What it delivers
Assessing the integrity of dual completions is challenging. Access below the short string is always blocked, and the geometry can be too complex for ordinary electromagnetic inspection systems to evaluate the integrity of the tubulars.

Dual String Tube Integrity brings all the accuracy benefits of Multi Tube Integrity to dual completions, assessing up to four concentric tubulars from a single through tubing deployment.

Powered by our True Integrity system using the Pulse (electromagnetic) platform; Dual String Tube Integrity is the industry’s most accurate multi barrier diagnostic product for dual completions.

Dual String Tube Integrity if used routinely can support your ongoing integrity management programme, or in a targeted fashion to investigate a specific integrity breach.

Our ability to assess up to four concentric tubulars simultaneously means that most of the well can be evaluated in a single deployment, without pulling the tubing.
Challenges

- Managing tube integrity in dual completions
- Routine or targeted surveillance of tubulars in dual completions
- Time-lapse barrier condition monitoring
- Assessing maximum allowable annular surface pressure (MAASP)
- Assessing tube condition in the presence of scale
- Verifying completion design
- Pre-workover, pre-handover, or pre-abandonment assessment

Benefits

- Track and validate tube condition over time and spot tube weakness before it fails
- Through-tubing deployment in a single run minimises disruption and cost
- Comprehensive validation of barrier condition in a single run
- Understand true wall thickness
- Identify internal vs. external defects in primary tubes (when used with a multi-finger caliper)
- Better remediation decisions, precisely targeted
- Maintain regulatory compliance

Indicative logplot for Dual String Tube Integrity

Left columns of the well sketch display data for short and long strings. Right columns show logs for the 9 5/8” and 13 3/8” casings. Each column shows responses (left) and calculated thicknesses (right). Metal loss was found in 13 3/8” casing at the X663 - X664m interval.

Case studies

CS012: Quantitative evaluation of reservoir flow reveals short-string production profile and guides workover plan

Technical papers

SPE-191558-18RPTC-RU: Rigless pre-workover diagnostic of a Dual String Completion

SPE-187668-MS: Application of Noise and High Precision Temperature Logging Technology to Detect Tubing Leak in an Oil Well