



Case Study 2:

PulseEight™ wireless intelligent completion technology delivers P/T data from clients wells in Norway

The PulseEight product range from Tendeka uses unique 'pressure pulse telemetry' to deliver pressure & temperature data to surface, without control line.

Well Data

Location: Offshore Norway

Well Type: Gas producer

Installation Date: November 2011

Depth: 1460m RKB

Tubing Size: 7"

Temperature: 68°C



Norway's largest gas reservoir has been on-line since 1996 and is expected to continue production for the next 70 years. Declining pressure means that more compression is required to drive production and an accurate understanding of reservoir pressure and decline is critical to meeting contractual gas deliveries and achieving recovery targets.

- Obtain bottom hole data to aid production optimisation
- Use an intervention based solution to enable data collection beyond the service life of permanent gages

The Challenge

Seasonal variations in gas demand means that production rates vary greatly from less than 30 mmscf/d to over 85 mmscf/d.

Tendeka Solution

Tendeka installed the PulseEight Wireless PT Gauge to provide daily flowing bottom hole pressure and static well data following a shut-in. No surface acquisition equipment or data relay system was required as the existing wellhead sensors are used to read the signal. Pressure regulation was introduced to the pulse signalling to ensure data transmission over the large range of flow rates.

Project Results

The system remained highly effective with less than 0.5bar pressure pulses for 428 days. The gauge was retrieved and found to be in excellent condition.

