

Remote Grease Purging System

Streamlined Technology to Decrease Valve Damage and Routine Greasing



Overview

Many of today's fracturing operations are complex multi-well pads with high treatment rates and pressures. To maintain service quality, greasing products and systems must be designed to perform under these demanding conditions. Completion Equipment Rental's Remote Grease Purging System provides a step change in valve performance by reducing valve damages cause during fracturing operations while also improving HSE.

Improved Operational Efficiency

Utilizing a programmable logic controller, the Grease Purging System provides grease pressure in the valve cavity enabling it to maintain a continuous purge during fracturing operations. As fracturing pressure fluctuate, the Grease Purging System maintains a positive grease pressure, normally 20-30 PSI above fracturing pressure, in real-time. This allows: (1) valves to remain full of grease (2) keeps sand, debris, and corrosive chemicals from entering the valve cavity, (3) reduces damage to internal parts and valve repair charges, and (4) shortens transition times and reduces nonproductive time by eliminating the need for routine greasing.

Results

For a leading Permian Operator located in New Mexico, the Grease Purging System allowed them to save over 40 hours of NPT on their total 2-well pad fracturing operation time compare to traditional remote greasing systems. Additionally, after the job, when the valves were pulled, no sand was found, the body still completely full of grease, and no damage parts resulting in limited repair cost to the operator (redress fees were still applied).

Features

- Programmable Logic Controller adjusts grease pressure in real-time
- Valves remain full of grease
- Reduces damage to internal parts
- Reduces valve repair charges at end of job
- Eliminates need for routine greasing
- Volume of grease is similar as routine greasing
- Programmable Logic Controller records Frac pressures in real-time

Benefits

- Shortens transition times
- Improved operational efficiency
- Minimal footprint on location
- Reduces nonproductive time
- Reduces HSE exposure



Grease Purge System



4-well Pad Location - Permian Basin



Valve Cavity after 52 stage job