CASE STUDY

DRILLSCAN® SOFTWARE IDENTIFIES DRILLING DYSFUNCTION CAUSES IN COMPLEX, MULTILATERAL ERD WELL

Customized Solution Helps Prevent Future Failures in Lower Completion

Challenge

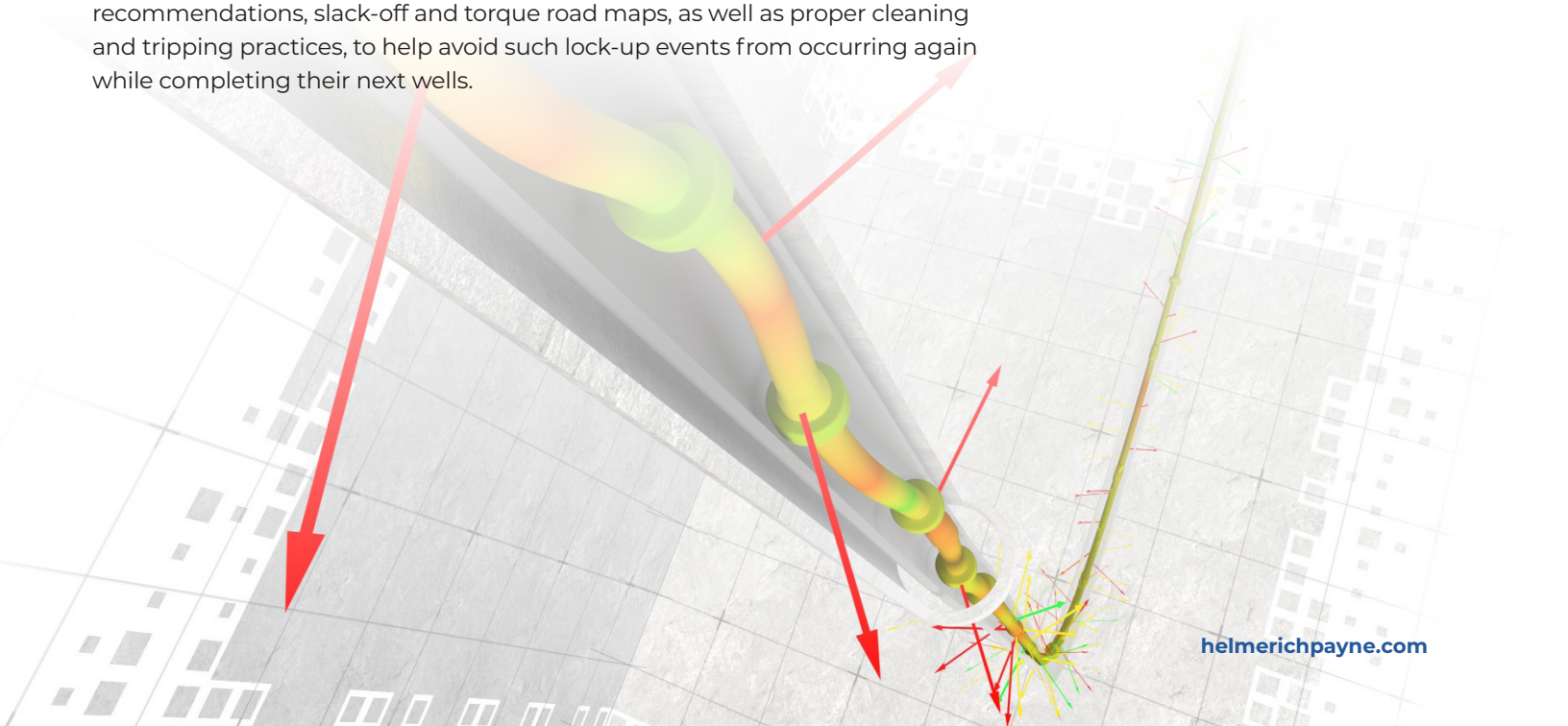
An operator in the North Sea faced a lower completion lock-up 800m above total depth (TD), followed by a stuck pipe event in an ERD multi-lateral well. In an initial effort to push the completion down to TD, all slack-off weight and torque margin were used. Since no improvement was observed, the decision was made to pull-out. However, the string remained stuck and despite the rig efforts to free it, the lower completion had to be cut and left in hole.

Solution

H&P's DrillScan® technology team performed an in-depth post-analysis, reviewing all available data to identify what might have caused the lock-up event. The data provided was used to simulate the downhole conditions undergone by the completion with the DrillScan genuine stiff-string model. The results and conclusions pointed to string dysfunctions: suboptimal tripping and lubricating/backreaming practices (BHA POOH) led to repeatedly exceeding the screens yield strength (lower completion RIH).

Outcomes

H&P's DrillScan software was able to provide the operator with relevant recommendations, slack-off and torque road maps, as well as proper cleaning and tripping practices, to help avoid such lock-up events from occurring again while completing their next wells.



PROJECT OVERVIEW

Location
North Sea

Outcomes
Reduce Failure and Repair Costs

Technology & Services
DrillScan® Software

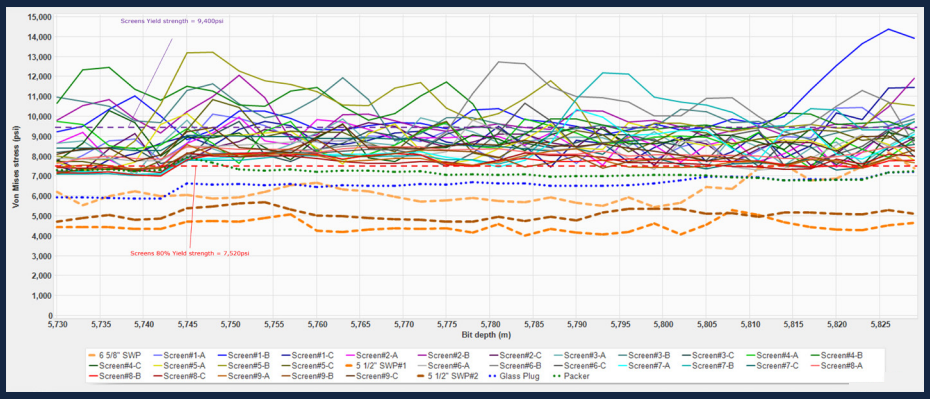
Are you looking to achieve a similar outcome?

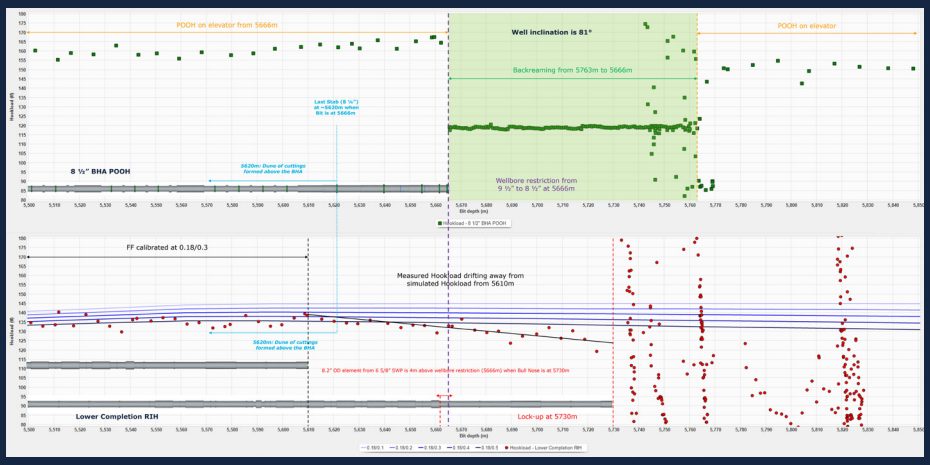
Contact us today.

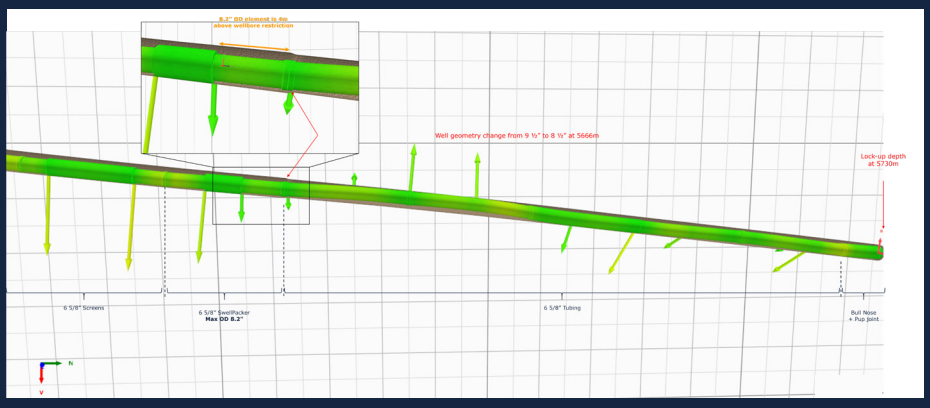
Proof

The outputs provided to the operator have a substantial impact on the success of the lower completion deployment operation. In such complex ERD wells, this translates into preventing:

- Loss of expensive completion equipment
- Sidetrack drilling to substitute for the lateral drain lost
- 25 days of nonproductive time (NPT) at a daily rate of ~ $500,000 USD = **$12.5MM USD**







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