



Improving Hard Spot Detection, Characterization, & Prioritization *Comprehensive Inline Inspection with Multiple Dataset Platform*

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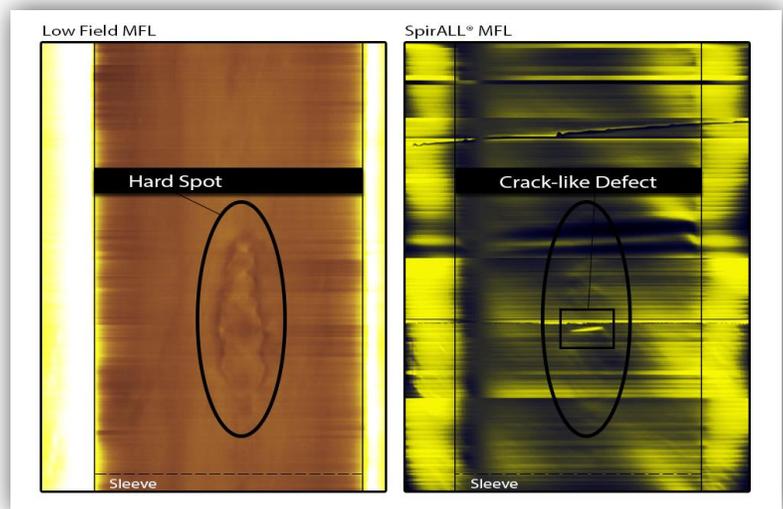
SALT LAKE CITY, Utah – September 5, 2014 – Pipeline hard spots: created due to localized quenching of steel during the manufacturing process. A potential threat to pipeline integrity, hard spots can become brittle and crack with time and under certain conditions. As such, operators with an environment conducive to the development of these cracks are very interested in detecting and addressing the threat before they contribute to a failure event.

A major US pipeline operator recently suspected hard spots with potential for cracking on a section of one of its 30-inch pipelines. The operator needed the ability to not only locate the hard spots, but to detect cracking initiated within the hard spots themselves. This level of characterization would provide the operator with a means to prioritize, allowing the operator to address the most critical hard spots first.

As part of the commitment to safe and reliable operation, the operator requested support from global pipeline solutions provider T.D. Williamson (TDW) – to provide improved detection and characterization of its hard spot integrity threats. The technology selected was the Multiple Dataset Platform (MDS)

with SpirALL® Magnetic Flux Leakage (SMFL). MDS utilizes multiple technologies, on the same tool, to overcome the limitations of individual inspection technologies. The platform includes Deformation, High Field Axial Magnetic Flux Leakage (MFL), Patented SpirALL MFL, Low Field Axial MFL, and XYZ Mapping.

Each technology on the platform provides a unique assessment of an integrity threat. In this case, the Low-Field MFL provides primary detection of hard spots, High Field MFL confirms, and SpirALL MFL identifies any crack-like defects within the hard spots. In addition, the data collected by the MDS platform is captured, synchronized, and analyzed in a single software, providing a unique comprehensive assessment where one, two, or even three technologies may not be sufficient to detect, characterize, size, and prioritize given integrity threats.



The MDS inspection analysis confirmed the operator's suspicion: cracking within hard spots. Due to the advanced characterization offered through the overlapping inspection data, the operator was able to prioritize the hard spots and address as needed.

The MDS platform, engineered by TDW, has been used to detect integrity threats such as hook cracks, lack-of-fusion, selective seam weld corrosion, mechanical damage, and axially-extended metal loss. As a result of this innovative technology, pipeline operators are looking to the potential of MDS to help solve detection and characterization challenges with a variety of additional integrity threats.

About T.D. Williamson

Global pipeline service provider T.D. Williamson delivers a comprehensive portfolio of safe integrity pipeline system solutions for onshore and offshore applications, including hot tapping and plugging, pipeline cleaning, integrity inspection, pigging and non-tethered plugging technology for pressurized piping systems.

Note to editors: To obtain corresponding imagery, please contact Waylon Summers below.

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