On-Site Friction Loop

Improving efficiency and optimizing fluid systems

GeoKimika Oil & Gas in Action

On-site friction reducer testing services during hydraulic fracturing operations provide information on product compatibility with field waters and other additives.

Challenge

A Permian based operator was conducting a field trial of various high brine friction reducers. Pre-job testing had been performed in the lab to determine field trial candidates with best compatibility in up to 100% produced water. However, during frac operations, high friction pressures limited the ability to use more than 25% produced water. There was also uncertainty on the effect of the disinfection treatment on the friction reducer performance.

Solution

Subsequently, GeoKimika was asked to assist with evaluating alternate options. In collaboration with the operator and the frac company, on-site testing was performed to identify a new candidate for field trial evaluation. A field trial was scheduled and GeoKimika’s recommended product showed ~ 1000 psi lower friction pressure at half the dosage.

Findings

GeoKimika’s friction loop was deployed to the field in order to evaluate the products on-site. Testing showed only one of the four products available on-site was compatible with the source waters. Additionally, evaluation of the disinfection treatment showed it did not affect the friction reducer performance.

Benefits of On-Site Friction Loop

- Unbiased 3rd party verification of product performance
- Allows for quality control of every batch of product received
- Provide verification of fluid design and performance before job begins
- Troubleshoot performance issues real-time with on-site support

Our on-site services can be tailored to any oilfield operation.

Learn more at: www.geokimika.com or contact us at 432.242.3192