SCALE PROTECTION

FIELD CASE

Bulk Scale Analysis (BSA)* Captures Poor Inhibitor Placement

The Problem

Even distribution along long horizontal wells or commingled producers, are often challenging to squeeze due to changes in pressure and permeability.

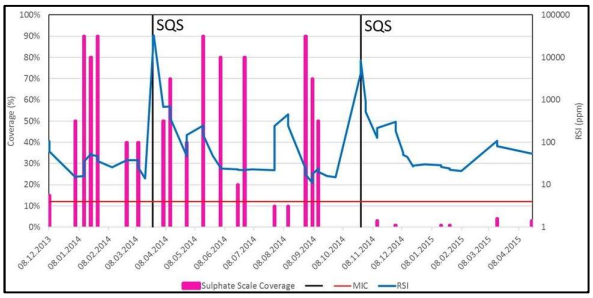
In this field example, the sulphate coverages on the produced water filter samples are very high. This indicate that parts of the well are unprotected, despite the recent squeeze.

The Solution

Bulk Scale Analysis (BSA) of filtered produced water phase samples of a producing oil well can be used as an effective way to prove protection from scale inhibitor placement in the whole reservoir section.

The Result

By performing regular BSA analyses over time, both the poor placement, and subsequently the successful placement of scale inhibitor were proven by the decline in sulphate scale coverage in the sampled produced water filters.



Graph showing sulphate coverage over time (bars) and inhibitor concentration (blue line). Despite squeeze and high inhibitor concentration, the BSA indicate severe scaling in the well. This is because of poor placement, and this is corrected by increasing the pumping rate in the next squeeze.

Location
North Sea, Norway

Well Type
Offshore oil

Scale Protection Service
Bulk Scale Analysis (BSA)

* Mark of Scale Protection