

Case Study:

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

TAQA's PulseEight dynamic downhole reservoir management system uses unique Fluid Harmonics to deliver pressure & temperature data to surface, without the need for 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. 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 gauges

The Challenge

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

TAQA Solution

TAQA 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 Fluid Harmonics telemetry 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.

