

Drilling Software | Sophisticated Yet Simple



CWPRO®

Casing Wear Prediction Model

Overview

Casing wear is a continuous concern during the drilling and workover process. Casing integrity relies heavily on the preliminary casing design, which requires considering both well path and casing sustainability to withstand all operations. Improper placement of the casing may result in catastrophic incidents such as oil spills, blowouts, or even the loss of a well. Remediation of casing failures can raise the field operation cost dramatically and be time-consuming.

CWPRO is integrated with multi-well sections, multi-operations, cumulated casing wear results, and tool joint wear models. As a result of extensive research from both experimental and theoretical perspectives, CWPRO has been developed to better understand the casing wear process, predict the location and magnitude of casing wear and give constructive suggestions.

Passing on Pegasus Vertex's belief in building 'Sophisticated Yet Simple' software, CWPRO maximizes the utilization of your valuable data and frees the engineers from dealing with all the abundant casing wear calculations and complicated logistics. Install CWPRO to ensure building a safe and successful well.

Benefits

Improved Casing Integrity and Well Safety

- Accurately predicts casing wear locations and magnitudes, CWPRO enables proactive measures to prevent catastrophic failures like oil spills and blowouts.
- Analyze horizontal well limits and achieve the required weight on liner-top packers.

Cost Reduction and Efficiency

- Prevents casing failures and optimizing casing design, CWPRO helps reduce overall field operation costs.
- Automates complex casing wear calculations and logistics, freeing up engineers' time for strategic tasks.

Efficiency in Operations

- Integrating multi-well sections, multi-operations, and cumulated casing wear results streamlines operations and reduces the complexity of managing casing wear data.





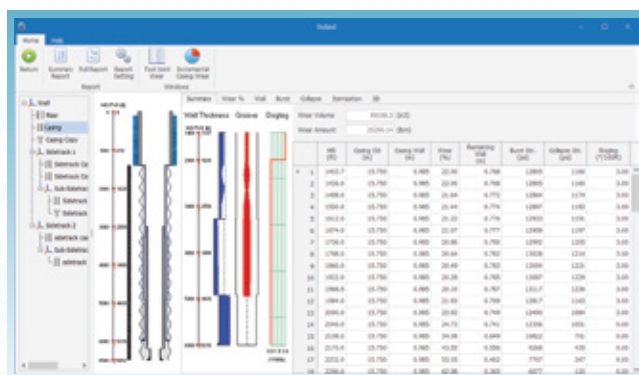
CWPRO®—Casing Wear Prediction Model

Features

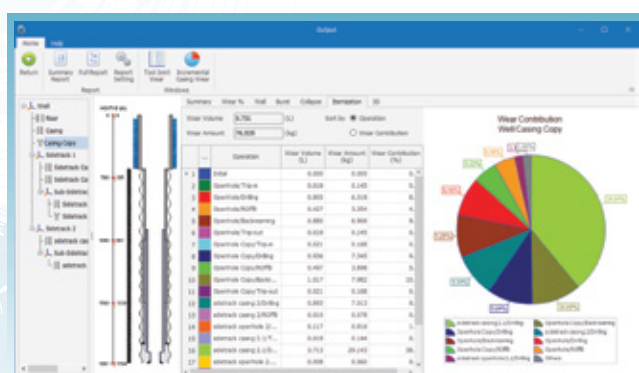
- Wear factor sensitivity analysis
- Casing wear calculation
- Tool joint wear calculation
- Torque and drag calculation
- 3 well types: land, offshore, and offshore with riser
- 5 operations: drilling, back reaming, rotation off bottom, tripping in, and tripping out
- Parent well with sidetracks
- Multiple casings and open holes for each well/sidetrack
- Cumulative casing wear from multiple operations
- Initial wear
- Burst and collapse strength calculation
- 3D well path visualization
- Survey tortuosity
- Casing wear schematics
- Pipe protector recommendation
- Survey import from Excel®, text or PDF® files
- US oil field, SI, and customized units
- Microsoft Word® report

System Requirements

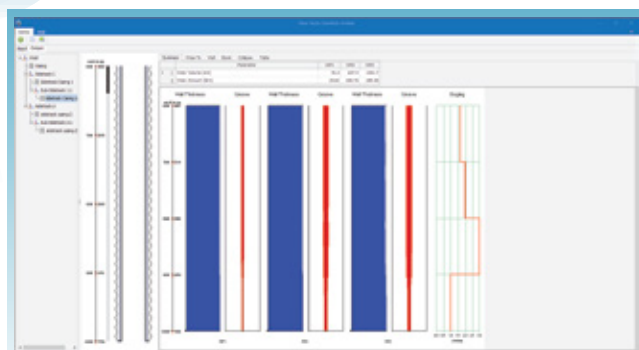
- Microsoft Windows® 10 or above
- Microsoft Office® 2016 or above
- Dual-core Intel or AMD processor, 1.4 GHz or higher. Quad-core CPU recommended. Not compatible with ARM processor
- 4 GB RAM (8 GB Recommended)
- 200 MB of free disk space for installation
- 1,280 x 768 display resolution



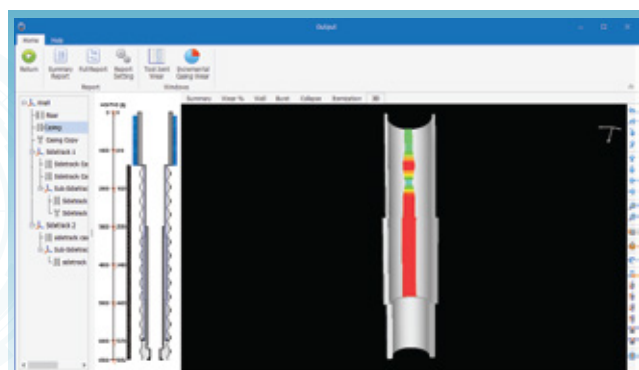
Casing Wear Overview



Casing Wear Contribution



Wear Factor Sensitivity Analysis



3D Animation