Mitigating wax deposits and well cleanouts enables improved operational efficiency with less blockage risk

**CHALLENGE**
Stop formation of wax deposits and prevent wax-related operational problems in Eagle Ford Shale wells.

**SOLUTION**
Deploy PI-7478* wax dispersant to mitigate wax deposition caused by high-molecular-weight paraffin.

**RESULTS**
Significantly reduced wax deposition and subsequent cleanout, hot oiling, and pigging frequency compared with previous inhibition treatments.

**Mitigate wax deposits in Eagle Ford Shale**
An Eagle Ford operator faced challenges producing oil that contained high-molecular-weight paraffin (up to and greater than C100) that can crystallize into wax deposits and cause operational problems throughout the crude production and transportation system. Hot oiling was frequently used to dissolve the paraffin and prevent plugging in the wellbore and tubing. Although it was effective, hot oiling caused well downtime and increased the risk of formation damage caused by accumulation of high-molecular-weight paraffin near the wellbore.

**Deploy PI-7478 wax dispersant as solution**
The operator turned to Schlumberger to effectively mitigate wax deposition. The Schlumberger team initiated development of a novel product—PI-7478 wax dispersant. After thorough evaluation in the laboratory, the operator approved a short field trial, where it showed improved performance over the previous inhibitor.

**Reduced wax deposits and frequency of costly interventions**
The PI-7478 wax dispersant improved performance by reducing wax deposition, required cleanout, hot oiling, and pigging frequency. Over a 3-week treatment with PI-7478 wax dispersant, the operator observed consistently fewer wax deposits, reducing the risk of blockage.

Pigging results after treatment with PI-7478 wax dispersant (right) compared with pigging results with previous wax deposition treatment (left).