Today’s shale fracturing treatments have stretched the abilities of legacy pumping systems to the extreme edges of the performance envelope. The requisite high pressures and rates are resulting in more frequent equipment maintenance and repair procedures. Often, the repairs are necessary during a treatment causing increased nonproductive time (NPT). It is noteworthy that the repairs are frequently due to excessive pump fluid end wear.

**Q10 Unit Meets the Shale Challenge**

The new Q10 pump has been completely redesigned to provide significantly longer-term performance and reduced NPT. It is the most versatile pump ever produced by Halliburton. Specifications include the following:

- Mono-block fluid end handles the demanding duty cycle required for shale fracturing. Testing and modeling have indicated that under identical conditions, the Q10 pump provides up to 14 times the fluid end life of legacy pumps
- In-line five cylinder (quintuplex) design provides maximum durability
- Engineered to minimize vibration during pumping for improved service life of the entire unit

The Q10 pump is the heart of the Q10 pumping unit. New design approaches have resulted in much longer service intervals with greatly reduced downtime on location for fluid end replacement.

- Performance specifications:
  - Maximum pressure: 20,000 psi
  - Minimum rate: 2.7 bpm
  - Maximum rate: 18.9 bpm
  - Current hydraulic horsepower: 2000 hhp
On-the-Job Testing Verifies Performance

Prior to beginning regular production and deployment, the Q10 pumping unit was field-tested and proved to provide rugged, dependable performance.

For more information about how the Q10 pumping unit can help reduce NPT during shale fracturing treatments and improve completion efficiency, contact your local Halliburton representative or email stimulation@Halliburton.com.