



Adaptive Riser Support for P&A Success

Location

Dutch North Sea

Product:

SubSea Drilling Riser

Background

In preparation for a plug and abandonment (P&A) campaign for three subsea wells in the Dutch North Sea in 2024, Aquaterra Energy partnered with TotalEnergies EP Nederland to deliver a high-pressure subsea riser package and carry out detailed riser analysis.

Operating at a water depth of 38 metres, the campaign required a riser system with a 13-5/8" bore and a test pressure of 5,000 psi. To meet these technical demands, Aquaterra Energy provided a newly built 14" AQC-CW riser system.

Solution

Aquaterra Energy supplied its 14" AQC-CW riser system, equipped with a 13-5/8" 10k flange down to interface with the client's wellhead connector, and an 18-3/4" AQC-BC pin up to interface with the rig-owned BOP. A running tool was included to allow pre-BOP installation pressure testing of the riser string, and a tension ring with a stop collar was provided to streamline installation and removal at moonpool level over open water. A riser spider and custom interface 'top-hat' further supported safe and efficient riser handling. Given that wellhead heights were unknown until the rig was operational, Aquaterra Energy developed contingency stack-ups and provided adaptive equipment and operational sequencing advice to accommodate these variations.

Close collaboration with the rig team ensured optimal positioning of the tension ring, removing the need for online adjustments. Additionally, Aquaterra Energy supplied offshore personnel to support riser operations, produced detailed running procedures, and worked closely with both the client and rig team to optimise the running, retrieval, and hopping operations. The team actively contributed to both onshore and offshore safety culture through comprehensive risk assessments.

Results

The P&A campaign was completed successfully with zero non-productive time (NPT), and TotalEnergies EP Nederland reported high satisfaction with Aquaterra Energy's performance.

The client praised the smooth, efficient, and hassle-free process, noting the quality of both the 14" subsea riser system and the AQC-CW connectors, as well as the expert support provided throughout. Operational performance was also a positive, with riser connections completed reliably and efficiently - makeups and breakouts were achieved in as little as 15 minutes.



We were impressed with Aquaterra Energy's 14" subsea riser system and AQC-CW connectors during our recent P&A campaign. From delivery to operation, the process was efficient and hassle-free. Their onshore and offshore support met all our expectations, providing expert guidance at every step.



Drilling & Wells Team
TotalEnergies EP Nederlands