

QuickCut™ System, FloReg™ ICD

Enable Record Setting Openhole Sand Screen Completion

Objectives

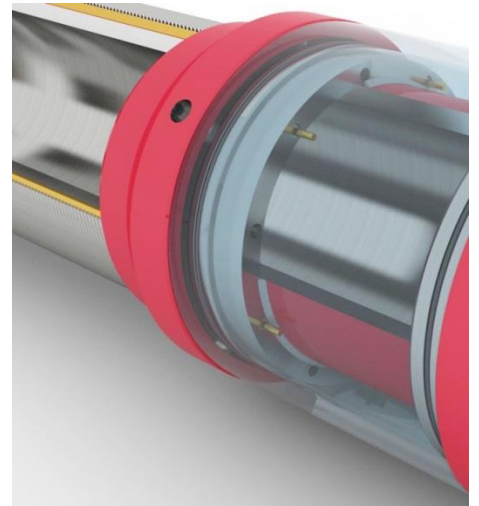
- Execute a 9 5/8-in. casing exit from a shallow wellbore to enable a 9,350-ft (2,850-m) openhole completion. Several attempts by a competing services company had failed because of uncertainty about the casing ID.
- Design and deploy a sand screen system that enables improved reservoir recovery throughout the 9,350-ft (2,850-m) openhole section.

Our Approach

- After a pre-job planning analysis, Weatherford mobilized the QuickCut casing-exit system and an experienced re-entry team. Because the exact inside diameter of the casing was unknown, a hydraulic multi-catch anchor was selected. This anchor enables setting in a wide range of casing sizes regardless of wear. The team ran the 9 5/8-in. QuickCut system into position and milled the window in a single trip.
- The client ran the drilling assembly through the window without hang-ups. They drilled the 9,350-ft (2,850-m) lateral to total depth (TD).
- The Weatherford team then conducted a torque and drag analysis to ensure that the sand screens—a series UltraGrip™ screens with FloReg™ inflow control device (ICD) technology—would reach TD despite the dogleg severity. The FloReg ICD system restricts water or gas coning to promote uniform production flow along the sand-face completion.
- The Weatherford team ran 6,780 ft (2,067 m) of screens in 6 5/8-in., 5 1/2-in., and 4 1/2-in. sizes. The entire string—a record for shallow-depth offshore openhole wells—was run safely without any buckling, holdups, or nonproductive time (NPT). The run rate was 11 joints per hour for a total operational time of 20.9 hours to install 230 screens.

Value to Client

- The Weatherford QuickCut system performed a quality 9 5/8-in. casing exit in one trip after a competitor had failed multiple times. The operation provided a steady run rate, excellent operational efficiency, zero HSE exposure, and no NPT. The system is the longest shallow-depth, 8 1/2- × 9-in. extended-reach, openhole sidetrack in the world.
- The team designed and placed a sand screen system that will restrict water coning and enable efficient reservoir drainage.
- The project is initially expected to deliver 4,660 B/D.



Combined with the UltraGrip screen, the FloReg ICD system restricts water or gas coning to promote uniform production flow along the sand-face completion.

LOCATION

Offshore Western Australia

FIELDS

Carnarvon/Dampier sub-basin

WELL Type

Multilateral horizontal

TOTAL VERTICAL DEPTH

2,051 ft (625 m)

LATERAL LENGTH

9,350 ft (2,850-m)

DOGLEG SEVERITY

11.5° per 100 ft (30 m)

PRODUCTS/SERVICES

- Fishing and re-entry services
- QuickCut casing exit system
- Hydraulic multi-catch anchor
- Tubular running services
- UltraGrip sand screens
- FloReg ICDs

