GEN 3 Drillpipe Debris Trap Deck Unit Aids Stimulation Effectiveness June 2021 v1

Location: Deepwater
Gulf of Mexico

Challenge: Prevent foreign surface debris from plugging screens and formation during stimulation treatment.

Solution: Integrate Spoked Solutions' 3rd generation high pressure DPDT-DU downstream of high-pressure pumps and upstream of coiled tubing down lines.

Result: Spoked's DPDT-DU filtered 16,000bbls+of stimulation fluids over two wells; removing scale, rust, wood, paint, supersack fibers, sludge and other unidentified material assisting the operator with make significant increases to production.



Single Barrel Hydrated Capacity: 6 gal
Single Barrel Dehydrated Capacity: 0.52 ft^3
Unit Hydrated Capacity: 35 gal
Unit Dehydrated Capacity: 3.1 ft^3

The Case:

Often overlooked is the debris that accumulates on surface through fluid transfers from vessel to vessel, tank to tank, and via hoses owned by multiple vendors. A deepwater operator in the Gulf of Mexico chooses to eliminate the accumulation of this debris by filtering fluids destined to come into contact with the formation during their yearly stimulation campaigns.

Spoked recently made significant improvements to its Gen 2 DPDT-DU and this two-well campaign was the first operation of the Gen 3.

With a simplified rig up easing the ability to utilize the Gen 3 backflush capabilities, increased capacity, onboard bypass, and inlet/outlet differential pressure monitoring; the Gen 3 DPDT-DU was able to filter over 5,100bbls on Well 1 and over 11,300bbls on Well 2 catching 5.5lbs and 1.7lbs of

a myriad of formation and screen plugging debris respectively.

The Gen 3 DPDT-DU was placed downstream of all HP pumps and immediately upstream of the choke manifold and coiled tubing down lines. The 5,700psi filter differential rating was monitored via the onboard intrinsically safe digital gauges and allowed the operator to determine friction pressure prior to fluid entering the coiled tubing downlines while observing the accumulation of debris over the course of the operation. The unit captured a significant amount of rust, scale, super sack fibers, and a heavy sludge on Well 1 and fine particles of rust, paint, super sack fibers, some metal, and wood on Well 2.

The Tech:

The 8'x4'x5.5', 15,000psi patented DPDT-DU has primary, backup, and bypass abilities customizable screens with magnet accessories, and can handle greater than 18bpm.

More Information:

www.spokedsolutions.com/dpdt-du www.superiorperformance.com





