

Weatherford®

REAL RESULTS

Inflatable Retrievable Bridge Plug Passes through Narrow Wellhead to Isolate Zone, Saves Expenses by Minimizing Downtime

Objectives

 Facilitate a wellhead change by setting a tubing barrier capable of passing through a 4 1/16-in. wellhead with a minimum through-bore of 3.87-in. and setting inside 5-in., 18-lb C-75 Hydril SEU tubing. Adding complexity to the job design, the operation would have to be conducted rigless with potential high-pressure exposure and a significant amount of H₂S content.

Results

- Using an electric pump-setting tool conveyed on electric line, Weatherford ran two 3 3/8-in. electric-line inflatable retrievable bridge plugs (E-IRBP) as a dual barrier against the expected 3,200 psi (22 MPa) shut-in gas pressure.
- The well was filled with 9.9 ppg brine to mitigate both the high-pressure and high-H₂S content.
- The E-IRBP bridge plugs were then tested to 6,000 psi (41.4 MPa) and left in hole for the duration of the wellhead change, estimated at 48 hr.
- The wellhead was changed; the E-IRBP plugs were retrieved with electric line, using Weatherford's hydraulic retrieval tool, and the well was placed back on stream within 48 hr.

Value to Client

 The Weatherford solution saved costs by minimizing downtime while avoiding the added expense of mobilizing a rig and performing a complete workover. Small-diameter E-IRBP tools are ideal for passing through restrictions. Their highperformance inflation elements provide up to 3:1 expansion, using Weatherford's electric-pump setting tool.

Client BAPCO

LocationBahrain

Type of Well

High-rate gas producer with a flow potential of 50 MMcfd

Products/Services

- E-IRBP tools
- Electric pump setting tool

