

NORWAY, NORTH SEA

Combining new technologies brings safety benefits to customer operations

Intercept® retrievable bridge plug and Turbo Tech® II valve combined for success

CHALLENGES

- Safely manage gas present below the RBP using correct control measures.
- Controlled pressure bleed off via the annulus.
- RBP to remain set as a mechanical barrier until all pressure has been bled off.

SOLUTION

- Intercept® RBP and Turbo Tech® II valve combination.
- Field-proven technologies allowed the customer to address potential trapped pressure in a safe and controlled manner.

RESULTS

- Pressure bled off via the annulus in a safe, controlled manner.
- No balls/darts had to be dropped to function, reducing operational time.
- Gas pressure bled off and RBP unset and retrieved to surface in a single trip.

Overview

Our customer wanted a reliable and simple solution to address any potential pressure/gas buildup below a retrievable bridge plug (RBP) set as a temporary barrier in plug and abandonment (P&A) and horizontal tree (HXT) operations.

It is advantageous to address the buildup of any pressures from the annulus side vs. the drillpipe prior to unsetting the RBP.

Halliburton proposed a combination of field-proven technologies and successfully completed the project with ZERO non-productive time (NPT) or cost of poor quality (COPOQ) incidents.

Challenges

During temporary P&A and HXT operations, the customer utilized an Intercept® RBP as a temporary barrier. Due to potential trapped pressure/gas buildup below the plug, the customer asked Halliburton to provide a dependable resolution that allows operations to effectively manage such buildup prior to unsetting the plug.

Solutions

To meet the operational objectives, Halliburton proposed incorporating the field-proven Turbo Tech® II multi-activation bypass valve in the Intercept API 11D1 V0-rated RBP retrieving string. This combination allowed Halliburton to assess the pressure below the plug, bleed off this pressure at surface via the annulus and safely and efficiently manage operations while the V0 barrier remained in place for well control.



Intercept® Retrievable Bridge Plug

CASE STUDY

Operational Steps:

- Run in hole Intercept® retrieval overshoot and Turbo Tech® II valve (in closed position) to tag the Intercept RBP.
- Latched the Intercept RBP and cycled the ball valve to the open position to assess any trapped pressure below the plug.
- Set weight down to close the ball valve and cycle the Turbo Tech II valve into the intermediate (closed) position.
- Closed the annular.
- Picked string up in tension to open the Turbo Tech II valve and ball valve.
- Bled off pressure in a controlled manner to trip tank via the choke line and flow check the well.
- Continued to unset the Intercept RBP and pull string out of well to resume operations.

Results

Halliburton performed the job with ZERO NPT or COPO issues. The successful execution of this operation demonstrates that the integration of field-proven technologies can deliver innovative and safe solutions to maximize asset value for our customers. It also highlights how collaboration can foster fresh ideas within our business.



Improved method brings an additional level of safety to the operation



ZERO
non-productive time
(NPT)



ZERO
Cost of poor
quality (COPO)
incidents

For more information, contact your local Halliburton representative or visit us on the web at www.halliburton.com

At Halliburton we collaborate and engineer solutions to maximize asset value for our customers. All products and service solutions are available as integrated offerings or as discrete services, based on customer requirements.

H014553 04/24 © 2024 Halliburton. All Rights Reserved.

halliburton.com

HALLIBURTON | Completion Tools