



## CHALLENGE

The disposal well of an E&P company was experiencing a continuous decrease in the injection rate, thought to be from fines in the produced water being injected that was plugging the screens. The well was designed for up to 10,000 bwpd and had reached 7,600 bwpd during its history. In 2014 the rate dropped to 5,800 bwpd at 1,800 psi, prompting a screen wash and acid job to be done. The rate improved to 10,800 bwpd at 1,100 psi, but within two months the rate declined rapidly to 587 bwpd at 1,500 psi. The well was shut-in in February 2016.

## HIGHLIGHTS

Conventional oil field  
Directionally drilled  
Gravel Pack with Screens  
Sandstone reservoir

LOCATION: Nigeria

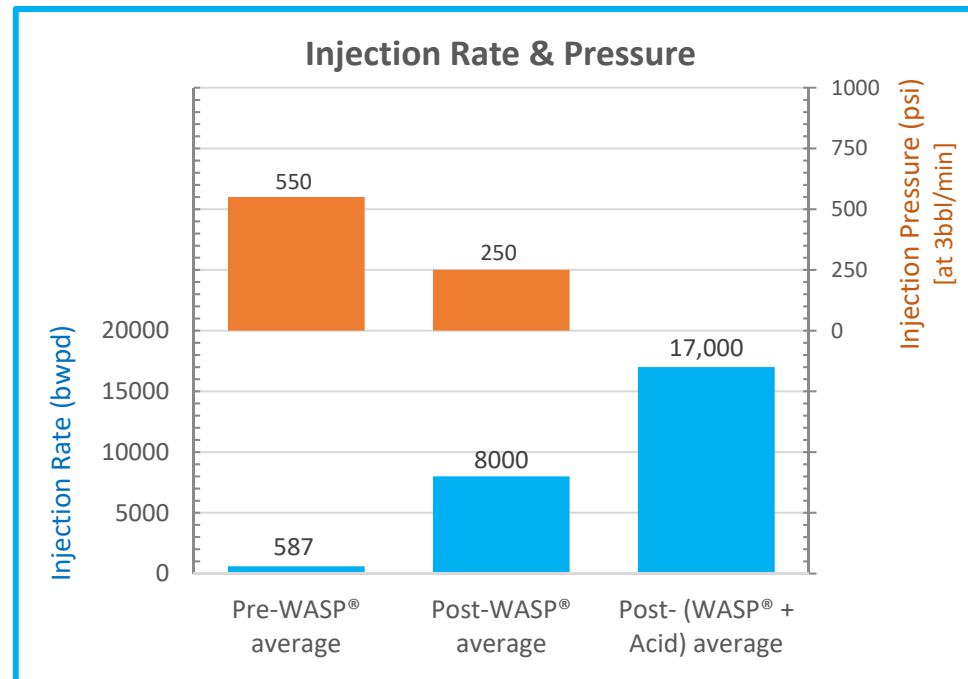
## CONDITIONS

Depth: 10,000 ft (3,000 m)  
Temperature: 144 °F (62 °C)

## OUTCOME

- After treatment with WASP® there was an instantaneous reduction in injection pressure of 55%. An extended injection test established that the rate had increased by 1,260%. After an acid treatment was done, the injection rate was now up by a combined 2,800%.

2,800%  
increase  
in water  
injection rate



## SOLUTION

Improve connectivity to the reservoir by clearing out blockages using electro-hydraulic pulsing technology

- The Blue Spark WASP® 212 (Wireline Applied Stimulation Pulsing) slimhole tool was run on third-party E-Line to the treatment interval
- An interval of 90 ft (27 m) was treated in two runs in the hole in less than one full day of rig time
- The well was put back on full injection and monitored



Injection Well



BLUESPARK