

 HYDRASHOCK™	HydraShock™ Drill Pipe		Treatment Date
			February 3, 2017
Rescue DP Case History		Pages	
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Document Number	Approver Position	HydraShock CT Product Line Manager	
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Day(s) on location: 2 into the HydraShock Drill Pipe Sub. With the WHP
Location: Watonga, OK slowly rising it was necessary to strip into the well
Formation: STACK to circulate it and kill it.

Scope of Work:

Provide XT39 HydraShock Sub as a dual-purpose well control profile sub, and a HydraShock profile.

Treatment:

The HydraShock technician arrived on location with a HydraShock Drill Pipe Tool. The other piece of equipment brought to location was a retrievable 2.313" Dual Flapper pump through lock from Red Bone Services, which sets in the HydraShock Drill Pipe Tool profile. The lock was set approximately 4,460' from the end of the tubing, due to the float above the UBHO leaking. The drill pipe was then stripped into the well, being filled every 20 stands, while maintaining 1,200-1,250psi on the annulus. Once the pipe was stripped to 10,322' (EOT), the rig crew was unable to break circulation. It was later suspected that the multi-density LCM and barite had settled out in the drilling fluid, which dropped it all on top of the pump through lock. Many attempts with braided line were made to bail out the fill, with a total of 12lbs of cedar fiber and multi-density LCM being recovered. With the annular preventer set to 500psi, and the casing pressure circulated to 650psi SICP, the string was stripped out of the well while keeping the pressure within the manageable safety limits. The HydraShock DP Sub was then removed and normal ops resumed. During the course of the treatment the HydraShock team was able to source a coiled tubing unit, a braided line unit, and wireline pressure control equipment specific to this job. The versatility of TENAX, having the only sub for both retrievable well control barriers for stripping ops and retrievable HydraShock drill pipe tools to free pipe, was on full display throughout the entire job.

Background:

Workstring: 5.0" Drill Pipe
HydraShock: HydraShock Drill Pipe Sub (XT39)
Immediate Concerns: UBHO ports @ 3,844' w/600' of plugged tubing below Sub
SICP: 1,250 psi
Completion Specifics:
➤ 9.625" 40# @9,325'
➤ 8.50" OH to 11,140'
➤ Suspected kick zone @ 9,400'
➤ Influx Zone - Open Stack play
➤ MW - 15.2ppg WBM (Drilling)
➤ MW - 15.8ppg (Tripping)

The operating company was drilling the vertical, when the well started flowing due to an influx from the Stack play. Once the well was shut in, it recorded a stable 1,250psi SICP. Next, the operator was in the process of tripping in the hole to spot a balanced cement plug to isolate the lost circulation zone at 11,400'. The 600' of 2.375" Stinger tubing became plugged off during the course of the treatment, leading the operating company to install a UBHO, pulling 2x 0.500" side jets out to circulate through. The float on top of the UBHO ended up leaking by during the job after the rig took a kick, which necessitated the pump through check installation