



Vietgazprom chooses Blue[®] and Wedge Series 500[™] connections for the first deepwater well in Vietnam

TenarisHydril Blue[®], Wedge 513[®] and Wedge 523[®] connections promoted operational efficiency in a deepwater exploration well in Vietnam.

Summary

Drilling the first deepwater well in Vietnam was a challenging task. The operator, oil and gas company Vietgazprom, decided to run TenarisHydril Blue[®], TenarisHydril Wedge 513[®] and TenarisHydril Wedge 523[®] connections, manufactured with high collapse and sour service steel grades.

Tenaris also supplied Vietgazprom with a wide variety of services, including technical consulting and field services. As a result, Vietgazprom conducted a smooth operation, without rejects or difficulties.

Challenges

A demanding deepwater operation

The VGP project involved drilling the first deepwater exploration well in Vietnam, which reached water depths of over 1,600 meters. In this context, Vietgazprom also wanted to run large OD casing pipes in stands, a practice that can save time but must be performed carefully.

Due to the high external pressures, the operator required pipes manufactured with steel grades for enhanced collapse strength and also sour service.

Solutions

Suitable connections for challenging applications

Vietgazprom ran casing and tubing strings all with TenarisHydril Wedge Series 500[™] and Blue[®] Series connections.

The Wedge 500[™] Series offers high compression strength, a feature that makes it ideal for strings that must be pushed into place. In this operation, Vietgazprom ran 16" 97,7ppf TN 110HC integral flush TenarisHydril Wedge 513[®] connections and 13 3/8" 72ppf TN 125HC integral semi-flush TenarisHydril Wedge 523[®] connections.

PROJECT PROFILE

Operator
Vietgazprom

Location
Vietnam

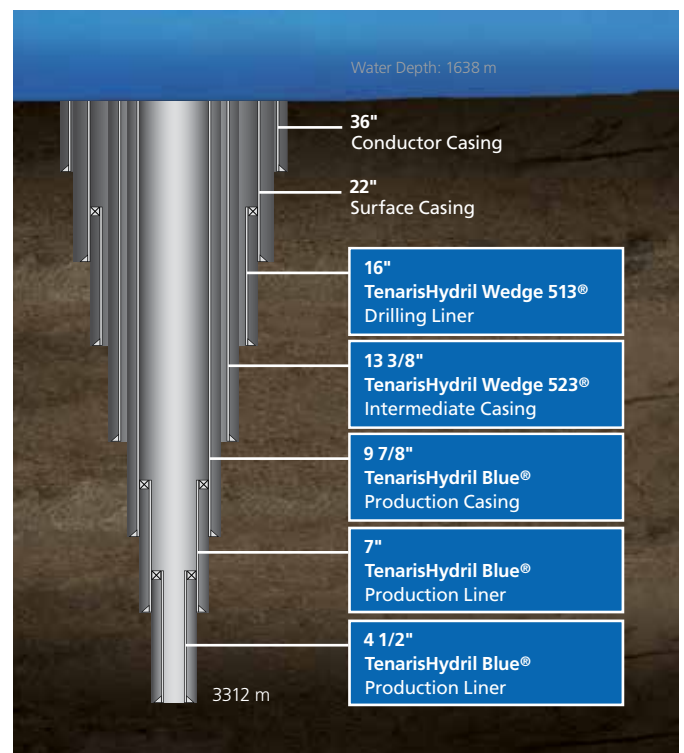
Well
Deepwater

Products highlighted

- TenarisHydril Blue[®]
- TenarisHydril Wedge 513[®]
- TenarisHydril Wedge 523[®]

Services provided

- Technical consulting
- Field services



▲ Vietgazprom ran TenarisHydril Blue[®], Wedge 513[®] and Wedge 523[®] connections in the first deepwater well in Vietnam.

The reverse angle stab flank of their threads ensures high compression ratings, making them suitable for the most severe compression applications. In addition, they come with 100% collapse rated metal-to-metal seal.

The TenarisHydril Blue® Series offers high reliability and versatility. It has been designed for the most complex environments. Vietgazprom chose 9 7/8" 62,8ppf TN 110SS, 7" 32ppf TN 110HC and 4 1/2" 15,1ppf P110 Blue® connections for this operation.

Their parabolic seal contact pressure profile minimizes galling risk and improves sealing performance stability. Blue® connections have been proven extensively in the most complex operating conditions around the world for more than ten years.

Special Grades

The operator faced an unfavorable combination of H₂S dissolved in water, low pH, a susceptible structure and high loads. These conditions increase the risk of cracks, which can propagate until failures occur. Therefore, Vietgazprom needed special grades designed to prevent Sulfide Stress Corrosion Cracking (SSC) failures along with high strength material.

For this requirement, Tenaris provided sour service grades with improved resistance to Sulphide Stress Corrosion (SSC), ensured by the specific design of the steel microstructure and tight control of the mechanical properties.

In addition, Tenaris supplied high collapse steel grades for environments characterized by high external pressures.

A complete service offer

Tenaris provided Vietgazprom with a wide range of services, some of them offered in collaboration with local licensees.

TenarisHydril Blue® and Wedge Series 500™ connections were manufactured for the first time by PVD Offshore Services Company Limited, a local licensed threader. Tenaris had previously approved this licensee and conducted a rigorous inspection to ensure the quality of the products.

Also for the first time, Tenaris worked in strategic alliance with PVD Tubulars Management and offered technical training to PVD Well Services Company Limited, the local running services company. The aim was to ensure the correct use of the Blue® and Wedge Series 500™ connections, as they were run for the first time in Vietnam.

Tenaris technical consulting specialists worked with the customer to analyze the running conditions and define the best practices for running in stands. In addition, two Tenaris field service experts offered field technical support to promote operational safety and efficiency, along with running assistance aimed at ensuring the appropriate use of the products and the application of the corresponding operational practices during installation.

Results

Smooth outcomes

The whole operation was conducted without difficulties and with zero rejects. Moreover, the 16" integral flush TenarisHydril Wedge 513® connections were efficiently run in triples. This was the first time in which large OD pipes with metal-to-metal seal were run in triples in Vietnam. As a result, the oil and gas company managed to reduce the running times associated to this project.

Throughout the operation, Tenaris and Vietgazprom worked side-by-side, maintaining a good communication level and planning each stage of the operation with the same care.



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