



CASE HISTORY

Drilling and Completions

Casing Annulus Packer + Stage Tool

BAREFOOT COMPLETION

Air Drilled Well Requires Completion Without the Loss of Cement into Exposed Reservoir

Location: New Mexico



CHALLENGE: Air drilled well requires completion without loss of cement into exposed reservoir. Gas wells in New Mexico are air drilled through the reservoir to minimize formation damage typically resulting from mud invasion. The wells are then completed as barefoot completions with cement not exposed to the reservoir.

SOLUTION: A 4-½ in. float shoe, Casing Annulus Packer (CAP), and stage tool were run on the casing and positioned immediately above the reservoir. A wiper plug was pumped down to seat in the float. Pressure was applied and the CAP inflated. Additional pressure was applied to open the hydraulic stage tool and a cement program was executed. The closing wiper plug was landed to close the stage tool, and then the stage tool and float were drilled out using air. The wells were placed on production with minimal stimulation required. Seals were activated to block the Port Collar cementing ports and the inflation valve ports of the CAP.

RESULTS AND BENEFIT: Over 100 wells in Montana, New Mexico and Ohio have been completed using this barefoot completion method.



Casing Annulus Packer