



## OMV Petrom: a record for casing while drilling using TenarisHydril ER™ connection

Tenaris's vast experience and premium connections helped the Romanian company achieve a European record for the diameter and depth of a column drilled with a casing string.

### Summary

#### Reducing drilling time

Romanian company OMV Petrom, the largest oil and gas producer in southeastern Europe, was looking for ways to cut drilling costs and improve efficiency in their onshore operations, in this case the 4545 Totea well, located in the Totea Deep field. For this operation, OMV Petrom was looking for a technical solution to reduce drilling time and thus achieve an overall efficiency gain.

The customer decided to use the casing while drilling technique with TenarisHydril ER™ connections in the upper section of the well. As a result, the drilling time of the whole 4545 Totea well was reduced as it was drilled in much shorter time as compared to similar wells of the same area. OMV Petrom achieved a European record for the diameter and depth of a column drilled using this technique.

### Challenge

#### Casing while drilling in a large diameter well

OMV Petrom was familiar with the casing while drilling technique as it had utilized it successfully in 17 projects since 2012 up to this well. However, there were some concerns about applying this solution in the 4545 Totea well. The Romanian company had only used casing while drilling in smaller diameter strings and took into consideration this technique for the upper section of the 4545 Totea well, where the lithology of the rocks (with sandy faces, gravels and marl) made drilling with a 20-in OD surface casing feasible.

Tenaris worldwide experience on casing while drilling has been consolidated and shared with Petrom with the main scope of providing data on operational parameters used with success.

Casing while drilling combines drilling and casing in a single operation, reducing operational costs and drilling time while improving safety. However, with this technique the column is subject to a considerable amount of alternating stress, so robust, high quality casing connections with characterized fatigue resistance are essential for the success of the operation.

### PROJECT PROFILE

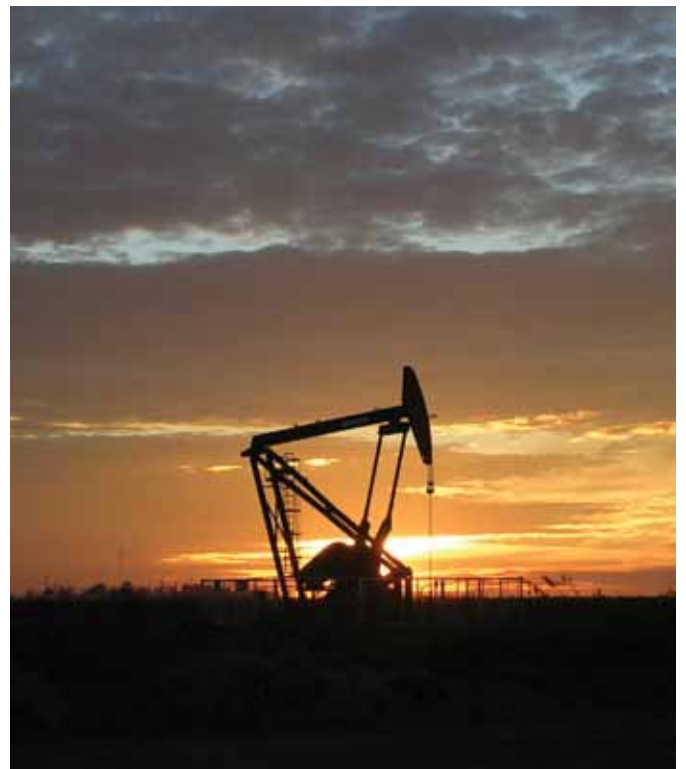
**Operator**  
OMV Petrom

**Products highlighted**  
20" TenarisHydril ER™ connections

**Location**  
Romania

**Services provided**  
Technical advice

**Type of well**  
Onshore gas well



OMV Petrom uses casing while drilling technique also in mature fields. The importance of improving operational efficiency has been stated in the following corporate statement: "Given that 2/3 of our production comes from fields that have been producing for around 50 years, the latest technologies and adequate expertise are needed to continue to supply oil and gas in Romania."

## Solution

### Sharing experiences from around the globe

Tenaris's relationship with OMV Petrom dates back to 2004 when Tenaris acquired control of the Romanian manufacturer of seamless steel pipes, Silcotub. A long-term agreement was later signed on December 15, 2006, and is effective to these days.

To support OMV Petrom with the casing while drilling operation in the 4545 Totea well, Tenaris's local technical sales team shared its experience in using this technique in well sections with large diameters. The engineers showed internal technical data from operations in countries such as Argentina, the United States and Mexico, which detailed the field results obtained in wells with similar parameters.

### Connections with proven success

Tenaris's experience and the excellent track-record of TenarisHydril ER™ connections helped OMV Petrom feel more confident about implementing a casing while drilling solution in the challenging upper section of the 4545 Totea well.

The TenarisHydril ER™ solution is a reliable and robust connection that provides easy stabbing and fast make-up with minimized cross-threading risk. These connections are designed to provide optimal performance in a variety of applications where there's no need for a metal-to-metal seal.

## Results

### A European record for casing while drilling

Using TenarisHydril ER™ connections, OMV Petrom achieved a European record for the diameter and depth of a column drilled using casing while drilling, with 40 joints run in less than 14 hours. This accomplishment was certified by Odfjell Well Services, a renowned company that delivers well service activities in over 20 countries worldwide.

The company's satisfaction was expressed in the corporate statement saying that "these exceptional achievements set new benchmarks in operational excellence".

The time reduction achieved in the upper section had a positive impact on the drilling time of the whole well. The 4545 Totea well was drilled in 92 days while the 4540 and 4541 Totea wells, which have similar characteristics, were respectively drilled in 187 and 212 days. In all three cases, the estimated drilling time was 120 days. This European record is a new step in the long-term relationship between Tenaris and OMV Petrom. Tenaris will continue to work side-by-side its customer in a wide variety of operations, including an initiative with the latest connection chosen by Petrom for casing while drilling, TenarisXP™ Buttress.



For contact information, please visit our site:

[www.tenaris.com](http://www.tenaris.com)