

Returning the shut-in “devil’s well” to production Gulf of Mexico, May 2020

6 000 bbl/day

Increased production,
peaking at 8 000 bbl/day

\$30M USD

Additional
profit

+4 000 h

Operational
hours

0

Downtime

-100 t

Reduced equipment
tonnage

-14

POB
reduction

Challenge

A major American Operator experienced such a high level of solids from multiple wells on one of its platforms that the well had been nicknamed the “devil’s well”. The existing solids and water handling equipment on board were inefficient and a build-up of solids in the production separator meant the water treatment plant could no longer function sufficiently. Since governmental environment restrictions in the Gulf of Mexico require produced water to be processed before re-injecting, the high producing well had been shut in.

Solution

We installed a DualFlow production enhancement unit to manage the solids production. The unit allowed the sand to be continuously transported out of the wellbore, keeping it free from solids, eliminating the need for intervention due to solids build up and maximising production.

Result

Not only was the well brought back online, but the operator was also able to increase production by 10% due to efficient sand management. This generated an increase of 6 000 bbl/day to date, with continuous production over 167 days (and zero downtime) generating \$30M USD of additional profit to the operator.

Through a successful solids management operation, the quality of produced water was improved (with less pollution in the process equipment). This reduced wear in the production chokes and in the downstream process facility. In addition, a costly cleanout operation, such as Coiled Tubing Clean Out (CTCO) was prevented. FourPhase remain the only supplier to have successfully managed these wells.

