

Red Eye® 2G Water-Cut Meter Proves Reliable in High-Wax, Polymer-Injected Wells

Objectives

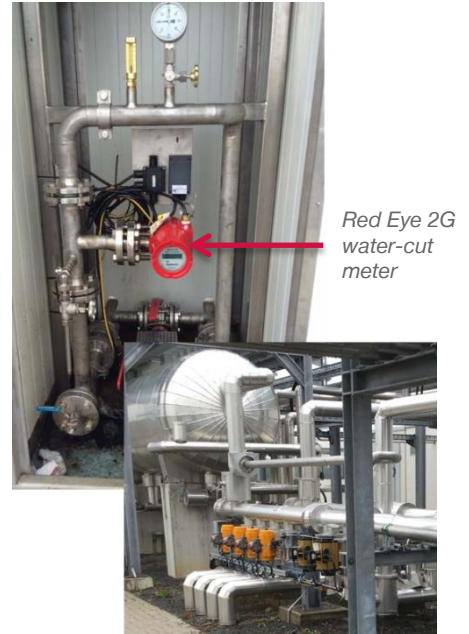
- Accurately measure water cut continuously in enhanced oil recovery (EOR) pilot oil wells during full test cycles.
- Eliminate the need for hand sampling and measure water cut more accurately in a high-wax environment than the client's separator does.
- Accurately monitor water-oil transient characteristic of the tested well.

Our Approach

- For the 3-month trial, Weatherford installed a Red Eye 2G water-cut meter to provide measurements to monitor seven high-wax wells.
- Weatherford also integrated the Red Eye 2G meter into the automation (SCADA) of the test separator and provided real-time data over the full duration of the trial.
- Although the operator considered wax a serious challenge in these wells, the Red Eye 2G meter proved successful in this environment. No wax deposition was noticed on the measuring window in several inspections during the 3-month trial period.
- The Red Eye meter tracked slugs showing water-cut variations over short periods of time.

Value to Client

- The Weatherford Red Eye 2G meter provided reliable, real-time water-cut measurements for the client, despite the challenges posed in high-wax environments.
- The Red Eye eliminated the need for biweekly hand sampling, which saved time and effort for the operator and reduced the inherent inconsistencies of hand sampling. Moreover, the client did not have to wait the typical 1 or 2 days for lab results to assess water cut and move on with further well tests.
- During the trial, the results of the water-cut measurements closely matched the hand samples and proved more accurate than the test separator results.



The Weatherford Red Eye 2G meter provided more accurate and efficient water-cut measurements in a high-wax environment

LOCATION

Lower Saxony, Germany

WELL TYPE

Onshore oil, polymer injected, high wax

NUMBER OF WELLS

7

FLOWRATE RANGE

30 to 100 m³/D

OIL DENSITY

25 API

WATER SALINITY

185,000 ppm

GVF

Below 5% at production system

OPERATING PRESSURE

10 to 16 Barg.

OPERATING TEMPERATURE

68 to 95°F (20 to 35°C)

WAX OCCURRING TEMPERATURES

68 to 86°F (20 to 30°C)

PRODUCTS/SERVICES

Red Eye 2G water-cut meter

