

# Vero<sup>®</sup> Conventional System Delivers Connection Integrity and Achieves Zero Rejected Joints During Completion Running and Workover

## Objectives

- Enhance connection integrity.
- Eliminate or reduce the number of rejected joints.
- Reduce rig-up and rig-down times as well as personnel requirements.

## Our Approach

- Weatherford recommended the Vero conventional system to enhance connection integrity while running completion tubing in an offshore well. The automated makeup and autonomous evaluation system applies artificial intelligence to eliminate human influences that cause errors.
- The all-in-one system—including integrated evaluation software—simplified installation, with rig-up and rig-down completed in less time than traditional equipment.
- The system enabled running 4 1/2-in. 13Cr VAM TOP<sup>®</sup> tubing stands in triples with control lines and clamps on each coupling. When measuring slips to slips time, each connection was run in less than 6 minutes.
- The speed-control programming feature regulated spin-in speed and torque to prevent thread damage during the initial stage of makeup. At any time that spin-in torque increased over the preset value, the system stopped rotation of the pipe. This proactive feature prevented excessive torque spikes potentially leading to damaged connections and costly waste of these pipes.
- During the spin-in process, the Vero system detected one 7-in. joint that was damaged before being picked up at well center and missed during inspection.
- The system enabled pulling and rerunning the 4 1/2-in. completion tubing for the electrical submersible pump (ESP) in triples with zero rejected or damaged joints.

## Value to Customer

- The Vero system delivered connection integrity through a smooth, automated makeup and evaluation process with repeatable graphs.
- The system enabled the operator to pull and run triples and achieve zero rejected joints during the completion workover.
- Compared to traditional equipment, the system reduced rig-up time by 28% and rig-down time by 63%. It also cut personnel requirements in half to improve red zone management.

\* VAM TOP is a registered trademark of Vallourec Oil and Gas France.



When put to the test, the Vero system successfully detected a damaged joint during the spin-in process for completion tubing. It also replaced the ESP for the completion with zero rejected joints.

### LOCATION

Arabian Sea, Middle East

### WELL TYPE

Offshore, oil

### TUBING SIZE AND TYPE

4 1/2-in. 13Cr VAM TOP

### DEPTH

7,359 ft (2,243 m)

### PRODUCTS/SERVICES

Vero conventional system

