VR90® X-ray technology diagnoses condition of whipstock

Downhole X-ray diagnosis provides Middle East operator with clear answers in key fishing decision.

THE CHALLENGE

In 2014, a Middle East operator attempted to add a section to a multi-lateral well. After experiencing problems setting the whipstock and milling the casing window, multiple attempts were made first to fish and then to mill the whipstock. Several weeks later, the operation was suspended. It was presumed that the whipstock was incorrectly set. In order to discern how the whipstock could be fished, it was necessary for the operator to determine the condition and position of the whipstock assembly with quantitative accuracy. However, conventional imaging techniques were ruled out because the well was filled with opaque brine.

OUR SOLUTION

The VR90 downhole X-ray diagnostic tool was tractored on wireline into the horizontal well. An image was acquired when the VR90 tool tagged the whipstock. The orientation of the whipstock was immediately obtained. High-resolution X-ray intensity maps from the VR90 tool also revealed that a significant portion of the whipstock had been milled off, including the latching point. The results indicated that the whipstock was therefore unfishable.

CLIENT BENEFIT

By running the VR90 downhole X-ray diagnostic service, the client was able to work around the limitation imposed by the opaque well fluid, and finally obtain clear information about the condition of their whipstock. The results provided by the VR90 tool lead the client to make a quick, informed decision about how to proceed, ultimately saving further loss of productive time and money.

ACCURATE. MEASURABLE. RECOGNIZABLE.

Well intervention decisions are not easy to make. The Visuray® VR90® tool offers a new commercial wireline diagnostic service that uses ground-breaking X-ray technology to give you downhole images in any well production fluid – allowing you to see with certainty and act with confidence.

Visit visuray.com/case-studies for examples.

VR90