

Norway

Operator reduces rig time with integrated wellbore cleaning and completion solution

CleanWell® mechanical wellbore cleaning tools placed above an XtremeGrip® ELH system enable efficient three-well campaign in Norway

CHALLENGE

- Minimize rig time in noncemented liner application
- Avoid tool damage during post-release rotation
- Perform wellbore cleanup during same run as lower completion installation in three wells

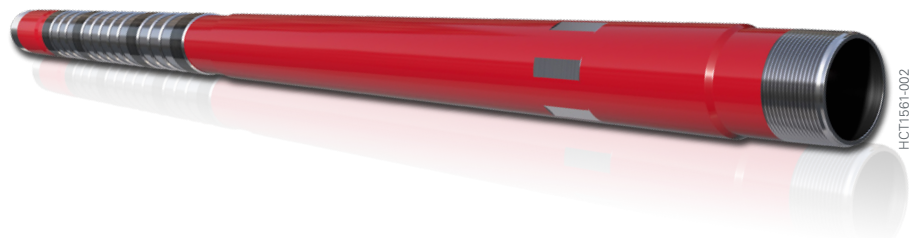
SOLUTION

Complex deployment string comprised of:

- VersaFlex® high-flow circulating valve for increased flow rate upon release of running tool
- Drillpipe swivel to help prevent running tool rotation
- 9 5/8-in. Drill Tech® mechanical wellbore cleaning tools to add friction and protect running tool

RESULT

- Completed three wells with no NPT
- Minimized fluid losses and avoided service quality events
- Delivered clean wellbore and reduced rig



XtremeGrip® ELH

Overview

In a three-well campaign offshore Norway, an operator sought to reduce rig time by combining wellbore cleanup and lower completion installation into a single run. Halliburton deployed CleanWell® mechanical wellbore cleaning tools above the XtremeGrip® expandable liner hanger (ELH) system to meet this objective. Simulations revealed that high flow rates alone would not sufficiently clean the wellbore for upper completion installation. The operator required a solution that allowed for the rotation of the deployment string at 60 to 80 rev/min after releasing the VersaFlex® ELH running tool, without risking tool damage or operational delays.

The lower completion included SSD and ICD screens, a high-pressure float valve, swell packers, FS2 valve, and the XtremeGrip ELH. The well's horizontal section featured a highly deviated angle at the top of liner (TOL), adding complexity to the operation.

Challenge

Upon retrieval of the VersaFlex ELH running tool from the liner hanger assembly, multiple collet fingers are exposed to the well. Rotation of the running tool can potentially cause collets to break off, which requires subsequent fishing runs to retrieve missing or broken running tool parts.

The deviation at the TOL—ranging from 75 to 83°—meant the running tool could contact the parent casing post-release, increasing the likelihood of damage. The operator needed a documented, repeatable solution that minimized rig time and avoided nonproductive time (NPT).

Solution

Halliburton recommended a complex deployment string to help mitigate risks and enable simultaneous wellbore cleanup and completion installation. Key components included:

- VersaFlex® high-flow circulating valve: Enabled increased flow rates after running tool release, addressing the need for effective cleanout.
- Drillpipe swivel: Thoroughly tested to prevent residual rotation below the swivel, protecting the running tool.
- Drill Tech® casing scraper tools were placed below the drillpipe swivel to help ensure additional friction would limit any residual rotation of the VersaFlex ELH running tool.

The drillpipe swivel was run in-hole (RIH) in the locked position and activated at 84 bar (1218 psi) during ELH expansion. A confirmation overpull test validated the expansion, followed by a rotational test with 20 mtf (44,092 lbf) of tension to confirm swivel activation. The running tool was then released via compression and retrieved above the TOL. The circulating valve was activated, and rotation commenced for wellbore cleanup.

Result

All three wells were successfully completed using the integrated tool configuration. While fluid losses occurred in the first two wells, they were minimized, and operations continued without interruption. The third well experienced no losses. All operations were completed within the expected timeframe, with no service quality events or NPT. The documented process demonstrated the viability of running CleanWell® tools above an ELH system in noncemented liner applications, delivering a cleaner wellbore and reduced rig time.



Drill Tech® casing scraper tool

For more information, contact your local Halliburton representative or visit us on the web at www.halliburton.com

Sales of Halliburton products and services will be in accord solely with the terms and conditions contained in the contract between Halliburton and the customer that is applicable to the sale.

H015039 11/25 © 2025 Halliburton. All Rights Reserved.

halliburton.com

HALLIBURTON