

Wireline Deployed Memory Gauge Services

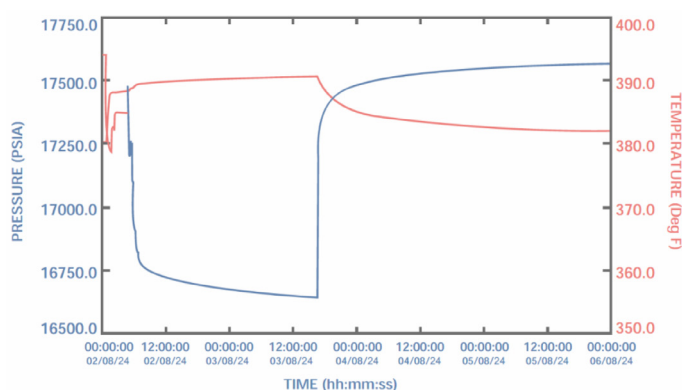
High quality data, trusted insight, confident decisions

Expro's Wireline Deployed Memory Gauge Service has built a global reputation for reliability, delivering high-quality downhole pressure and temperature data that operators trust to evaluate well performance and optimise production.

The versatility of memory gauges to measure and record downhole pressure and temperature in the time domain makes them an invaluable tool in the well performance management toolbox. Through the interpretation of the acquired gauge data, a wide range of well parameters and reservoir characteristics can be determined - from wellbore fluid gradients, fluid interfaces, permeability and skin through to reservoir boundaries, heterogeneities and field connectivity.

By partnering with leading global sensor, hardware and battery suppliers, we select best-in-class technology to configure the right memory gauge solution for each application, ensuring delivery of high-quality data that operators can rely on.

Our extensive inventory includes slim designs and tools rated up to 30,000 psi and 400°F, with memory capacity of up to 4.2 million data sets. All gauges utilise shear mode quartz sensors for the highest accuracy and stability.



With ultra-fast sampling rates down to 0.01 seconds, Expro captures early-time pressure transient behaviour while also supporting extended duration reservoir monitoring. Every deployment is backed by rigorous QA, calibration, verification, and maintenance processes, ensuring dependable performance across the well lifecycle.

To maximise operational flexibility, memory gauges can remain on the wire for short duration surveys, suspended below a lock mandrel or set in a side pocket mandrel for longer durations - the latter allowing continued full-bore access during the survey. For specialised applications, Expro can also provide custom gauge housing to safeguard the gauges in high-vibration or long-duration environments.

Memory gauge surveys fall into three main categories, each providing distinct insights and adding value at different stages of the well lifecycle - from early reservoir characterisation, through production surveillance, to field life extension and well integrity management. The main survey categories types include:

Short duration flow, build-up and gradient surveys - determination of:

- Permeability (k)
- Skin (s)
- Reservoir pressure (P*)
- Productivity Index (PI)
- Inflow Performance Relationship (IPR)
- Wellbore fluid gradients and interfaces

Long-term surveys - identification of:

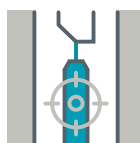
- Reservoir boundaries
- Heterogeneities and dual-porosity effects
- Well-to-well connectivity (interference)
- Reservoir depletion and pressure trends

Well integrity diagnostics - evaluation of:

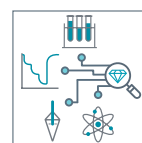
- Tubing-Annulus communication
- Barrier performance

Why choose Expro?

- Access to best-in-class technology
- Downhole data acquisition expertise spanning five decades
- Complimentary market leading production optimisation solutions
- Global reach, rapid mobilisation and local execution
- Backed by our dedicated Global Data Analysis Centres for rapid interpretation



Cased Hole Services



Data Analysis Centre

To discuss an application, contact:

wellintervention@expro.com

expro.com/products-services/well-intervention

Wireline Deployed Memory Gauge Services

High quality data, trusted insight, confident decisions