

M.O.S.T. Plus System Reduces Casing-Cutting Times By 50% During Subsea Wellhead Retrieval Operation

Objectives

- Cut and recover casing strings safely and efficiently.
- Sever casing and drive pipe within a 5-hour time frame and retrieve the subsea wellhead in one trip.

Our Approach

- The Weatherford well-abandonment specialists met with the customer to determine objectives for the casing-cutting and wellhead-removal operation.
- As a result of the meeting, the Weatherford team recommended the mechanical outside-latch single-trip (M.O.S.T.) Plus wellhead retrieval system.
- The team deployed the M.O.S.T. Plus system with a nonrotating flexible stabilizer (NRFS), a large OD (outside diameter) cutter, and newly designed high-angle knives. This combination significantly reduced vibrations while cutting, minimized total cutting time, and decreased the cutting area.
- The system used external wellhead latches to engage the external profile of the high-pressure housing on the wellhead, minimize internal wellhead damage, prevent wellhead turning and listing, and reduce swarf buildup.
- The system confirmed cuts without the need for tripping. It easily latched and released for inspection of the cutting knives.
- In only 2.5 hours, the team successfully severed the dual-string 21- and 36-in. drive pipe without any lost-time incidents or impact to the environment.

Value to Customer

- The M.O.S.T. Plus system, NRFS, large-OD cutters, and high-angle knives increased cutting efficiency, reduced rig time, and enabled quick casing-cutting operations and wellhead recovery.
- The M.O.S.T. Plus system enabled finishing the operation 50% faster than the expected 5-hour timeframe to significantly reduce operator costs.



The M.O.S.T. Plus system cut cleanly through two strings of casing.

LOCATION

North Sea

WELL TYPE

Offshore, exploratory

CASING SIZES

- 21 in. x 1.25 in. wall thickness
- 36 in. x 2 in. wall thickness

DEPTH

396 ft (121 m)

PRODUCTS/SERVICES

- Well-abandonment services
- Wellbore cleaning services
- M.O.S.T. plus system
 - High-angle knives
 - M24 large OD casing cutters
 - Nonrotating flexible stabilizer

