

Product True Integrity

Packer Seal Integrity

Validates sealing performance of completion packers

What it delivers

Completion packers are an essential part of the integrity envelope, but their sealing performance can degrade over time. Rapid diagnosis is essential to restore safe and productive operations.

Packer Seal Integrity evaluates the seal performance of packers, locating leaks quickly and with precision.

Delivered by our True Integrity system using the Chorus (acoustic) platform; Packer Seal

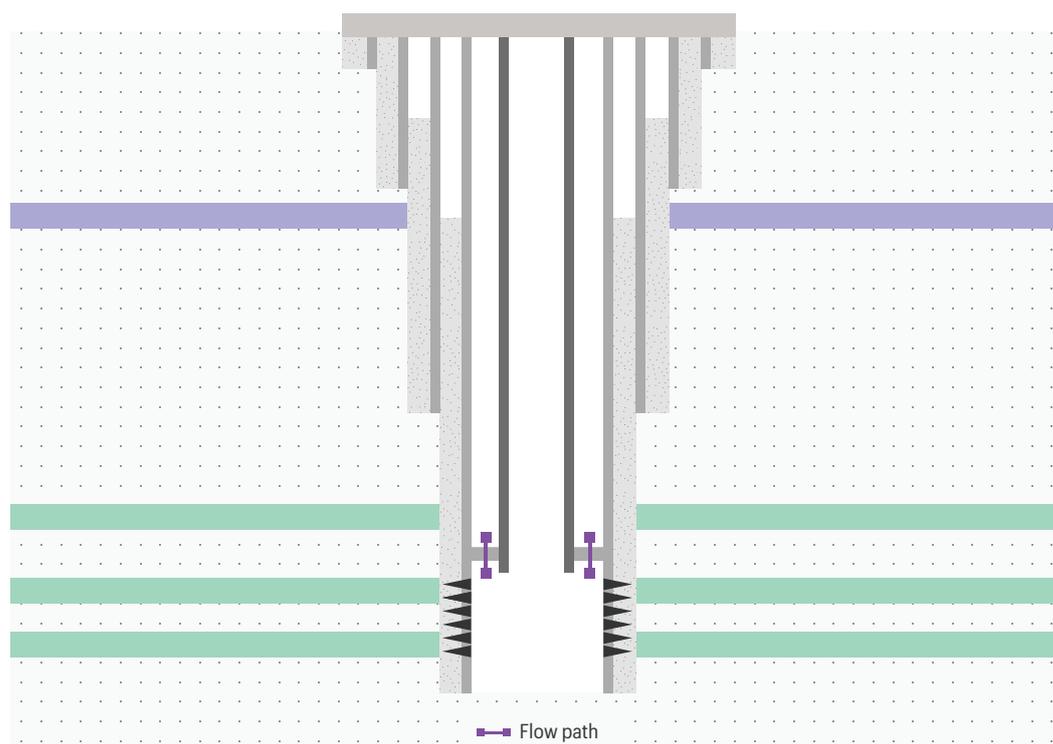
Integrity provides a clear and convenient diagnosis of packer integrity so the right corrective action can be taken.

Packer Seal Integrity is used in a targeted fashion to diagnose suspected packer leaks, and proactively to ensure correct operation. With proper diagnosis, the well can be restored to normal operations.



Well sketch shows a range of typical packer leaks and unwanted flowpaths – that Packer Seal Integrity can diagnose.

Packer Seal Integrity gives you the clarity and insight needed to manage well system performance more effectively.



Challenges

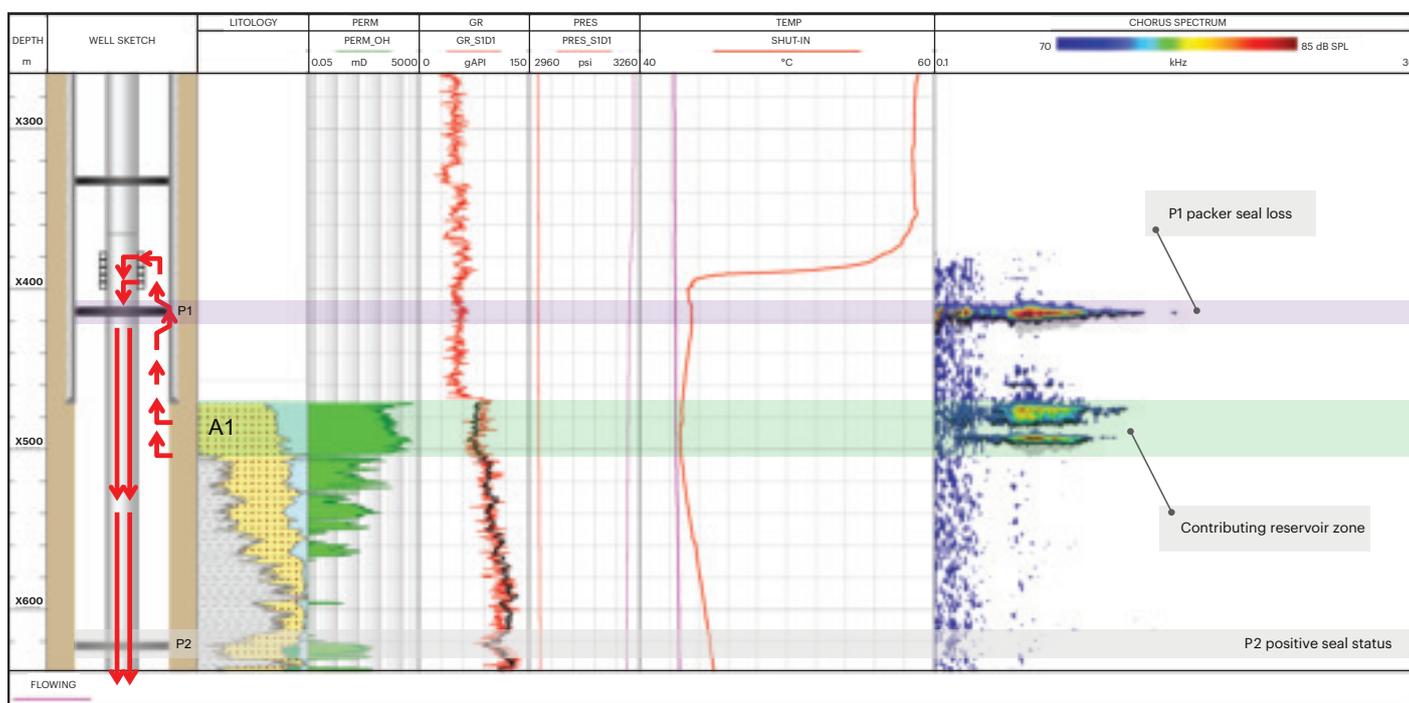
- Evaluate seal integrity & sealing performance of completion packers
- Sustained pressure in A-annulus [SAP]
- Abnormal production or injection performance
- Annular fluid loss
- Leaking packers
- Investigate long and short string communication in dual completions
- Planning workover or P&A

Benefits

- Locate packer leaks rapidly, accurately and completely
- Locate true source of SAP in A-annulus
- Mitigate integrity risk and ensure regulatory compliance
- Rapid deployment through-tubing minimises disruption and cost
- Improved water shut-off planning in horizontal wells with smart completions
- Better remediation decisions, precisely targeted
- Optimise or validate pre- or -post workover or P&A programmes

Indicative logplot for Packer Seal Integrity

Chorus data indicates a clear signature of packer seal failure, identified at packer P1 location. At P1 location there is a high amplitude, wide frequency acoustic signal which is typical for leaks.



Case studies

CS010: Identifying the cause of sustained annulus pressure helps operator restore normal operations.

Technical papers

SPE-191735-MS: Complete Assessment of Complex Unconventional Saudi Arabian Producer Using High Definition Spectral Noise Logging and Numerical Temperature Modeling

SPE-188656-MS: An Integrated Approach to the Integrity Diagnostics of Underground Gas Storage Wells

SPE-186129-MS: The Sound of Silence: Innovative Approach to Confirm Barriers using Spectral Noise Logging