

CASE HISTORY

Well Intervention Inflatable Bridge Plug

BRIDGE PLUG APPLICATION: CASING REPAIR

Casing Failure Requires Repair

Location: South Texas



CHALLENGE: A Class 1 disposal well failed to pass the bi-annual mechanical integrity test due to severe corrosion and partial collapse in the upper 3,000 ft. of the 7 in. OD production casing.

SOLUTION: A 4 ¼ in. OD inflatable bridge plug (IBP) was run below the corroded section to prevent losses of trash and fluids into the injection zone and improve well control during the workover. The top 3,400 ft of 7 in. casing was cut and retrieved. A replacement 7 in. casing string was run with a pack off overshot to latch onto and seal the 7 in. casing stub left sticking up. A stage cement job was performed above the overshot with full cement returns to surface. The stage tool plugs were drilled out and pressure testing of the new casing and overshot confirmed integrity. The IBP was retrieved and the well returned to service.

RESULTS AND BENEFIT: Repair costs were less than P&A and new well drilling costs. In addition, permitting a workover requires considerably less paperwork than permitting a new Class 1 disposal well and thus the well was returned to service approximately one year sooner than if a new drilled well had been required. Without the well in service, all disposal fluids required trucking to a commercial disposal site at considerable cost.



Inflatable Bridge Plug