



# **Intelligent Mud Solutions AS**

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## **RheoSense**

### **– Real Time Fluid Analysis**

USE CASES

# Case History 1 – EQUINOR

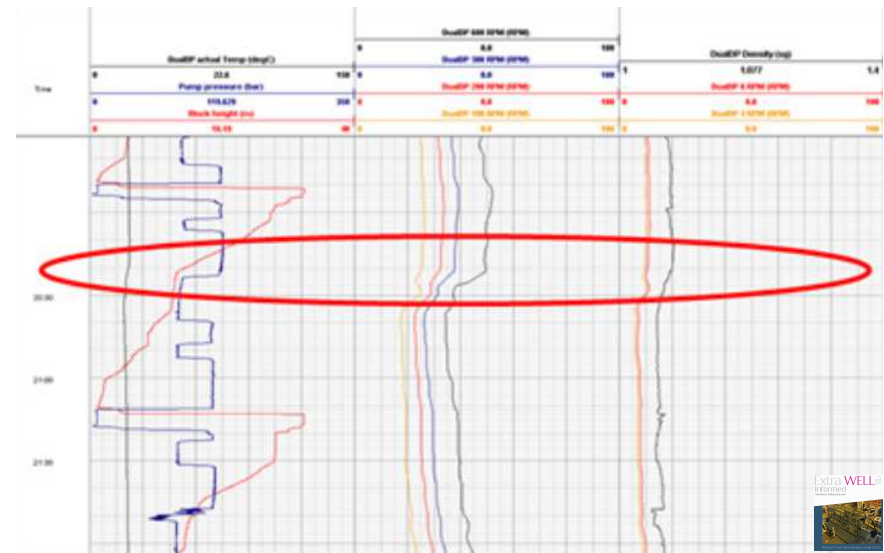
## Event:

While drilling in the Viking Group sandstones a 12-bar pump pressure reduction was observed. This was immediately attributed to a drill pipe, bit or pump washout.

RheoSense data from the active suction tank identified a reduction in density and rheology indicating a non-conformance in the active suction tank.

## Claim:

The RheoSense data pointed to an active mud change that was investigated and identified as an accidental 2m<sup>3</sup> addition of water to the suction pit. The RheoSense unit had identified the occurrence 10 minutes prior to the pump pressure anomaly. A potential down hole non-conformance was avoided.



Source Reference: Extra Well-Informed April 2017

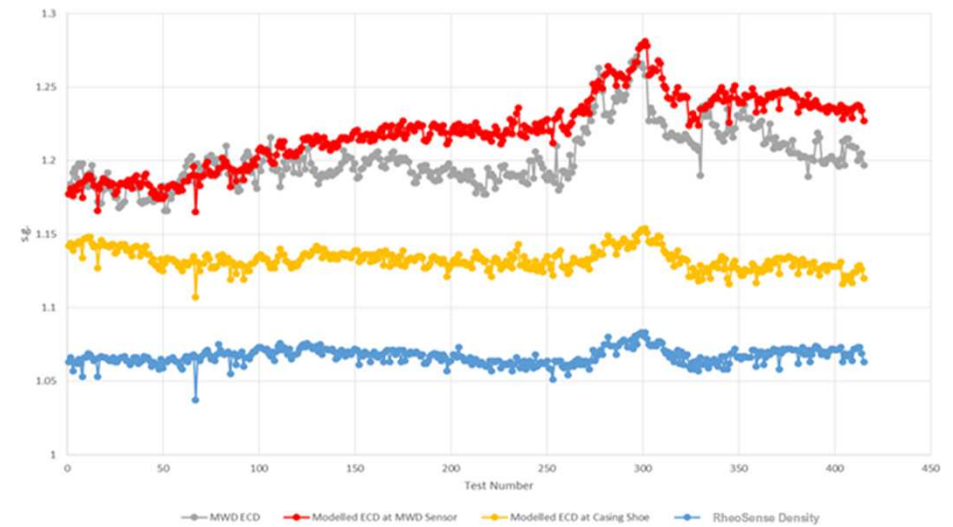
## Case History 2 – BAKER HUGHES

### Event:

The Operator was drilling horizontally in a sandstone reservoir. The RheoSense unit identified a RT density spike at surface of 0.02 S.G. (0.17 lb/gal). The spike occurred within a 1-hour period – that is probably outside the mud engineer's check period and/or derrickman's periodic check.

### Claim:

The lag value of the MWD ECD sensor and modified ECD calculation for the casing shoe indicated that this density anomaly resulted in a wellbore density differential of up to 0.09 S.G. (0.75 lb/gal). The proactive identification and interpretation of the RheoSense data has the ability to reduce, avoid and/or mitigate wellbore non-conformances.



Source Reference: Baker Hughes, Ole G. 2018

## Contact Details:

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