



# DAV MX™ CircSub



## DAV MX circulation sub delivers robust hole cleaning and reduced rig-time

During a recent project in New Mexico, an operator encountered issues tripping out of hole which was a result of suspected hole cleaning issues.

The current on bottom and off bottom clean-up routine was taking around 11 hours each time and extreme vibrations during off bottom hole cleaning was also increasing the risk of damage to costly BHA equipment.

The operator deployed the 7" 3-port DAV MX downhole circulation bypass tool to remediate the issue. The simple to use, multi-function, multi-cycle circulating sub can be used across a wide range of applications including hole cleaning, displacements, LCM Spotting and BOP jetting. Activation speed, versatility and robustness enables timely and reliable fast circulating options and requires no service hand.

A split flow dart was selected for the hole cleaning application, after reference pressures were first recorded. The dart was deployed where a clear pressure drop of ~ 530psi indicated the dart landing and valve opening. The tool was then locked open, and off bottom hole cleaning commenced at 800gpm for two cycles. Finally, a universal closing dart was pumped to close the valve.

While pumping at 800gpm, and bypassing through the DAV MX, the BHA was limited to 40-50 RPM to reduce vibration and mitigate any risk of damage to downhole equipment.

Following the DAV MX's deployment, a 20% increase in cuttings was observed. With reduced clean-up cycles and higher pump rates delivered, almost eight hours rig-time was saved.

### BENEFITS

- **Eight-hour rig-time savings**
- **20% increase in cuttings**
- **No service hand or configurations required before use**
- **No issues tripping out of hole**
- **Mitigate shock and vibration**

