CASE STUDY: 2023 - NORTH SEA

X-it® Whipstock performs successful casing exit and 30-ft rathole in 9.25 hours

Challenge

- Create an exit at 12deg. inclination with a toolface orientation of 50 degrees right of high side in 20-in casing and 30ft (9m) of open hole in mature North Sea well
- Run, orient, set, mill and condition the window in a single trip. Ensure the completed window is conditioned to allow ease of passage for the drilling and casing strings
- The 20-in casing was not logged (Wear, CBL, CCL)
- Safely conduct all operations involving large whipstock and milling assemblies
- Minimize rig time, associated expense, and HSE risks

Solution

- The 20-in casing was cleaned, scraped and drifted with dedicated run by Archer to ensure good casing condition for setting 20" plug in preparation to deploy the whipstock assembly
- Archer 20-in X-it® Asymmetric whipstock with retrievable mech anchor safely surface tested and deployed
- The whipstock was set at 2,236 ft (681.7m) and the window and 30-ft rathole were completed in 9.25 hr without losses, providing the operator with confidence to continue drilling

Result

Complete well integrity was achieved and successful sidetrack operation performed.

“Very efficient window milling operation -9.25 hours vs. budget time of 22 hours”