

Q-Seal Wellhead Case History

Client

Major Operator

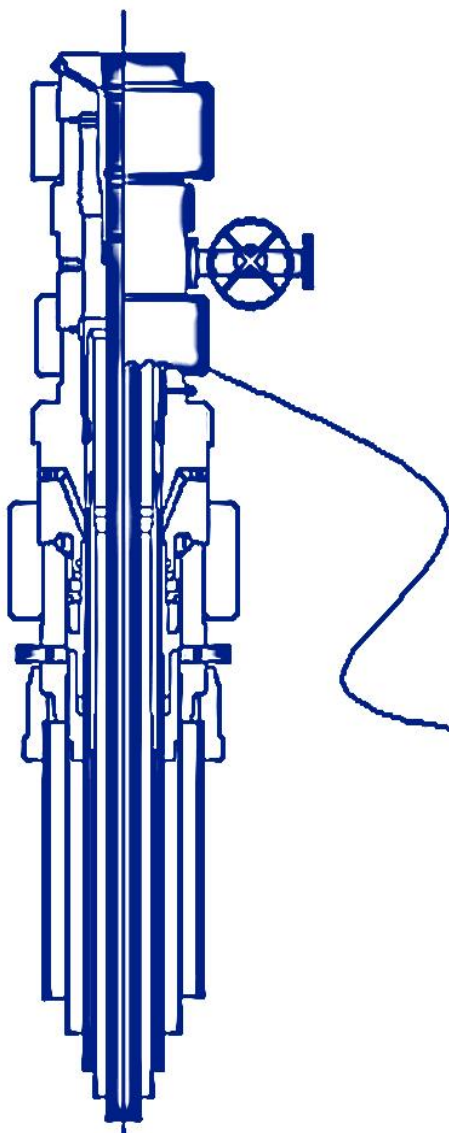
Location

North Sea Location

Hanger Seal Type

MST Casing pack-off seal

Q-Seal eliminates A-B annulus communication, creating additional \$100,000 / day production.



The Challenge

A well producing 15-20 MMscfd gas and 1,000 bpd oil had been identified to have A through B to C annulus communication. The 9-5/8" casing pack-off had already been treated with an alternative repair method, which, although initially successful, had failed within six months. As a result, the well had been shut-in, and suspended with a tubing plug, as the extent of the leak path left only a single barrier to loss of containment to atmosphere against a 2300 psi surface shut-in pressure.

The Solution

After determining the optimum grades of Q-Seal to address the various seal leaks from the test data provided on the well, Q-Seal equipment, including a proprietary injection system, was mobilized to the installation. After injecting Q-Seal into the hanger void, a successful pressure test to 3,000 psi was achieved.



The Outcome

Due to the critical nature of the repair, following the Q-Seal treatment, a gas injection pressure test was carried out at 2320 psi for a hold period of 18 hours. The A-B communication caused by the failed pack-off seal was proven to be eliminated by the Q-Seal.

The Impact

The suspension plug was removed, and the well brought back on line. Original production rates were regained, resulting in over \$100,000 in additional production per day.