

AlphaV™ Single-Trip Casing-Exit System

Eliminated Dedicated Wellbore-Preparation Run
Increased Trip Speed 150%, Saving a Total of
20 Hours' Rigtime

Objectives

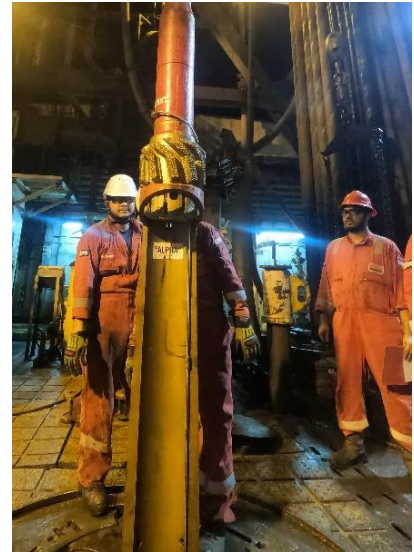
- Set whipstock to target depth without the need for a dedicated wellbore preparation run.
- Increase trip speed over conventional re-entry methods.
- Complete window and rathole in one milling trip.

Our Approach

- Weatherford ISDT experts recommended that the offshore operator run the AlphaV single-trip casing-exit system for its ability to eliminate the wellbore preparation run by including a gauge mill and scraper assembly just below the packer on the toolstring—ensuring a clean setting area for the whipstock.
- The system also replaces traditional shear bolts with the patented hydraulic-mill release (HMR) system to enable high-torque and load-bearing capabilities for increased tripping speed. This also enhances safety during tripping operations when abrupt workstring movement 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 milled—all in a single trip.

Value to Customer

- The exclusive HMR system allowed the operator to increase trip speed by 150%, as compared to conventional casing-exit systems.
- The integral full-coverage scraper in the AlphaV system enabled the operator to clean and scrape the setting area in the same trip, prior to setting the whipstock. This eliminated any need for a wellbore-preparation run, saving 19 rigtime hours.
- Whipstock toolface orientation, packer setting, and mill release were all conducted hydraulically within predetermined ranges.
- The drilling BHA successfully passed through the window without any restriction or interference, ensuring the quality and reliability of the sidetrack—meeting all client KPIs.



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

Indonesia

WELL TYPE

Offshore

HOLE SIZE

12-1/4 in. (31.12 mm)

HOLE ANGLE

40°

SETTING DEPTH

2,350 ft (716.14 m)

CASING TYPE/SIZE

72#SD P110/13-3/8 in. (33.97 cm)

PRODUCTS/SERVICES

Re-Entry Services

AlphaV single-trip casing-exit system

