

# 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.

## 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.

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

Learn more at:  
[www.geokimika.com](http://www.geokimika.com) or contact us at 432.242.3192

## 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.



## 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