



# Weatherford®

## REAL RESULTS

### Substantial Production Increase After Water Shutoff Operation in Two Production Wells

#### Objectives

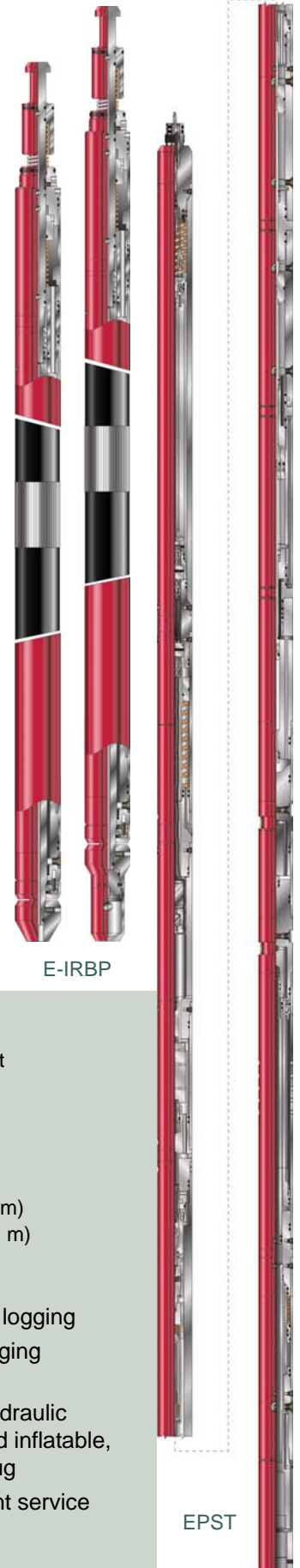
- Identify, locate, and isolate the zones producing 97% watercut to optimize production of two North Sea wells.
- Safely perform the operation simultaneously with drilling operations without the assistance of drilling rig crew.
- Overcome constraints of wellbore restrictions, off-line skid deck work, and unwanted debris on deployed bottomhole assemblies.

#### Results

- Weatherford engineers and its Well Engineering Solutions Team conducted an in-depth evaluation to provide an integrated service package.
- A memory production logging tool was run to identify the exact locations of unwanted water production in both wells.
- Caliper surveys around the proposed setting depths of inflatable bridge plugs, using Weatherford's multifinger caliper tool, confirmed that the bridge plugs would not fail as a result of wellbore diametric irregularities.
- The inflatable, retrievable bridge plugs, set by electric wireline, were then set successfully to isolate the water-producing zones.

#### Value to Client

- Both wells are back on production.
- Drilling operations were conducted without interruption.
- Water production was reduced.
- The job was performed under budget and on schedule, without any safety issues or nonproductive time.



**Location**  
North Sea, UK

**Well Type**  
Subsea production

**Hole Angle**  
~40°

**Casing Size and Type**  
1st well: 7 in., 29 lb/ft  
2nd well: 5-1/2 in., 17 lb/ft

**Maximum Temperature**  
225°F (107°C)

**Setting Depths**  
1st well: 12,735 ft (3,882 m)  
2nd well: 13,325 ft (4,061 m)

#### Products/Services

- Cased-hole memory logging
- E-line production logging services
- Thru-tubing e-line hydraulic pump setting tool and inflatable, retrievable bridge plug
- Cement displacement service