Horizontal Surface Pump System Saved $295,000 for Oklahoma Water Flood

Baker Hughes reduced NPT/maintenance costs with pumping system

Benefits

- Reduced downtime 67% to one day per month
- Saved 6,168 Bbl oil deferred production
- Reduced annual maintenance $48,000

Project background and challenges

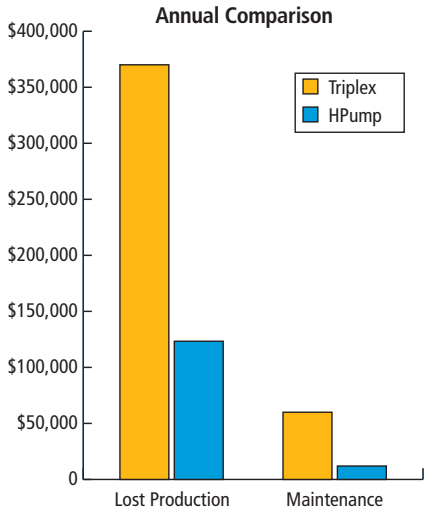
- Northeastern Oklahoma water flood with 1% oil cut
- 28,000 BWPD injection rate
- High operating expense and non-productive time (NPT) using current triplex pump reinjection system

Baker Hughes solution and results

- Installed parallel horizontal surface pumping system (HPump) paired with a Baker Hughes Electrospeed™ 3 variable speed drive (VSD)
- Downtime dropped from an average of three days to one day per month

A customer operating a water flood with 1% oil cut in northeastern Oklahoma was experiencing extensive downtime and rising maintenance costs using a triplex pumping system to re-inject 28,000 barrels of produced water daily.

Baker Hughes engineers recommended replacing the triplex pump with a highly reliable, efficient parallel HPump paired with a Baker Hughes Electrospeed 3 VSD.



The core of the system is a Baker Hughes multistage centrifugal pump combined with a horizontal thrust chamber and industrial quality, foot-mounted electric motor, all attached to a sturdy skid. Optimized with over 1,000 hours of research and development testing, plus thousands of worldwide customer installations, the durable and simple HPump design lowers operation and maintenance costs.

In this case, the customer saw maintenance expenses decrease 80% while production increased 67%. Further, the HPump saved $246,700 in annual deferred production costs compared to the previous system.