

Product True Integrity

# Primary Tube Integrity

## Evaluates the metal condition and wall thickness of primary tubulars

### What it delivers

Production tubing and casing needs to connect reservoirs to the surface safely and productively. Tracking the condition and wall thickness of primary tubulars is essential to maintaining a secure well.

Primary Tube Integrity provides the same accuracy advantages of Multi Tube Integrity but, tailored for the production tubing or primary casing barrier.

Powered by our True Integrity system using the Pulse (electromagnetic) platform;

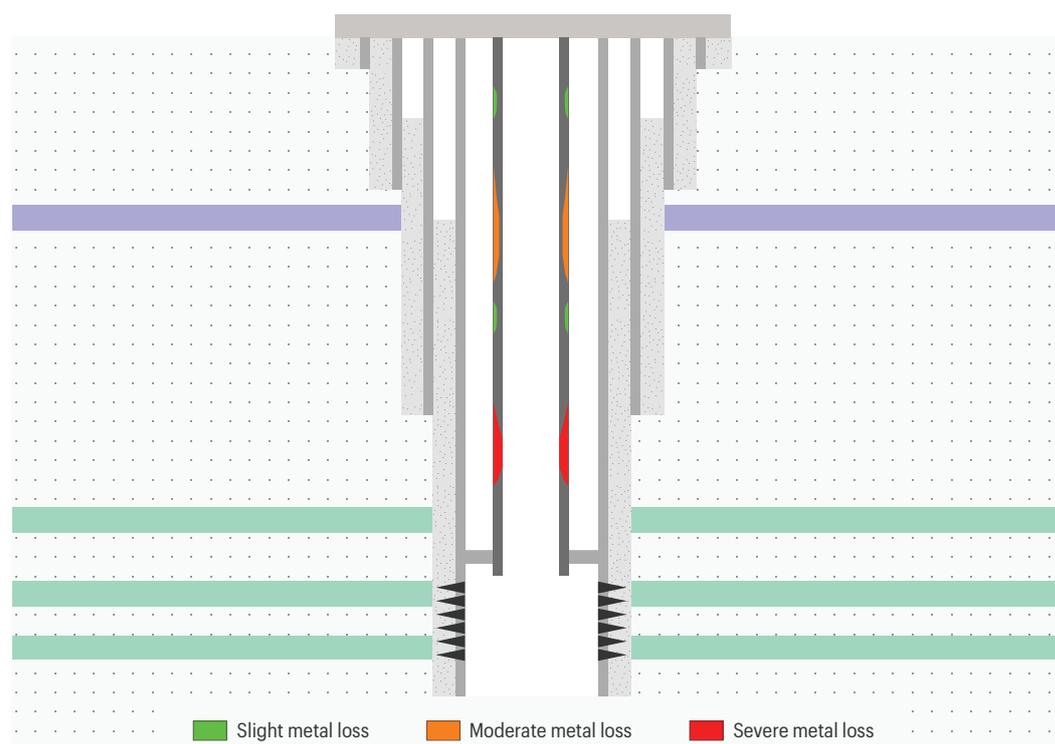
Primary Tube Integrity delivers accurate wall thickness data – even if you have scale.

Primary 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 reveal actual wall thickness and external defects makes it the ideal complement to conventional caliper type investigations.

Well sketch shows a range of typical barrier condition and metal loss scenarios that Primary Tube Integrity can diagnose.

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



## Challenges

- Evaluate & manage tube integrity of primary tubulars
- Routine or targeted surveillance of primary tubular condition
- Time-lapse barrier condition monitoring
- Identifying internal and external defects
- Assessing tube condition in the presence of scale
- Pre-workover, pre-handover, or pre-abandonment assessment

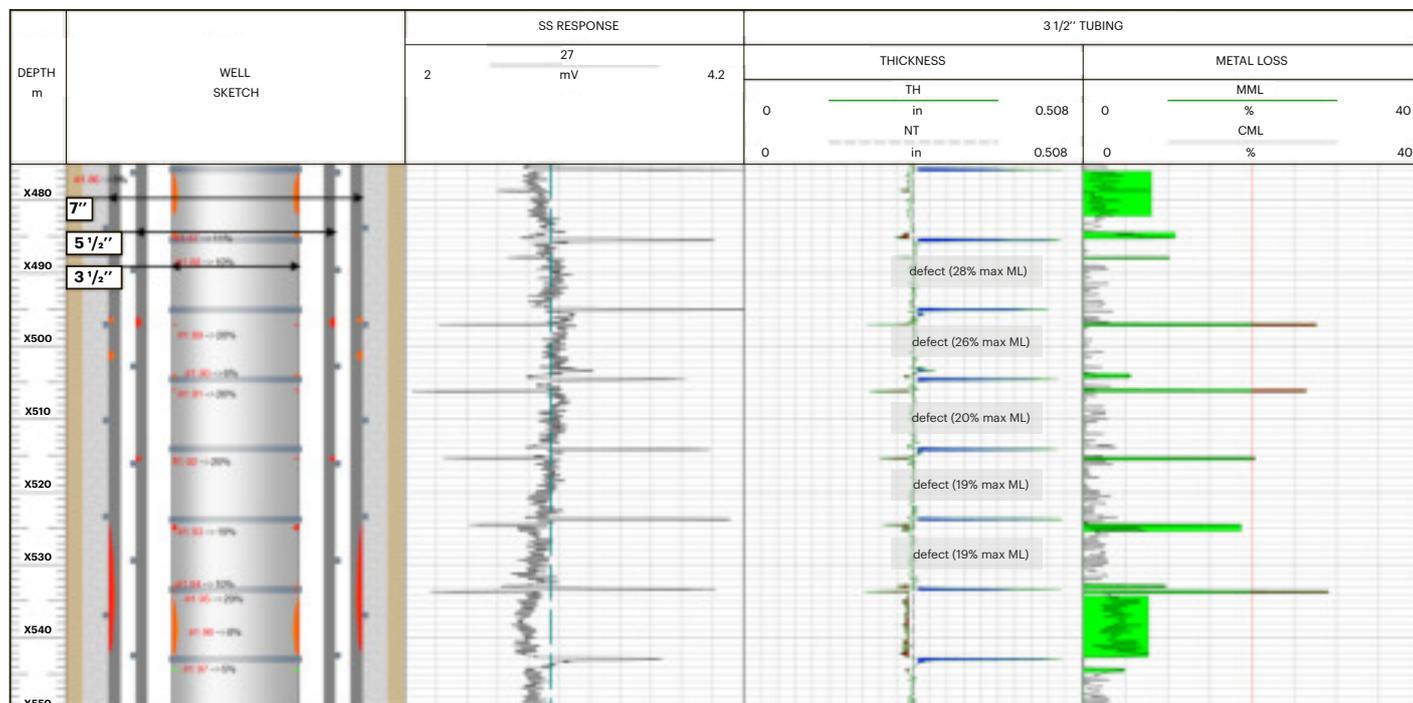
## Benefits

- Proactive integrity management mitigates risk and maintains safe and productive operations
- Track and validate tube condition over time & spot tube weakness before it fails
- Slickline deployment minimises disruption and cost
- Understand true wall thickness, behind scale
- Identify internal vs. external defects in primary tubes [when used with Caliper]
- Complement and improve multi finger caliper surveillance.
- Better remediation decisions, precisely targeted
- Maintain well system integrity

### Indicative logplot for Primary Tube Integrity

Oil producing well with suspected corrosion in multiple barriers.

Primary barrier shows 136 metal loss zones with 36% metal loss. 19 corrosion intervals showing >20% metal loss, and 69 significant findings suspected to be mechanical defects.



### Technical papers

SPE-190888-MS: Subsea Well Envelope Integrity Assessment Utilising Electromagnetic Pulse and Spectral Noise Logging,

SPE-169601-MS: Time-Domain Magnetic Defectoscopy for Tubing and Casing Corrosion Detection