



Maersk Oil Angola chooses robust TenarisHydril Wedge 523™ Dopeless® connections for deepwater well

Maersk Oil Angola successfully drilled an exploratory offshore well in Angola with the support of Tenaris field service team.

Summary

A promising land

Maersk Oil Angola has been present in Angola since 2005. The operator owns three blocks that, taken together, occupy 15,000 square kilometers of promising fields to explore. Angola is part of the “Golden Triangle”, an area that includes Brazil, West Africa and the Gulf of Mexico. These deep and ultra-deepwaters raise high expectations in the industry for they could be holding billions of barrels of oil.

Maersk Oil Angola standardized the use of TenarisHydril Dopeless® technology in its offshore projects in 2010. Knowing the performance and reliability of this solution, the operator decided to use 13 3/8 TenarisHydril Wedge 523™ Dopeless® connections for the deepwater, exploratory CUBAL-1 well, drilled 176 kilometers from the Angolan coast in the advanced, deepwater drill ship West Polar.

Challenges

An unpredictable well

Based on its wide experience in the region, Maersk Oil Angola knew that drilling the CUBAL-1 well was going to be challenging. As in every exploratory well, conditions are not fully known and many possible complications might occur.

Offshore projects call for extra planning, especially when operating in water depths range of 600 to 5,000 ft (200 to 1500 meters), like in Block 16. In addition, the sea of Angola sometimes has intense currents and demanding climatic conditions that further increase the possibility of complications.

To keep its high quality standards, Maersk Oil Angola needed a reliable product and services solution to achieve the efficient and safe running of casing in this promising but hardly predictable well.

PROJECT PROFILE

Operator

Maersk Oil Angola

Products highlighted

TenarisHydril Wedge 523™
Dopeless® connections

Location

Angola

Services provided

- Field inspection
- Running Assistance
- Technical Assistance

Field

Cubal (Block 16)

Wells

CUBAL-1 and CUBAL-1 –ST1
Deepwater exploratory



Solutions

Advanced features

Maersk Oil Angola was familiarized with TenarisHydril Wedge 523™ connections as it had successfully used it in several operations, both in Angola and other countries. This integral semi-flush connection with metal-to-metal seal renders outstanding results in demanding applications, such as deepwater.

The robust TenarisHydril Wedge 523™ connection is designed for production casing, intermediate casing, tie-backs and drilling and production liners. It's easy to run and offers remarkable features such as good clearance, high tension/compression resistance and exceptional torque strength due to the simultaneous engagement of opposing flanks of the dovetail thread.

Reducing make-up problems

Tenaris presented the Dopeless® technology to Maersk Oil in 2009 and the customer standardized the use of this solution in all their offshore operations in Angola in 2010. The dry, multifunctional coating is applied in the controlled industrial environment of Tenaris mills, a process that ensures that the exact amount of lubricant is applied. With standard connections, running dope must be applied manually in the field, but the Dopeless® coating renders this operation and the use of thread compounds unnecessary. Consequently, the risk of make-up problems is reduced and the reliability of the installation improves.

Thanks to increased rig time efficiency, Dopeless® casing produces significant savings of the total pipe cost in offshore projects. In addition, the environmental footprint of the operation is minimized because no thread compounds are used.

Local support

The presence of Tenaris field service specialists adds reliability to the operation, especially in complex environments. Their advice onsite, backed by their certified competencies, makes a difference because they know the specific proprietary procedures and best practices to obtain the best out of TenarisHydril premium connections. In

addition, their HSE awareness helps operators improve safety at the rig site and better protect the environment.

In this project, the local support team worked side-by-side the customer from the start.

Results

Outstanding performance

The operation was as challenging as expected. Difficult downhole conditions made it necessary to conduct three runs in total.

During the first pulling out of the hole, the string came out without centralizers or stop collars, and the customer decided to pump a cement plug and side track to well Cubal-1-ST1.

The second running was achieved with no damages or rejections but it was not possible to set the casing hanger in place due to downhole formation problems. Therefore, Maersk Oil Angola rapidly decided to pull the string out the hole again. This operation went very well and all the connections were found in a very good condition.

In the third running, the casing hanger was successfully landed, once again without any rejects or damages.

In spite of the many makes-and-breaks, TenarisHydril Wedge 523™ Dopeless® connections provided outstanding performance. The presence of Tenaris field service team helped the customer install the products safely and efficiently. The specialist onsite stayed onboard until the operation was successfully completed. He constantly interacted with the corporate field services team to take full advantage of the company's knowledge network.

After the operation was concluded, Maersk Oil Angola expressed its satisfaction with the connection performance, its durability and the service provided.



For contact information, please visit our site:

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