

Goldsmith 11-31 – Annular Fill Procedure

- 1 Call Wattenberg IOC (970-506-5980) at least 24 hrs prior to rig move. If not already completed, request that they catch and remove plunger, isolate production equipment and remove any automation equipment prior to the rig showing up. Install perimeter fence as needed.
- 2 Check bradenhead for pressure. A form 17 has not been performed. Record pressure if any.
- 3 MIRU Slick line. Fish plunger if necessary and tag for PBTD.
- 4 Prepare location for base beam rig.
- 5 Spot **1200'** of 1.66" 2.33# J-55 10rd IJ tbg.
- 6 Check wellhead for 5,000 psi rating. If wellhead is not rated to 5,000 psi, install one that is prior to completing the job.
- 7 MIRU WO rig. Kill well with fresh water with biocide. ND wellhead, NU BOP.
- 8 Run two 2" lines from starting head to return tanks.
- 9 Unseat tbg hanger and LD tbg hanger and landing joint. Install rubber wiper in stripping head.
- 10 MIRU EMI equipment. TOOH with 2-3/8" tbg. EMI tbg while TOOH. Lay down joints with wall loss or penetrations >35%. Replace joints as necessary. Keep yellow and blue band tubing. Note joint number and depth of tubing leak(s) on production equipment failure report in OpenWells. Clearly mark all junk (red band) tubing sent to yard.
- 11 PU and TIH with 2-3/8" tbg with 4-1/2" RBP for 11.6# casing. Set RBP at +/- **6120'**. Pressure test RBP to 1,000 psi for 15 minutes. Spot 2 sx sand on top of RBP. TOOH. SB tbg.
- 12 ND BOP, ND tubing head. Un land 4-1/2" 11.6# csg. NU double entry flange, NU BOP.
- 13 PU and TIH with 1.66" 2.33# J-55 10rd IJ tbg outside 4 1/2" csg to +/- **1200'** with alcomer sweeps while running in.
- 14 Circulate **150** bbls with rig pump (Circulate at least 1.5x annular volume from **1200'**) or until well is dead.
- 15 TUH to 1050'.
- 16 MIRU Cement company. Commence pumping cement job consisting 5 bbl fresh water, 20 bbl sodium meta silicate and 5 bbl fresh water; **360 cuft (270 sx)** of Type III + 0.3% CFL-3 + 0.3% CFR-2 + 0.5% CaCl₂ + 0.25 lb/sk Polyflake mixed at 14.8 ppg and 1.33 cuft/sk. (Cement from +/- **1050'** to **350'**).
- 17 TOOH with 1.66" 2.33# and LD.
- 18 Break lines and clean up with fresh water. RMDO cement company.
- 19 ND BOP, ND double entry flange, re-land 4-1/2" csg NU BOP.
- 20 Leave well shut in for minimum of 24 hours.
- 21 MIRU wire line and run CCL-GR-CBL-VDL from **1500'** to **surface**. If Fox Hill plug is not above **350'**, contact engineering for further instructions. RDMO wire line.
- 22 Pressure test casing to 1,000 psig. If pressure test does not hold call engineering.
- 23 TIH with 2-3/8" tbg and retrieving head and tag sand above RBP @ +/- **6120'**. Circulate sand off RBP, latch onto RBP and TOOH. SB tbg, LD RBP.
- 24 PU and TIH with 2-3/8" XN, 2-3/8" tbg and 4-1/2" production packer. Land EOT at +/- **7250'** with the packer being set at +/- **6870'**. Set packer and land tbg string
- 25 ND BOP, NU master valve.

- 26 Install 7 1/16" x 5,000 psi tubing head adaptor with new 5,000 psi master valve threaded 2 1/16" connection. Make sure all wellhead valves are rated to 5,000 psi.
- 27 Install 2 3/8" pup joint above the master valve. Pressure test the tubing head from below the tubing head through the master valve to 5,000 psi with hydro tester. NU 5k wellhead.
- 28 RMDO WO rig. Return well to production team.
- 29 Clean location and swab well back to production. Notify field foreman/field coordinator of finished work and turn well back over to production team.