

# ECO-LUB HP

A Case Study





## Overview

While drilling through 12 1/4" and 8 1/2" deviated sections of onshore and offshore wells, various operators were faced with challenges such as high torque, low ROP, several motor stalls and string stuck. PDF has introduced **ECO-LUB HP** to minimize such issues in problematic wells.



## Application

PDF team developed an efficient solution to improve intense drilling torque while drilling highly deviated and horizontal wells. By introducing **ECO-LUB HP**, friction factor and torque range were reduced and as a result, smoother drilling and acceptable ROP were achieved.

Figure 1 demonstrates the experimental test results for Torque reduction of Bentonite mud and polymer mud with addition of **ECO-LUB HP**.

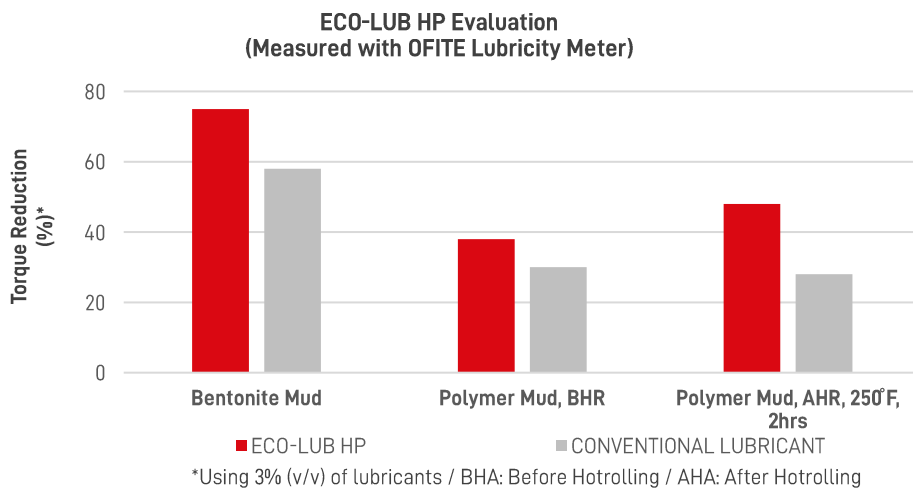


Figure 1. Laboratory Tests for Torque reduction of Bentonite mud and polymer mud with addition of ECO-LUB HP

## ECO-LUB HP

*significantly reduced torque range while drilling highly deviated sections and increased the ROP in the Middle East Oil and Gas fields.*





Consuming **ECO-LUB HP** in water-based drilling fluids resulted in 57% drilling torque reduction and 10% improvement in ROP in comparison with previous drilled wells.

Figure 2 shows the torque reduction and treatment concentration with **ECO-LUB HP** in one of the drilled 12 ¼" hole sections.

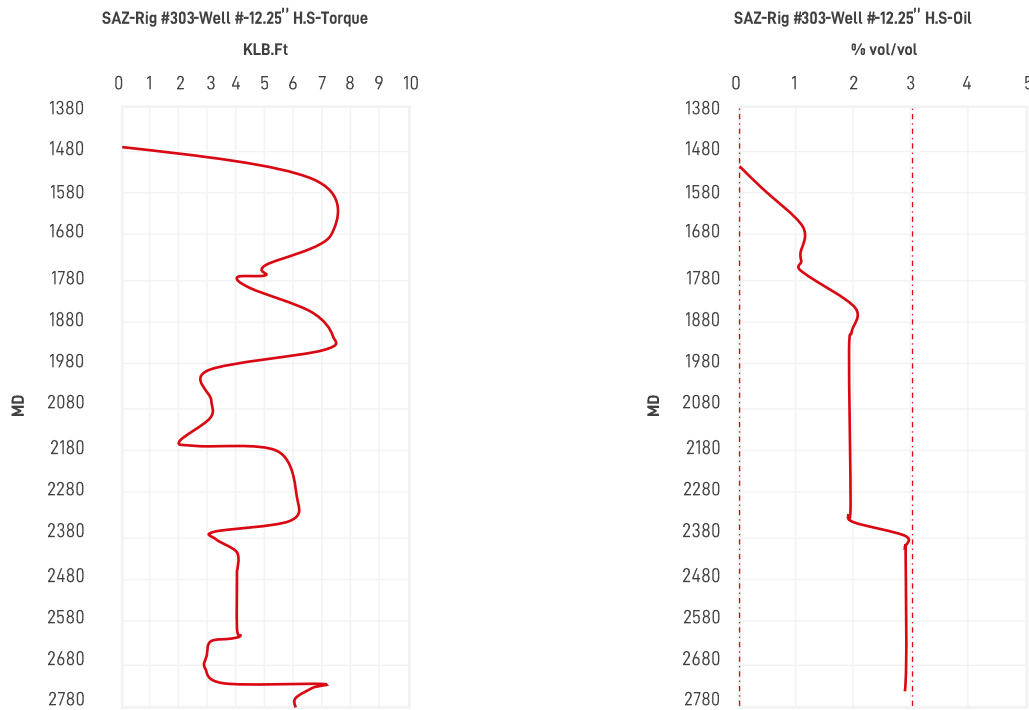


Figure 2. Operational torque reduction with addition of ECO-LUB HP

**\$ Economic Value**

**ECO LUB HP** provides drilling companies with effectively 50-60% reduction of the drilling torque and at least 10% improvement in ROP.

| Challenges         | Solutions            | Results                         |
|--------------------|----------------------|---------------------------------|
| Excessive Torque   | Addition of 3%V/V of | 57% decrease in Drilling Torque |
| Drill String Stuck | ECO LUB HP           | 10% improvement in ROP          |



**Address:** No. 46, 3rd Jan Souri St., After Niayesh Bridge, 43 Ashrafi Esfahani Expressway, Tehran, Iran

**Telephone:** +98(21) 44849770-6

**Email:** info@parsdrill.com

**Website:** www.parsdrill.com

**in LinkedIn**

This Data Sheet is provided purely for international purposes and PDF makes no guarantees or warranties, either expressed or implied, with respect to the accuracy and use of this data. All product warranties and guarantees shall be governed by the Standard Terms of Sale. Nothing in this document is legal advice or is an alternative for competent legal advice.