



Wedge 563® Dopeless® connections produce 1 million USD savings in offshore gas wells in the Bass Strait

TenarisHydril Wedge 563® Dopeless® connections promoted reliability in an offshore operation that involved five highly deviated wells in Australia.

Summary

Reliable solutions for highly deviated wells

An important oil and gas company required products with extra torque capability in five highly deviated wells located in the Bass Strait, in the waters of Victoria, Australia. The major oil and gas operator chose TenarisHydril Wedge 563® connections and decided to conduct a field trial of Dopeless® technology to test its operational benefits.

The Wedge 563® connections were run with zero rejects and zero remake-ups due to connection-related issues. Dopeless® technology helped improve running times. The operator also appreciated the health, safety and environmental (HSE) benefits that this technology provided.

Challenges

Severe deviations

The operation took place in challenging offshore conditions. It involved the drilling of five highly deviated wells that presented a fragile coal seam layer with a high probability of collapse. To prevent cave-in, the oil and gas company had to drill perpendicular through this layer, with an angle no larger than 35 degrees.

In the event of a collapse, the company would need a connection with extra torque resistance to push the casing into place.

In this challenging context, the operator required a reliable solution able to optimize running times, reduce costs and minimize risks.

PROJECT PROFILE

Location

Bass Strait, Victoria, Australia

Type of well

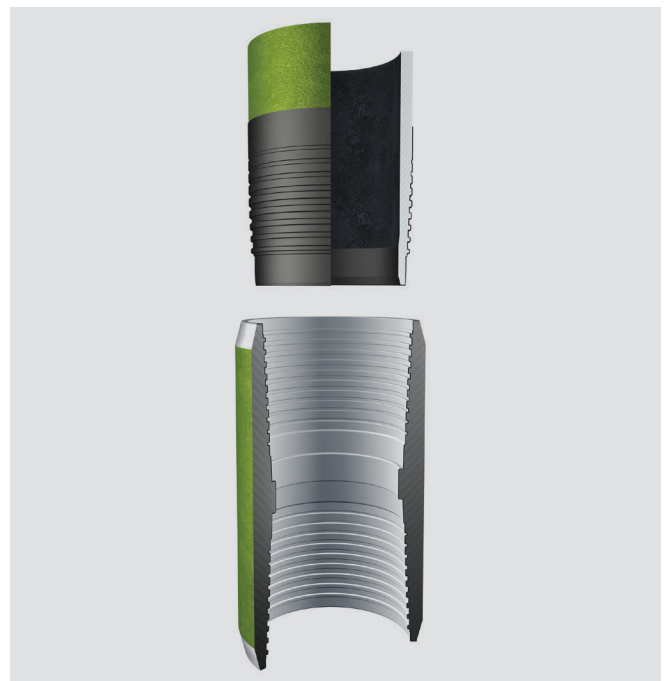
Deviated

Products highlighted

- TenarisHydril Wedge 563® connections
- Dopeless® technology

Services provided

- Field services
- Technical assistance
- Accessories



▲ Wedge 563® Dopeless® Connection

Solutions

Torque strength

The oil and gas company was familiar with the Wedge 563® connection. It had been previously qualified under a high torque and sealability protocol for a demanding extended reach operation led by the oil and gas company in the Middle East. Based on this successful experience, the operator decided to run 72,200 feet of the Wedge 563® connection in the five highly deviated wells.

This threaded and coupled connection offers outstanding torque resistance, and its dovetail thread profile ensures 100% ratings in tension and compression.

An efficient solution

While running the Wedge 563® connection, the operator also conducted a field trial of Dopeless® technology. A total of 1440 Wedge 563® joints came from Tenaris mills with this dry multifunctional coating, applied in a controlled automated process. In contrast, dope was applied manually in the field with a brush in around 200 threaded and coupled connections with metal-to-metal seal supplied by another company.

Dopeless® solution ensures that the exact amount of lubricant is applied to each product. It significantly reduces running times and increases the reliability of the running, minimizing the risk of re-makeups and rejects.

Dopeless® technology allows operators to conduct a seal inspection right before the connections are run, further promoting the reliability of the running. On the other hand, pipes coated with thread compounds can't go through this step because dope blocks the vision of the seal.

In addition, the absence of dope minimizes the environmental footprint of the operation and reduces pipe handling operations at the rig site, enhancing personnel safety.

Field service assistance

Tenaris field service specialists were present throughout the operation to promote operational safety and efficiency, offering assistance for the appropriate installation and use of Tenaris products.

Tenaris also supplied several accessories required by the operator for the five challenging wells of the Bass strait.



▲ The Wedge 563® Dopeless® connections provided the torque strength and reliability required to drill the five highly deviated wells located in the Bass Strait.

Results

Exceeded expectations

The oil and gas company achieved outstanding connection performance and running times. The operator ran the Wedge 563® Dopeless® connections with zero rejects and zero re-make-ups due to connection-related issues, attaining a reliable running in the highly deviated gas wells.

The results of the field trial showed that Dopeless® connections were run almost 30% faster on average than standard doped products.

The Casing Running Tool (CRT) used in the operation produced make-up graphs that were hard to interpret. Nevertheless, the Wedge 563® connections ensured a reliable running thanks to their roller-stenciled make-up confirmation band, which helps verify the correct installation.

Improved rig time efficiency, faster pipe preparation thanks to the use of Dopeless® technology products and thorough field inspections by Tenaris specialists helped the operator achieve important cost savings of over a million dollars for the 5 wells.



For contact information, please visit our site:
www.tenaris.com