

AlphaV™ Single-Trip Casing-Exit System

Eliminates One Round Trip from Casing-Exit Sequence, Saving 30 Hours of Associated Rigtime

Objectives

- Perform a successful casing exit within an onshore vertical well for Kuwait Oil Company (KOC).
- Eliminate dedicated wellbore-preparation run by combining the scraping-and-cleaning processes with the casing-exit operation.
- Provide a permanent installation including a secondary abandonment barrier.

Our Approach

- Following a thorough examination of the well parameters and operational needs, Weatherford Re-Entry Services recommended KOC run the AlphaV single-trip casing-exit system. This was selected for its unique ability to eliminate the wellbore preparation run by including a gauge mill and scraper assembly just below the packer on the toolstring. This ensured a clean setting area for the whipstock.
- The AlphaV system, which replaces traditional shear bolts with its patented hydraulic-mill release (HMR) system, enhances safety during tripping operations when abrupt workstring movements can cause premature shear of the whipstock assembly.
- The AlphaV system was mobilized to the rigsite and run to target depth. Once the whipstock was set and milling assembly released, a sidetrack window was then successfully milled.

Value to Customer

- The integral, full-coverage scraper in the AlphaV system enabled KOC to clean and scrape the setting area in the same trip, prior to setting the whipstock. This eliminated the need for a wellbore-preparation run, saving 30 hours of rigtime.
- The retractable pin within the HMR system, combined with its rigid, millable collar, allowed KOC to safely run in hole to target depth by delivering the high-torque and load-bearing capabilities needed to perform cleanup operations in the same run.
- The drilling BHA successfully passed through the window without any restriction or interference, ensuring the quality and reliability of the sidetrack.
- Following the successful casing exit and elimination of the wellbore-preparation run, KOC recognized the overall annual OPEX and invisible lost time (ILT) savings potential that the AlphaV system would provide across its other wells in the area.



The AlphaV casing-exit system eliminates wellbore preparation runs by including a gauge mill and scraper assembly on the toolstring. The system increases tripping speeds by replacing traditional shear bolts with the HMR system to enable high-torque and load-bearing capabilities.

LOCATION

Kuwait

OPERATOR

KOC

WELL TYPE

Onshore

HOLE SIZE

8-1/2 in. (215.9 mm)

CASING TYPE/SIZE

43.5# L-80/9-5/8 in. (244.5 mm)

SETTING DEPTH

6,126 ft (1,867 m)

PRODUCTS/SERVICES

- Weatherford Re-Entry Services
- AlphaV single-trip casing-exit system

