Q-Seal Wellhead – Instant Repair Case History



Client Major Operator
Location North Sea
Hanger Seal Type 13-3/8" Pack-Off Seal

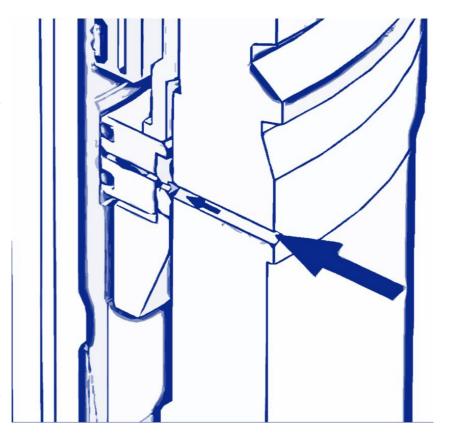
Leaking Wellhead Seals Repaired As They Are Identified.

Challenge

A North Sea gas-producing well has been closed in for upgrade. System tests carried out ahead of this operation identified that the 13-3/8" lower Pack-Off seal was passing. This created pressure communication between the C Annulus and the Pack-Off Assembly. This presented an integrity risk as a failure of the 13- 3/8" upper Pack-Off seal would pressurize the 13-3/8" Void, leaving the well with only a single isolation barrier.

The Solution

Field personnel already at location for other, planned operations, instantly responded, applying Q-Seal technology to restore the 13-3/8" Pack-off seal, reinstating the double isolation barrier from the C annulus to the 13-3/8" Void.



The Outcome

The 13-3/8" Pack-Off Seal was checked ahead of the planned upgrade operations, and found to be at 140 psi. The Q-Seal treatment was then carried out on the Pack-Off Seal, after which a successful pressure test was completed at 1,000 psi for 15 minutes. The 13-3/8" Pack-Off Seal was then bled to zero, and a 30-minute pressure build up test completed to confirm full integrity of the Pack-Off Assembly. The Q-Seal had successfully rebuilt the 13-3/8" Pack-Off Seal, regaining the second barrier against the C annulus. The entire operation was completed in just 3 hours.

The Impact

- Full well integrity reinstated.
- Immediate recovery of second barrier isolation.
- No risk to operation of well Q-Seal placement does not impact future wellhead operations.