



# Weatherford®

## REAL RESULTS

### OneTrip StarBurst™ Multilateral System Enables Increase in Production While Providing Cost Savings on Installation

#### Objectives

- Increase oil production from adjacent wells by drilling a multilateral gas injection well into two formations. Because the operator was using a floater in unpredictable seas, the multilateral system required a simple installation.
- Install a Technology Advancement for Multilaterals (TAML) Level 4 system in one trip while milling a casing exit in 9 5/8-in., 53.5-lb/ft, Super 13 chromium-alloy steel.

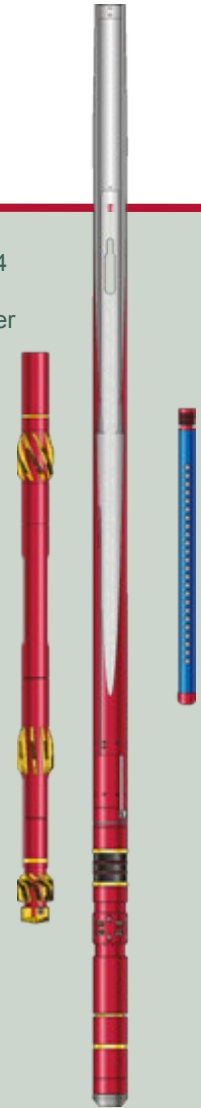
#### Results

- Weatherford's innovative *OneTrip StarBurst* Level 4 multilateral system was installed in one trip despite heaving seas. It was the first time a TAML Level 4 system had been installed without multiple trips.
- The mainbore injection path was reestablished through the hollow whipstock at the junction through wireline perforation using the *StarBurst*™ zero-phase perforating gun. The injection rate stabilized at 100-140 mscf/d (3-4 m sm<sup>3</sup>/d) with an estimated 30% of the injected fluid traveling through the perforated whipstock into the mainbore.

#### Value to Client

- The *OneTrip StarBurst* Level 4 system enabled the operator to create a usable, smooth, full-gauge window.
- The system helped lower rig costs by reducing installation time by two-thirds over the standard system.
- Because the *StarBurst* whipstock is designed for use in both milling and production operations, whipstock retrieval was not required, saving the cost of an additional pipe trip.
- Oil production from adjacent wells increased.

The *OneTrip StarBurst* Level 4 multilateral system creates a cemented junction with full liner access to the lateral bore. Overlapping concentric strings, combined with the cement, ensure a junction with maximum support and formation isolation.



#### Client

StatoilHydro

#### Location

North Sea, Norway

#### Formation

Garn 4 hard impermeable sandstone with quartz stringers

#### Hole Angle

63°

#### Casing

9-5/8 in., 53-1/2 lb/ft, 13% Scr 110

#### Setting Depth

13,314 ft (4,058 m)

#### Run Time and Length

5-1/2 hr to mill a 19.7-ft (6-m) window and a 19.7-ft (6-m) rathole

#### Products/Services

*OneTrip StarBurst* multilateral system