

CASE HISTORY

High Temperature Perforation Mapping

APPLICATION

High Temperature
Tubular Inspection

TECHNOLOGY

Vulcan MFT-24 Caliper

LOCATION

Middle East

CHALLENGE

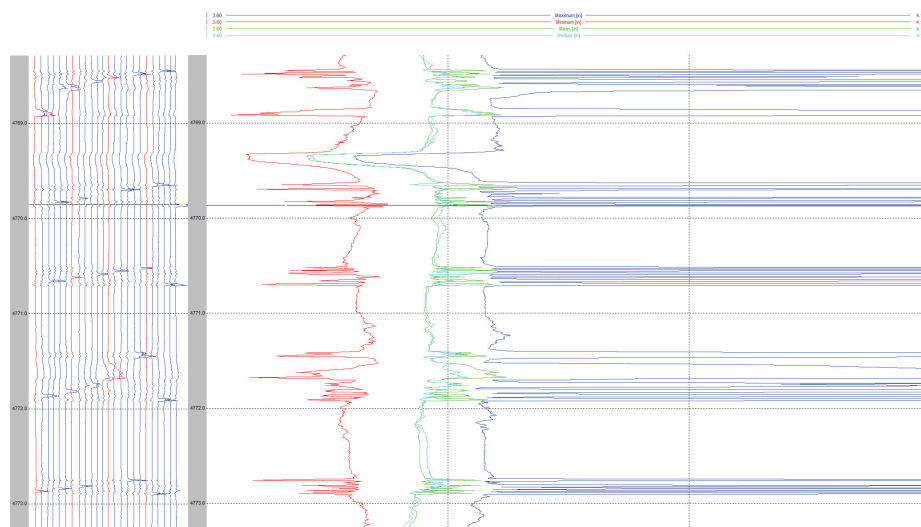
A recently completed well was logged with SDI's MPLT in the shut-in condition to assess cross-flow between different perforated formations. The results showed the high pressure lower formation as not flowing.

In order to understand the reasons behind the MPLT results, and eliminate the possibility of the zone not being perforated as expected, the customer required SDI to deploy a memory multi-finger caliper capable of operating at the well temperature of 174°C (345°F)

SCIENTIFIC SOLUTION

The proprietary Vulcan MFT-24 Caliper was deployed on slickline and has a proven track record in high temperature environments.

SDI's Vulcan MFT-24, with its 220°C (428°F) temperature rating, was carefully selected to acquire the required data. The Vulcan MFT-24 offers detailed measurements of the wellbore internal diameter, enabling the assessment of metal loss or scale buildup, as well as a 3D visualization of perforations in the wellbore.



CLIENT VALUE

The multi-finger caliper data proved the lower zone perforations to be shot as anticipated, thus eliminating a blockage as the cause of the absence of productivity. 3D imaging of the data shows that the spiral phasing was captured inside the 4-1/2" Liner, perforated with 2-7/8" Guns at 6 shots per meter at 60 degree phase.

Without SDI's Vulcan MFT-24 Caliper technology, the customer would have remained uncertain as to whether or not the guns had fired as required. The assurance gained from the accurately mapped perforations enabled the customer to plan further well completion activities with confidence.

