

FloReg™ Deploy-Assist Device Enables Sand-Screen Completion Without Wash Pipe, Saves \$350,000



The tool string included (from top to bottom) a liner-top packer, an OptiSet FL valve, MORPHISIS annular swellable packers, MaxFlo screens with FloReg DA devices, an SCCV, and a FREGS.

Objectives

- Install sand screens to complete a long, horizontal well in a shallow, partially depleted formation without the use of wash pipe.
- Mitigate fluid loss and regulate inflow caused by the significant pressure differential between the sand intervals.

Our Approach

- Weatherford deployed MaxFlo® screens using a premium, hydraulic-set, rotating (WPHR) liner hanger, a WTSPH5 liner-top packer, and an HNG hydraulic-release running tool. The team selected a hydraulic-release running tool because the client was using a swivelmaster tool, which enables the landing string to rotate independently from the liner hanger and screens.
- An OptiSet™ FL valve provided a unidirectional barrier to prevent fluid loss to the formation during the sand-screen installation. MORPHISIS® annular swellable packers and a FloReg deploy-assist (DA) device worked together to provide zonal isolation and regulate inflow.

Value to Client

- The FloReg DA device enabled the sand-screen completion without the need for a washpipe intervention, which saved the client at least 15 hours of rig time valued at US \$350,000.
- The OptiSet FL valve provided efficient reservoir isolation and minimized reservoir invasion, which helped to maintain well integrity during the completion operation and for the life of the well.
- The large inside diameter (ID) of the OptiSet FL valve also enabled high circulation rates throughout the operation, which enhanced wellbore cleaning.

LOCATION

New Zealand

WELL TYPE

Deepwater, oil, production, horizontal

HOLE SIZE

8-1/2 in. in openhole section

MAXIMUM ANGLE OF DEVIATION

92.09°

LINER SIZE

9-5/8 x 7 in.

OPENHOLE SECTION LENGTH

4,987 ft (1,520 m)

TOTAL WELL DEPTH

- 15,015 ft (4,577 m) measured
- 6,892 ft (2,101 m) vertical

PRODUCTS/SERVICES

- FloReg DA device
- MaxFlo screens
- WPHR liner hanger
- WTSPH5 liner-top packer
- HNG hydraulic-release running tool
- OptiSet FL valve
- MORPHISIS annular swellable packers
- Sand-control circulating valve (SCCV)
- Free-rotating eccentric guide shoe (FREGS)

