECD), bit optimization, hole cleaning, and volumetric displacements. Using DEPRO, downhole drilling hydraulic conditions can be fully examined, and any potential problems can be identified prior to field execution.

If you are interested in both TADPRO and HYDPRO, DEPRO is the package for you. It combines all the essential parts of both software programs.

Benefits

Operational Efficiency

- Optimizes equipment and fluid usage, leading to cost savings.
- Identifies optimal drilling parameters for faster and more efficient operations.

Comprehensive Solution

- Integrates torque, drag, and hydraulics analysis into a single platform.
- Provides a comprehensive solution at a potentially lower cost than purchasing separate software.

Risk Reduction

- Identifies potential issues before they occur, such as work string buckling, twisting off and pulling off, allowing for proactive measures.
- Prevents downhole problems like formation fluid kick-in and loss circulation fluid, and hole cleaning issues.

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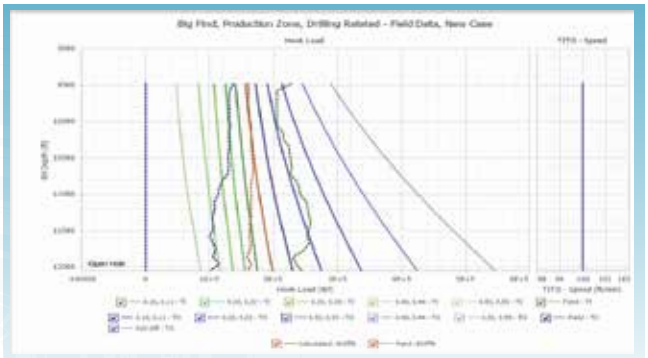
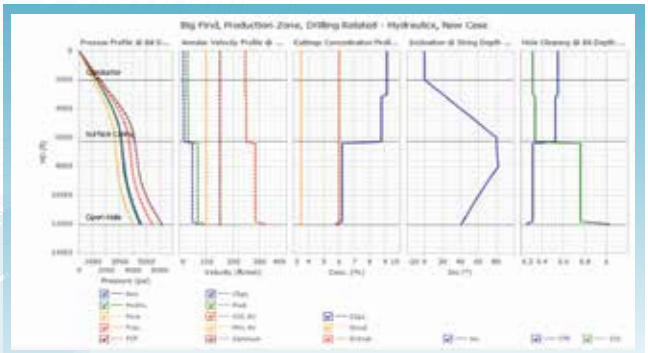
DEPRO®–Torque, Drag and Hydraulics Model

Features

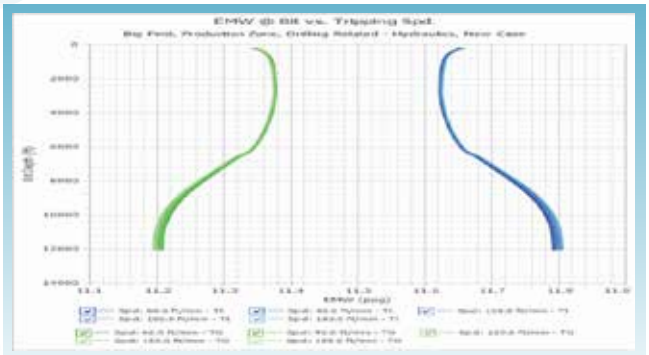
- Four-level structure: Well, hole, operation, and case
- Four operations: Drill related, casing running, packer setting, and other operation
- Land and offshore well
- Torque and drag calculation for: Drilling, slide drilling, back reaming, rotation off bottom, trip in and out
- Sinusoidal and helical buckling analysis
- Stiff-string model
- Circulation, surge and swab hydraulics
- Bingham plastic, power law, or Herschel Buckley model
- Hole cleaning
- Temperature prediction
- Pressure and temperature dependent pressure and ECD
- Field data comparison
- Torque and drag optimization
- Torque and drag sensitivity analysis
- Hydraulics optimization
- Hydraulics sensitivity analysis
- Friction factor calibration
- 2D/3D animation
- Extensive tubular and centralizer database
- Export results into MS Word or PowerPoint
- US oil field, SI, and customized unit system
- Multi-language



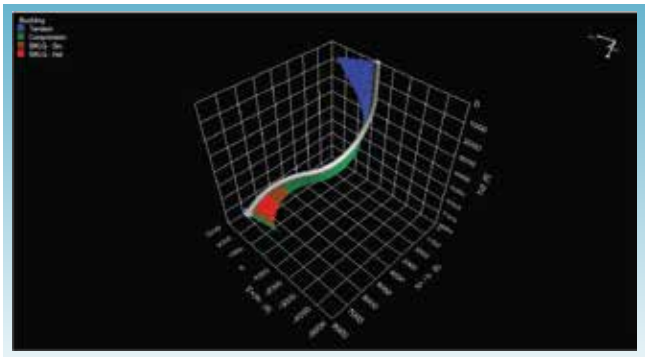
Field Data Comparison



Hydraulics Overall



Surge and Swab Speed Sensitivity Analysis



Buckling Force Profile

System Requirements

- Microsoft Windows® 10 or above
- Microsoft Office® 2016 or above
- Dual-core processor, 1.4 GHz or higher
- 8 GB RAM
- 600 MB of free disk space for installation
- 1,280 x 768 display resolution

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