

Radial Drilling Significantly Increases Production at Petrobras Maria Ines Del Oeste & Puesto Peter fields, in Southern Argentina

Lateral jetting technology allows accurate positioning of laterals, significantly increasing completion effectiveness compared to conventional and less accurate directional drilling and/or fracturing.

CHALLENGE

Extreme accuracyy required to complete the Magallanes formation cost effectively.

SOLUTION

Apply a sequence of extended laterals accurately depth positioned to surgically penetrate the oil zone in a thin bedded formation.

RESULTS

Production increases in excess of 300% were achieved.

Thin-bedded Magallanes formation required precise depth accuracy

The Magallanes formation exhibits good porosity & permeability characteristics, but has differing levels where saturation varies between 30%-80%. Conventional directional drilling and fracturing lacked the accuracy required to maintain a position in the low saturation zone.

Laterals accurately depth positioned provide immediate solution.

Four wells in the Maria Ines Del Oeste and Puesto Peter fields were chosen to reveive precise depth positioned laterals in the horizons with low-level water saturation.

Laterals were achieved using inhibited fluid with volumes no more than 1,000 liters per lateral and configured for zero formation invation.

300% - 600% production increase without loss of efficiency or added cost.

Following lateral placement, the wells flowed back and produced a comparison cumulative oil volume with an increased production between 300%-600%.

This far exceeded the operator's original expectations. As a result Petrobras continues to apply the technique.

