

Paradigm Slick-O-Line® Service Quickly Identifies Tubing Leak

Overview

A UKCS Operator was observing Tubing to A-Annulus communication. They needed to determine the source of the communication to enable remediation, in turn protecting 1.5mboed through barrier compliant operations.

Challenge

The requirement to identify the source of communication quickly and ensure the wellbeing of the entire wellbore was critical to the operation due to enforced operational time constraints as part of a campaign of intervention work on an NUI.

Solution

A Slick-O-Line® package was mobilised to the platform pre-mounted on a slickline winch to perform a distributed fibre optic survey.

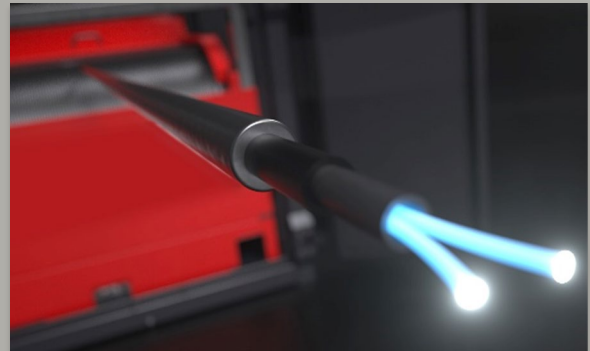
The Paradigm Slick-O-Line® service had been chosen due to its reduced intervention and survey time, quick turnaround of data and ability to survey the entire well simultaneously.

Result

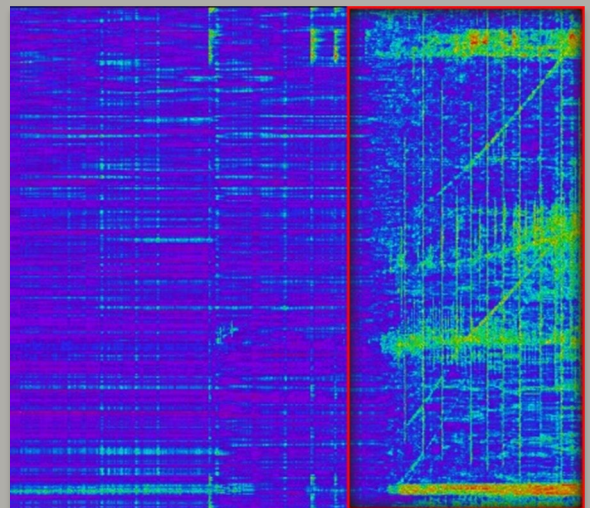
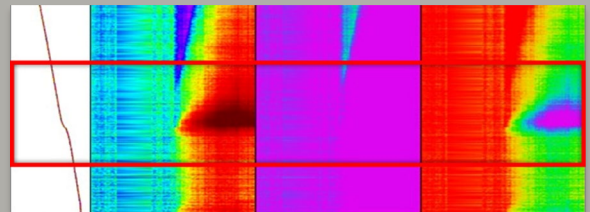
- Acoustic and Temperature responses were detected over a specific interval allowing the identification of the point of communication between Tubing and A-annulus.
- No other issues were observed in the well.
- It took 15 hours to complete the intervention.
- Data was processed and interpreted within 12 hours of acquisition.
- Regular pressure control equipment and procedures were applied saving time and cost.
- In addition to the Temperature and Acoustic fibre survey memory GR, temperature and pressure data were also gathered providing a more comprehensive surveillance package in the well

Value to client

- The communication source was quickly identified and a solution was put in place protecting 1.5mboed.
- The Paradigm Slick-E-Line® system was installed on the same winch and was used to deploy the remediation solution reducing operational time.



Slick-O-Line® offers a combined Distributed Acoustic (DAS), Distributed Temperature (DTS) and memory GR/CCL/Pressure/Temperature data package providing an integrated solution for well integrity and well abandonment.



Detailed analysis of multiple frequency bands was able to identify areas of fluid movement within the well, tracking a velocity & direction.

