

RESERVOIR CASE STUDY SPECTRAL FRACTURE FLOW [SPEC-FRAC*]

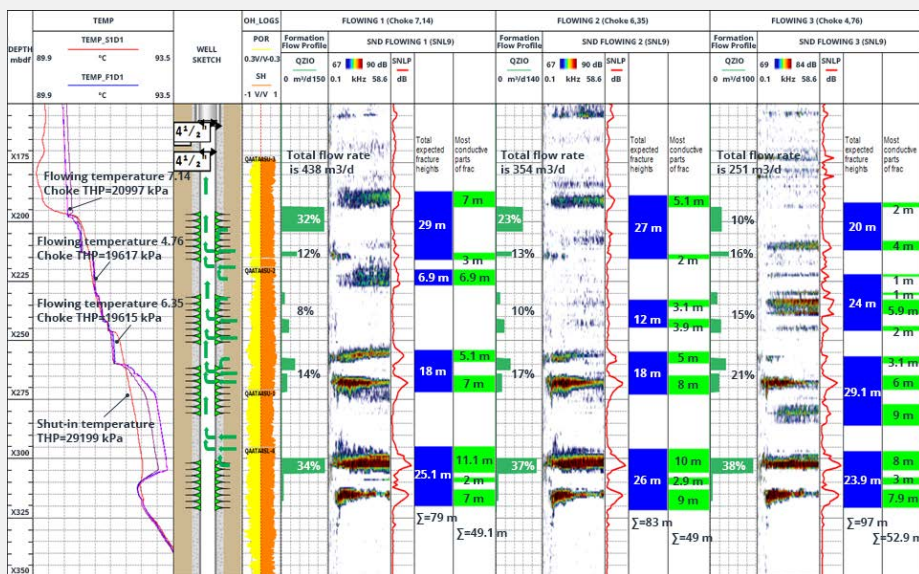
Challenge

Determining the true extent of actively producing fractures following a hydraulic fracture operation is critical. One method is to pump radioactive tracers during the fracture operation and survey the interval post-fracture with a gamma ray log. However, tracers could not be used in this well for operational reasons. Determining optimum choke sizes to produce the well was an additional requirement in this well.

Solution

TGT's proven SPEC-FRAC* service combines spectral noise and high-precision temperature technology, advanced proprietary modelling and conventional production logging techniques to determine active fracture intervals accurately and the true extent of production from each one. The integrated analysis of SPEC-FRAC information was used to determine the optimal choke size needed to maximise the contributing length and flow from each fractured zone.

Spectral technology helps to maximise production from hydraulic fractures by determining the true active fracture length and optimum choke sizes.



SPEC-FRAC results show the contributing fracture intervals at various choke sizes.

Outcome

Four actively producing zones were evaluated and optimised. The fracture length for each regime was found to be 79 m at 7.14 choke, 83 m at 6.35 choke and 97 m at 4.76 choke. The SPEC-FRAC service enabled the operator to maximise production from this well.