

Weatherford®

REAL RESULTS

Integrated Horizontal-Well Completion System Saves Operator 10 Days, Enables Early Production of 329 B/D



Weatherford installed a completion system with milling seat and balls on a land rig in Mexico. After milling, the hydrocarbons flowed without restrictions for optimum production.

Objectives

 Design and install an integrated completion system in a horizontal well with 14 producing zones.

Results

- Weatherford designed and deployed a completion system that met operator requirements. The installation entailed equipment and services to perform hydraulic fracturing, mill balls and seats, and run production tubing.
- The ZoneSelect[®] Multishift frac sliding sleeve used balls and seats to enable opening or closing.
- The OilVis hydrocarbon-based fracturing fluid system gelled hydrocarbons to help carry high concentrations of proppant into the fractures. The system used 48,307 bbl (7,680 m³) of fluid to place 3,107,600 lb (1,409,584 kg) of 20/40-size proppant to 14 different areas of the horizontal section.
- Coiled-tubing units and a milling and cleaning assembly designed for the ZoneSelect system helped to execute the milling process.
- A workover rig (WDI) enabled the installation of production tubing to prepare for an artificial-lift system if needed in the future.

Location

Mexico

Formation

Chicontepec Basin

Well Type

Onshore, horizontal, oil

Casing Size

7 in.

Production Casing Size

4-1/2 in.

Bottomhole Temperature

144°F (62°C)

Permeability

0.21 mD

Products/Services

- ZoneSelect system
- Cyclone Bailer® tool
- OilVis 70/30 fracturing-fluid system
- Arrowser I-X mechanical packer
- BlackCat liner hanger



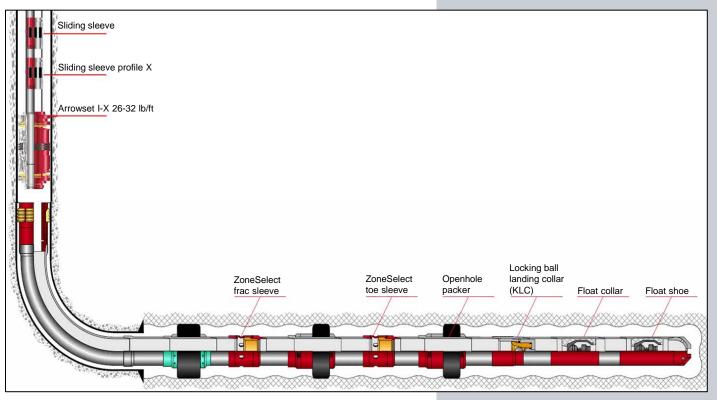
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Value to Client

- Weatherford intervened and installed the integrated completion system 10 days sooner than planned, which resulted in early production of 329 B/D (52 m³/d).
- The OilVis fracturing-fluid system made it possible to use an oilbased hydraulic fracturing fluid in a sensitive water reservoir. This minimized the possibility of damage from water.
- The installation of the production tubing readied the well for installing a hydraulic lift system in the future. This eliminated the costs for future repair operations to maintain production rates.

The illustration below shows the integrated completion system and its components. After setting the fracturing fluid, Weatherford milled the ZoneSelect seats using a bottomhole assembly that included the Cyclone Bailer tool.



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