

Expro Excellence

Extreme service Permanent Downhole Monitoring solution for a HPHT gas condensate asset

Well Flow Management | Wireless Well Solutions



Objectives and background

- Life of Well Real-Time downhole data was required from three planned infill wells to support production optimization and reservoir management
- Due to extreme harsh service the customer did not consider PDHG technology to be reliable enough for inclusion in previous completion designs
- Customer engaged suppliers to evaluate available technologies which would provide a best in class PDHG system with the technical specification capability to meet the monitoring requirements for the wells

Expro Excellence

- Expro collaborated with its technology partners and worked closely with the client to project manage and execute a "best in class" PDHG system installation
- Expro's Extreme Service PDHG solution featured two 20K psi / 225°C downhole gauges mounted on two Inconel 718 gauge carriers
- The two gauges deployed on a single TEC cable at set positions on the wells upper completion to enable reservoir management and production optimization
- The Expro PDHG system interfaced well with the various other completion component technology service providers ensuring a seamless installation
- Post-installation data from the Expro PDHG systems is designed for direct hand-off to the client well management control and monitoring systems

Value to the client

- Data used for:
 - Reservoir management
 - Reservoir model validation
 - Improved forecasting
 - Reducing uncertainty in reservoir connectivity
 - Pore pressure prediction for in-fill well drilling and well abandonment production optimization
 - Calibration of well lift curves
 - Timely detection of well behaviour changes such as hydrates, scale, condensate banking and water breakthrough
 - Reduction in HP-HT PLT spend
 - Completion Integrity
 - Detection of compaction caused by shale storm event or sand failure
 - TRSSSV integrity confirmation and control line pressure management

“
Great support and performance during completion running by the Expro crew.”

Well Services and Completions Representative

Insight



Reduction of rig time

