

Product True Integrity

Chrome Tube Integrity

Evaluates tube integrity in chrome completions, without scratching the surface

What it delivers

Corrosion resistant materials like chrome help protect well completions from highly-corrosive fluids. But high chrome content can cause serious problems for ordinary electromagnetic pipe inspection systems.

Chrome Tube Integrity provides an accurate barrier-by-barrier assessment of tubulars containing chrome or corrosion resistant alloys (CRAs).

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

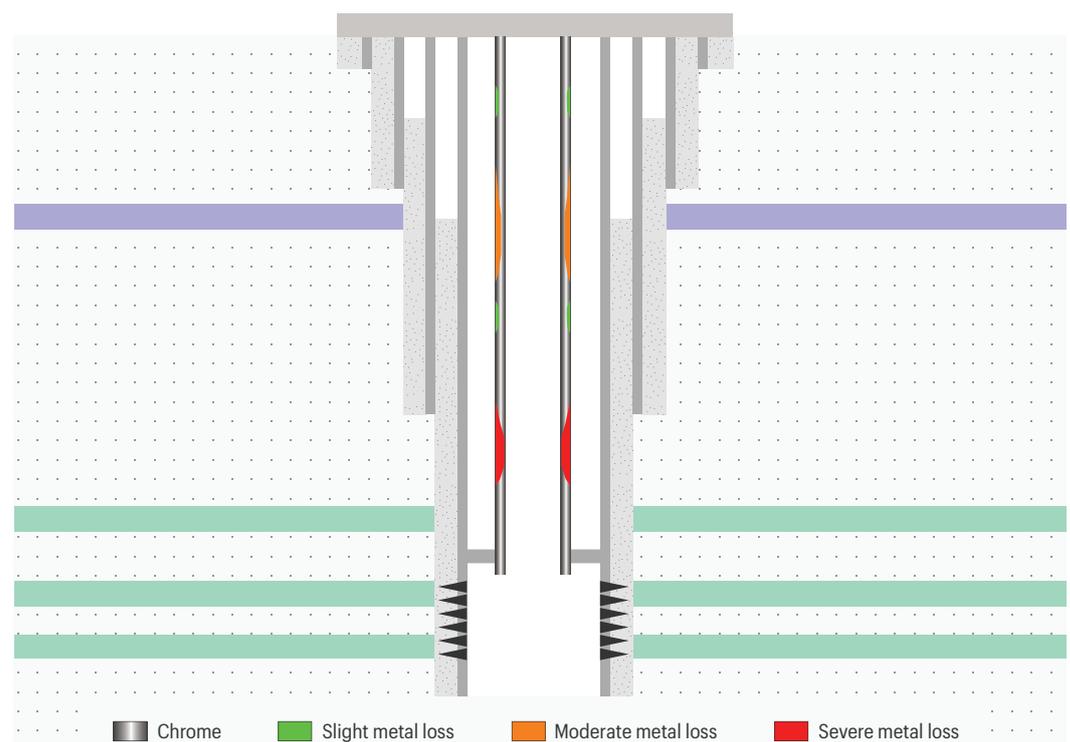
Chrome Tube Integrity delivers accurate wall thickness data where other products fall short.

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

Its ability to work with CRAs means that the answers are just as reliable as with conventional steel tubulars.

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

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



Indicative logplot for Chrome Tube Integrity

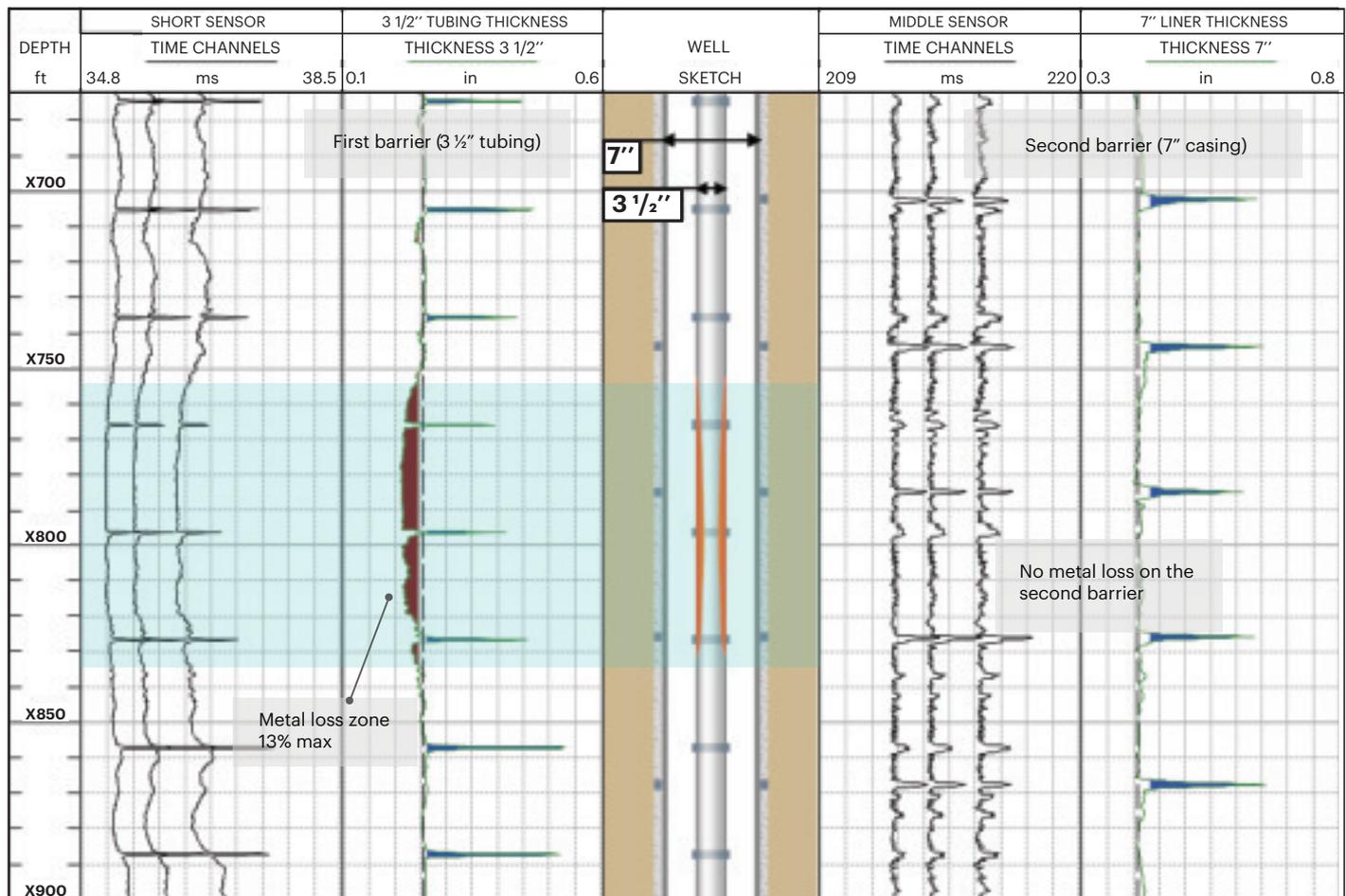
Drop at interval X750 - X830 ft on short sensor responses relates to a fast decay in this zone, a sign of metal loss. Thickness log was used for quantification. Second barrier has zones with metal loss—calculated thickness is close to the nominal.

Challenges

- Managing tube integrity of chrome or corrosion resistant alloy [CRA] completions
- 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

- Track and validate tube condition over time to mitigate risk and spot tube weakness before it fails
- Through-tubing deployment minimises disruption and cost
- Understand true wall thickness and condition without scratching inner surface.
- Identify internal vs. external defects in primary tubes [when used with caliper]
- Understand true wall thickness behind scale.



Case studies

CS009: Assessing metal loss in corrosion resistant alloy tubulars helps operator intervention plans

Technical papers

SPE-192974: Corrosion Status monitoring in wells completed with a high Ni CRA in gas well environment.