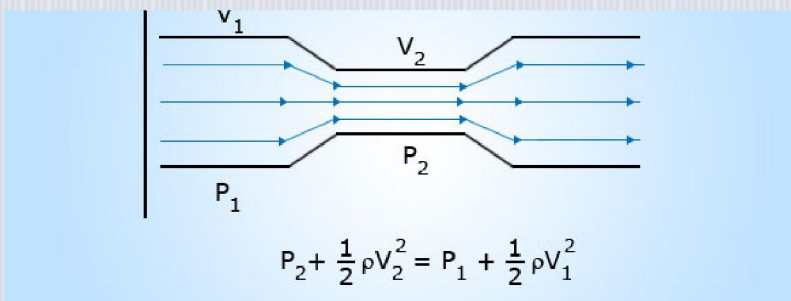




ExP BHA

ExP has been able to implement fluid conditioning and manipulation properties to successfully manufacture technologies that can help assist in the recovery of both Oil and Gas during work-over (cleanout) operations.



Situation

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Location: Wayne County, Mississippi

Problem: BaSO₄ scale with some sand debris in wellbore

Procedure: The ExP tool was deployed via 1.25" third party coiled tubing. An initial pump rate of .25 bbls/min with 200 CFM N₂ was pumped with circulating pressures of 1,200 psi. When the first bridge was encountered at 4,758' the CT was picked up by 25ft and the fluid rate was increased to .5 bbls/min with 100lbs WOB, which removed the debris bridge. At 5,082 a second bridge was encountered. Within 10 minutes the coil pushed through more blockages. The ExP continued to remove the obstructions in a timely manner to TD. During the cleaning the flow-back fluids were observed to contain over 75% solids which were presumed to be BaSO₄, sand and debris.

Total Time from RIH to TD: 2 hours 58 minutes

Result: All scale, barium, sand and debris were removed

Pre- ExP Intervention:
250-400 MCF (Gross)

Post ExP intervention:
TBD

Case History

Barium Sulfate (BaSO₄)

Scale, sand and debris in the wellbore

Objective: Utilize 1.25" CT with the 1.33" ExP BHA to remove Barium Sulfate, sand and debris from inside the tubing and wellbore, utilizing produced water and N₂ (when needed). During the course of the operations friction reducer and gel sweeps were utilized for the operations.

Tubing: 2 3/8"

Casing: 5.5"

Well TD: 5,320'

CT Size: 1.25"

CT Speed: 50-100 ft/min

Circulation PSI: 1,000-4,000

Fluid Flow Rate: .25 bbls
– .75 bbls/min

N₂ Flow: 150-300 CFM

Other Chemicals: FR