AlphaV™ Single-Trip Casing-Exit System and AccuView® Real-Time, Remote Support

Enables Dual-Casing Exit in One Run, Saving 14 Hours' Rigtime and Associated OPEX

Objectives

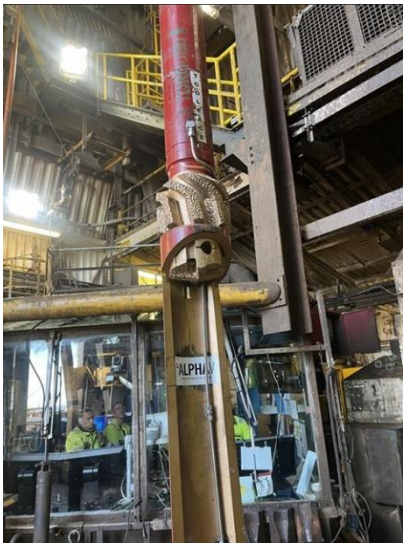
- Set whipstock at target depth without the need for a dedicated wellbore preparation run.
- Perform a single-trip, dual-casing exit in a deviated well through 53.5 ppf C95, 9-5/8 in. (228.6 mm) and 72 ppf N80, 13-3/8 in. (339.7 mm) casings.
- Complete window and rathole in one trip to accommodate a stiff, 8-1/2 in. (215.9 mm) rotary-steerable system (RSS) drilling assembly.
- Reduce the number of BHAs and milling runs required to resume drilling operations.

Our Approach

- Weatherford casing-exit specialists recommended running the proprietary AlphaV single-trip, casing-exit system to perform a dual-casing exit. This system includes a gauge mill and scraper assembly just below the packer anchor on the toolstring—thus eliminating the need to run a dedicated cleaning BHA to scrape and clean the casing at setting depth.
- The AlphaV system was mobilized to the rigsite and run to target depth. Once the whipstock was oriented and set and the milling assembly released, the sidetrack window was then milled through dual-casing strings—all in a single trip.
- Weatherford also leveraged the AccuView real-time, remote-support system for its end-to-end operations planning, execution, and post-action. By monitoring the operation in real-time (make up, run in hole, orientation, setting, and milling), the system enabled subject-matter experts (SMEs) to collaborate and support the decision-making process in real time throughout the operation.

Value to Customer

- The AlphaV system successfully eliminated the wellbore preparation BHA from the program, saving a run and approximately 14 hours of rigtime. This time savings also helped reduce personnel exposure to the red zone while also reducing the number of BHAs handled on site.
- AlphaV successfully milled the window through two casing strings in a single trip. This included milling through one centralizer installed on the 13-3/8 in. (339.7 mm) casing, while also avoiding an additional reaming run to polish the window or extend the rathole.
- By providing a full-gauge window and rathole in a single trip, the operator was immediately able to deploy a stiff RSS assembly to drill the 8-1/2 in. (215.9 mm) section, removing the need for a mud-motor assembly and any additional trips and associated OPEX.
- The AccuView software contributed significantly to the efficiency of the casing-exit operation by allowing remote data-monitoring and analysis. This enabled the SMEs to provide critical, real-time decisions.



The AlphaV milling assembly ready to be run on rigfloor in the North Sea. This casing-exit system eliminates wellbore preparation runs by including a gauge mill and scraper assembly on the toolstring. AlphaV increases tripping speeds by replacing traditional shear bolts with the patented HMR system to enable high-torque and load-bearing capabilities.

LOCATION
North Sea, Norway

WELL TYPE
Offshore

OPERATOR
Equinor

FIELD/FORMATION
Statfjord/Shale

HOLE SIZE
8-1/2 in. (215.9 mm)

HOLE ANGLE
33°

SETTING DEPTH
5,767 ft (1,758 m)

CASING TYPES/SIZES
53.5 ppf, C95/9-5/8 in. (244.5 mm)
72 ppf N80/13-3/8 in. (320.7 mm)

PRODUCTS/SERVICES
- Re-Entry Services
- AlphaV single-trip, casing-exit system
- AccuView, real-time remote support

Weatherford®

