

Field report:

Pivotal Riserless Intervention Service

First riserless coiled tubing deployment succeeds, saving nearly half the time and costs over traditional riser-based operations.



Pivotal Riserless Intervention

Rigless | Riserless | Limitless

It was time for a breakthrough in subsea well intervention. Introducing Pivotal Riserless Intervention, a major advancement in technology that fills a critical gap.

Pivotal Riserless Intervention enhances operational capabilities across a wide range of functions, including production optimization, well integrity management, and permanent plug and abandonment (P&A), and allows operators to pivot seamlessly between wireline and coiled tubing—all while improving efficiency and reducing costs.





A riserless coiled tubing success story

In brief

2024 | North Sea | Water depth 133m | Well depth 4,000m

Challenge

Return a suspended well to live production with coiled tubing using TechnipFMC's proprietary Pivotal Riserless Intervention service.

Solution

Deploy our Pivotal Riserless Intervention service to perform all project phases, including milling of the suspension plug, acid wash and scale clean-out, perforation, nitrogen lift via riserless coiled tubing, and safety valve installation.

Results

Mobilization, transit, all intervention operations and demobilization were performed in 33 days. Switching between coiled tubing and wireline took just over 6 hours. Crews were reduced from the 120 typically needed for riser-based operations to only 86 Personnel on Board (POB).

Conclusion

A suspended well was re-entered and brought back into production using TechnipFMC's riserless coiled tubing technologies, an industry-first. The intervention program was executed efficiently and effectively, with improvements in project time, cost, emissions and safety.



Challenge

Return a suspended well to production

A North Sea operator needed intervention support on an aging well that was sitting idle, shut-in for many years and suspended due to inviable or inefficient intervention solutions. Adding to the challenge was the need for fishing in the wellbore, but with no clear knowledge of what was still to be recovered. Milling would have to be done with limited monitoring, a damaged formation and casing head pressure limited to 2,500 psi.

Preparation | Intervention vessel at port with riserless intervention equipment and coiled tubing before offshore transit. SAFETY FIRST

Solution

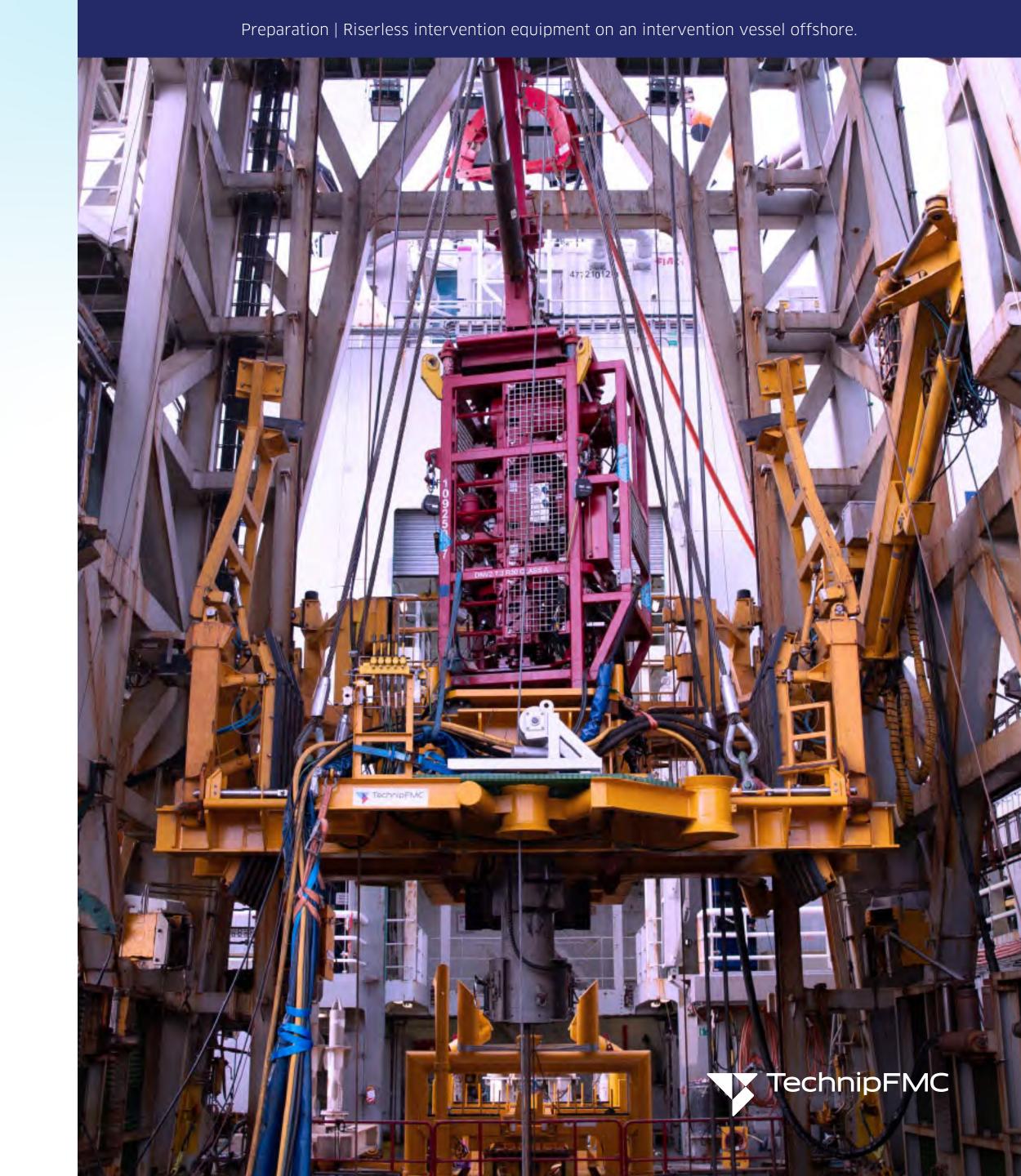
Deploy Pivotal Riserless Intervention

This well was a prime candidate for Pivotal Riserless Intervention, a breakthrough proprietary service from TechnipFMC. This is a riserless light well intervention solution that can deploy to a wellsite preconfigured with all intervention methods that will be needed, including coiled tubing. The lighter equipment would reduce the forces transmitted to the fragile wellhead, enabling the crew to pivot between conveyances quickly, saving time and cost.

Before deploying to the well, TechnipFMC conducted extensive rig-up and testing activities on the quayside to ensure coiled tubing operational readiness. These included stabbing of coiled tubing into the injector, making up the connector, pull testing it, and pressure testing of the whole system. TechnipFMC also extensively trained the offshore team for the operations.

System Integration Testing (SIT) was performed onboard prior to departure, including skidding in and lifting the passive heave compensator, topside injector, subsea injector and subsea stripper in the module handling tower. This was the first time TechnipFMC's riserless coiled tubing system was integrated onto the technically advanced *Island Constructor* vessel.

Once offshore, a full test program was also successfully completed before moving into the actual operations.



Results

Well back in production, platform life extended 5 years

The timeline and key operational highlights demonstrate a highly successful return of a suspended well to live production.

Except for the duration of the test program and the interim port call, the riserless coiled tubing operations, including mobilization, transit, intervention operations and demobilization, took 33 days.

The change of conveyance from coiled tubing to wireline took just over 6 hours, which produced some lessons learned that will decrease that time even further in the future. To the right is a summary of the project operations and associated duration:

Activity	Duration [days]
Mobilization (including 11 hours ROV wet test)	8.8
Transit	0.6
Well preparation and stack deployment	2.8
Safety Valve Fishing (12 slickline runs)	4.1
RLCT Test Program (2 RLCT runs)	4.5
Interim Port Call (SCM repair, including WOW)	9.1
RLCT Run #1: milling Thermatek plug	3.2
RLCT Run #2: Pulsonix Acid Wash	2.4
Perforating (3 e-line runs + 1 misrun)	2.8
RLCT Run #3: N2 lift>well flowing	1.9
E-line install straddle packer with DHSV	0.9
Stack retrieval, well handover and final survey	3.0
Transit	0.6
Demobilization	2.3
TOTAL	47



This experience helped establish best practices, which will result in further efficiencies in future mobilizations.



Conclusion

Riserless coiled tubing in a live well is now field-proven

TechnipFMC's Pivotal Riserless Intervention service, associated with Halliburton's coiled tubing technology, is now field proven for running coiled tubing in a live well without a riser.

It's about time.

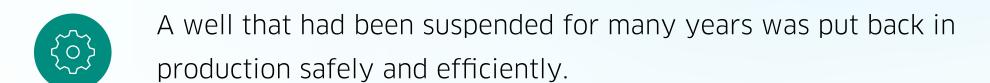
Pivotal Riserless Intervention from TechnipFMC helps operators execute their well optimization and decommissioning projects with maximum efficiency, from shallow to deepwater fields — in nearly half the time and cost of using traditional riser-based methods. Now they can perform production enhancement and plug and abandonment programs without expensive, risky, time-consuming riser-based approaches. We have proven the ability to add coiled tubing to the riserless light well intervention portfolio, and this capability will now become a standard for TechnipFMC's intervention vessels.

Preparing | Coiled tubing injector and cursor system.

TechnipFMC



Success story highlights:



Small vessel and well-trained, closely integrated crew reduced mobilization, intervention and demobilization times to improve efficiency and safety and reduce costs and carbon footprint.

The ability to rapidly pivot between conveyance methods minimized operational inefficiencies and enabled optimal execution of the intervention program.

Operations were performed with lighter equipment, optimized deck space, and simplified setup.

Total project time was reduced, which sped the return to live production. Project costs were lowered, and the return to asset profitability was accelerated.

For more information about Pivotal Riserless Intervention, visit us at https://www.technipfmc.com/campaign/pivotal-riserless-intervention

To schedule a consultation with a TechnipFMC expert, please contact us at communications@technipfmc.com



TechnipFMC