

Monobore Completion Design Reduces Operational Time by 80% and Saves 40% in Equipment Costs

Objectives

- Reduce operational time and costs for a gas-well completion in northern Brazil. Previous well completions in this field had required a two-trip operation and had used more costly equipment, including one run of 7-in casing. Average operational time was 5 days.
- Minimize inside-diameter (ID) restrictions.

Our Approach

- Weatherford recommended a single-trip monobore completion design, which would reduce the amount of equipment needed, lower operational time and costs, and minimize ID restrictions.
- The completion design included the Weatherford OptiMax™ cement-through safety valve, a landing nipple, and float equipment.
- The team ran the completion string into the 6 1/8-in. open hole, and then set and cemented the string at 5,249 ft (1,600 m). At this point, the string was ready for perforation and production with no casing runs or additional intervention needed.
- The operation was completed in accordance with local regulations and with zero health, safety, and environmental (HSE) incidents.

Value to Client

- Weatherford monobore completion design enabled the operator to complete the well in 1 day, which is an 80% reduction in operational time compared to previous completions using conventional techniques.
- By minimizing equipment requirements for this operation, including the need for a casing run, the completion design reduced costs by 40% compared to previous completions.



Weatherford monobore completion design, featuring the OptiMax cement-through safety valve, enabled a gas well to be completed in 1 day and reduced equipment requirements, which lowered costs significantly.

LOCATION

Brazil

WELL TYPE

Producer, gas

FORMATION

Sandstone

HOLE SIZE AND ANGLE

6-1/8 in., 43°

COMPLETION STRING TYPE AND SIZE

Open hole, 3-1/2 in.

TEMPERATURE

131°F (55°C)

PRESSURE

2,300 psi (15.9 MPa)

SETTING DEPTH

5,249 ft (1,600 m)

PRODUCTS/SERVICES

- OptiMax™ cement-through safety valve
- WX landing nipple
- Double Sure Seal 3 high-temperature float collar
- Double Sure Seal 3 high-temperature float shoe

