

Expro Excellence

Internal well profile evaluation supports successful fracturing preparation

Well Intervention & Integrity



Objectives and background

- As part of preparations for a planned hydraulic fracturing campaign in 2026, the client was evaluating a number of candidate wells for final selection. Given that the completion in one of the shortlisted wells had been in service for more than 20 years, a clear understanding of the condition of the tubing and liner was essential before progressing with stimulation activities
- Expro was engaged in April 2025 to provide well integrity and data acquisition services to assess the internal condition of the completion. With the planned fracturing operation expected to subject the well to high pressures, accurate dimensional data was required to support stress analysis, engineering evaluations, and operational planning
- To assess wellbore condition, Expro deployed its Multi-Finger Caliper (MFC) technology to identify scale, corrosion, deformation, and any restrictions that could impact future intervention and fracturing operations
- The initial survey identified conditions requiring remedial intervention before stimulation could proceed. Following remediation, a second MFC survey in March 2026 verified the effectiveness of the work, providing assurance of wellbore accessibility and readiness for the planned fracturing campaign



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- In April 2025, Expro deployed its Multi-Finger Caliper (MFC) technology to evaluate the condition of three tubing and liner sizes across more than 6,000 metres of wellbore in a single memory-mode run. The high-resolution survey identified a localized interval of circumferential scale deposition within the liner that had the potential to restrict wellbore access and impact future intervention activities
- When the well was subsequently selected for the 2026 hydraulic fracturing campaign, the MFC data provided clear evidence that remediation was required before operations could proceed. Following scale milling by a third-party contractor, Expro returned to the well in March 2026 to perform a focused post-milling assessment. Two memory-mode passes, including a repeat run for verification, were conducted across the affected interval to evaluate the effectiveness of the milling operation
- Analysis of the post-milling data confirmed a significant reduction in the scale deposit, demonstrating that the obstruction had been successfully removed without the need for additional milling. This enabled the client to proceed confidently with the next phase of operations, avoiding unnecessary intervention time and cost
- The processed caliper data was also shared with Expro's engineering team to support frac campaign planning. Detailed information on internal diameters, scale distribution, corrosion indications and ovality provided valuable insight into the well's internal profile, while accurate mean ID measurements supported the design of straddles to be deployed during fracturing operations for isolation of existing perforations
- By delivering accurate wellbore condition data before and after remediation, Expro enabled informed decision-making, reduced operational uncertainty, and helped optimize well preparation activities ahead of the planned fracturing campaign

Value to the client

- Memory-mode surveys were tailored to the client's requirements, capturing either the full wellbore or targeted intervals with repeat passes where required, helping minimize operational time and cost
- Direct-contact MFC measurements delivered highly accurate internal diameter data and a true representation of wellbore condition, with fast data processing enabling timely operational decision-making
- Comparison of pre- and post-milling caliper data, including 2D logs and cross-sectional views, confirmed the effectiveness of the scale removal operation, eliminating the need for repeat milling and allowing the client to progress with confidence while reducing cost and schedule risk

Cost saving



Insight

