



Cobalt International Energy chooses Blue[®] Dopeless[®] connections for the ultra-deepwaters of Angola

TenarisHydril Blue[®] with Dopeless[®] technology connections helped the company improve running times and reduce costs in the pre-salt Kwanza Basin.

Summary

A challenging oil well was located in the pre-salt Kwanza Basin, in the ultra-deepwaters of Angola. To face the challenges posed by this well, oil and gas company Cobalt International Energy decided to run 9 7/8" TN 110Cr13S TenarisHydril Blue[®] Dopeless[®] connections. As part of its complete package of solutions, Tenaris offered the technical support and running assistance of its field service specialists.

As a result, Cobalt International Energy achieved a smooth operation without re-make ups or rejects. Dopeless[®] technology helped the company accomplish a reliable installation, saving rig time, reducing costs and promoting safety at the rig site.

Challenges

Ultra-deepwater difficulties

The operation took place on a semi-submersible rig, at water depths over 5,300 feet in Angola's pre-salt Kwanza Basin. Operations at this depth pose important risks so they call for extra planning and considerations. In addition, Cobalt International Energy was facing an appraisal oil well with a highly corrosive environment that required a martensitic stainless 13Cr super steel for the 9 7/8" production liner string.

Cobalt International Energy required a robust solution able to perform in these harsh conditions. Products manufactured in sensitive steels offer improved corrosion resistance but connections have higher probabilities of presenting problems during make-up operations.

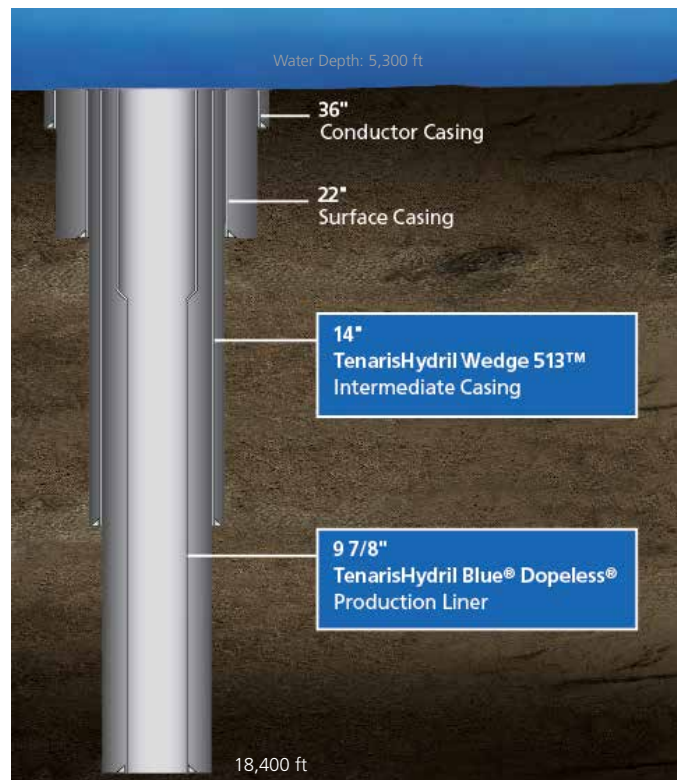
PROJECT PROFILE

Location
Kwanza Basin, Angola

Services provided

- Running Assistance
- Technical Assistance

Products highlighted
TenarisHydril Blue[®]
Dopeless[®] connections.



▲ TenarisHydril Blue[®] with Dopeless[®] technology connections were run in the pre-salt Kwanza Basin, in Angola.

Solutions

Strong connections for demanding environments

The robust TenarisHydril Blue® connections have been field proven extensively in the most complex operating conditions around the world for more than ten years.

They offer a 100% fully tested pipe body rated seal and are compliant with the ISO 13679 CAL IV standard. Their parabolic seal contact pressure profile minimizes galling risk and improves sealing performance stability.

The well had a highly corrosive environment so the operator asked for the products to be manufactured with martensitic stainless steel, a material that is more corrosion resistant than regular carbon steel but more sensitive to handling.

Dope-free choice

On February 2014, Tenaris conducted a Dopeless® technology demonstration in Angola and Cobalt International Energy was one of the attendees. The operator had ordered TenarisHydril Blue® connections, and after seeing the benefits provided by the dope-free solution the company asked Tenaris to deliver as many of those pipes as possible with Dopeless® technology.

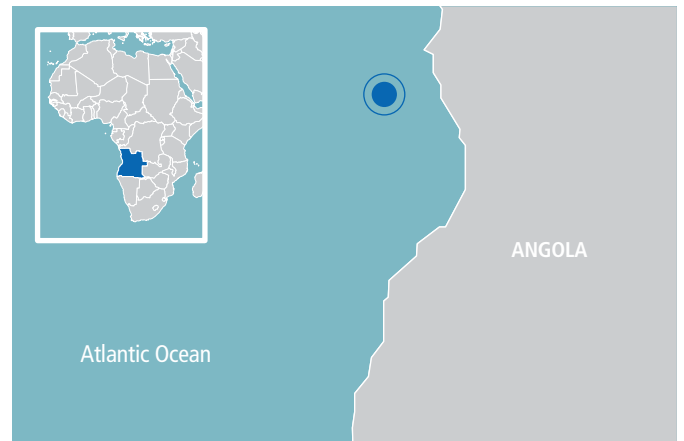
Dopeless® technology is a dry multifunctional coating applied in a fully automatic process at Tenaris mills. It eliminates the need for thread compounds, making the rig site safer and reducing the environmental impact of the operation.

Dopeless® technology also offers important operational benefits. Dopeless® products reduce running times and promote the reliability of the installation by reducing the risk of make-up problems. Increased rig time efficiency can produce around 10% savings of the total pipe cost in offshore operations.

Thanks to the fully automated application of an even amount of coating throughout the surface of the connection, Dopeless® technology reduces the risk of galling during make-up, which is more likely to occur when sensitive materials, such as the martensitic stainless 13Cr super steel, are used.

Local support

Tenaris's local team of certified field service specialists work side-by-side the customer to promote operational safety and efficiency. They offer advice regarding the appropriate use of Tenaris products and the application of the corresponding operational practices during installation.



▲ Well location.

Results

Deepwater success

Cobalt International Energy conducted the operation successfully, without re-make ups or rejects. Field service specialists worked with the customer throughout the operation to get the best out of Tenaris premium products. Tenaris's technical sales experts presented the running protocol before the operation began and organized meetings with the customer's team after the running was completed to evaluate the performance of the Dopeless® technology solution.

Cobalt International Energy understood the importance of using a dope-free coating so the company tested a solution presented by another supplier. However, it did not provide the results expected. In contrast, Cobalt International Energy was particularly pleased with the benefits provided by the Dopeless® technology.

After running both standard and Dopeless® connections of the same type and size in the same rig, in equal conditions and with the same personnel, a comparison of the results showed that Dopeless® technology improved running times in the order of 35% and helped the company save USD 141,000 as the semi-submersible rig rented for the operation was used for a shorter period of time. This cost reduction was exclusively related to the installation of the relatively short 9 7/8" liner string. In addition, the dope-free coating promoted a safer working environment.

After the operation, Cobalt International Energy and the drilling team expressed their satisfaction with the results and underlined the benefits provided by the Dopeless® technology.



For contact information, please visit our site:

www.tenaris.com