

PetroShield lubricating corrosion inhibitor (LCI) doubled rod lift run life in mature wells with no failures to-date in the Permian Basin

CHALLENGES

- Frequent rod lift failures due to friction and mechanical wear, leading to significant downtime and maintenance costs
- Costs associated with workover operations were substantial, ranging from \$45,000 to \$100,000 per well
- Rod wear inhibitors needed to be stable at high (250°F) and low temperatures to ensure consistent performance in varying field conditions
- Rod wear inhibitors needed to maintain a viscosity under 1,000 cP at -40°C to meet the requirements



Rod cracking and splitting due to high friction prior to treatment



SOLUTION

- Baker Hughes PetroShield™ lubricating corrosion inhibitor (LCI) was added in batch applications into selected rod lift wells, ensuring that they were stable at high and low temperatures
 - With a combination of corrosion inhibitor and rod lift lubricant in a single dose, PetroShield LCI significantly reduces wear scarring and increases run life

PetroShield lubricating corrosion inhibitor (LCI)

6-Month Field Trials

	Historical Max Time to Failure (before treatment)	Failure- Free Days (post treatment)	Improvement of run life
Well 1	92	220+	2.5x
Well 2	136	210+	1.5x
Well 3	80	210+	2.5x
Well 4	110	210+	2.0x

Wells using PetroShield lubricating corrosion inhibitor (LCI) have experienced zero failures to-date.

RESULTS

Zero

Rod lift failures or workovers needed*

Doubled

Run life

~100%

Reduction in wear scarring

94%

Corrosion inhibition efficiency

**At time of publication, at the conclusion of six-month field trial*

“Baker Hughes lubricating corrosion inhibitor has proven to be a game-changer.”

– Jonathan Heironimus
Portfolio Manager, Baker Hughes