

PSC 15-10 – Annular Fill Prep Procedure

- 1 Well needs a single stage annular fill and casing pressure test.
- 2 Gyro survey completed on this well 11/6/2014
- 3 Contact field foreman or field coordinator 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.
- 4 MIRU slickline. Fish PLE if necessary and tag fill (PBMD @ 7218').
- 5 Prepare location for base beam rig.
- 6 Spot 40 jts of 2-3/8" 4.7# J-55 8RD EUE tubing.
- 7 Spot 45 jts of 1.66" 2.33# J-55 IJ tubing.
- 8 Spot Alcomer 74L for pre-cement mud flush sweeps.
- 9 Notify Ed Asuchak in drilling to have 10 ppg mud on standby.
- 10 MIRU WO rig. Kill well with fresh water with biocide. ND wellhead, NU BOP.
- 11 Run two 2" lines from starting head to return tanks.
- 12 PU 8-10' landing joint with TIW safety valve on top and screw into the tubing hanger. Back out the lock down pins and pull up on the tubing string to break any possible sand bridges. Do not exceed 80% of tubing tensile strength, or 57,384-lb.
- 13 Unseat tubing hanger and LD tubing hanger and landing joint. Install rubber wiper in stripping head.
- 14 MIRU EMI equipment. TOO H with 2 3/8" tubing. EMI tubing while TOO H. 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.
- 15 TIH 2 3/8" tubing with 4.5" RBP (4.5" 11.6# I-80). Set RBP at +/- 6750' (collars at 6720' and 6762').
- 16 Circulate gas out of well; pressure test RBP to 2,000 psi for 15 minutes (pressure test to make sure plug is set correctly).
- 17 Spot 2 sx sand on top of RBP. TOO H with 2 3/8" tubing, stand back tubing.
- 18 ND BOP, un-land 4 1/2" casing, RU dual-entry flange, NU BOP. Stretch calcs show that with a 53,000-lb pull weight there should be 24" of stretch. If casing cannot be safely un-landed, contact engineering for further support.
- 19 PU and TIH with 1.66" 2.33# IJ tubing to 1200'. While tripping in, pump Alcomer 74L sweeps periodically based on visual inspection of returns with a final sweep at 1200'.

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Offset to Goose 4-15HZ, Maverick State 4-15HZ, Viper Pyro 4-15HZ, & Jester 5-15HZ Pads; ~180' from closest planned horizontal

Prep Type: Full Circle

Crops – Winter Wheat

Gyro survey completed on this well 11/6/2014

Nio Top: 6790'; Sx Top: 4117'; TOC: 3550'

Last casing pressure test: 6000 psi on 10/26/2006

- 20 Circulate 95 bbls with rig pump (circulate at least 1.5x annular volume from 1200') with 10 ppg mud spotted at the end until well is dead.
- 21 TOOH 1.66" tubing to 1000'.
- 22 MIRU cement company, establish circulation with biocide treated water and commence pumping cement job consisting of 5 bbls fresh water, 20 bbls sodium metasilicate, 5 bbls fresh water, and 45 bbl (190 sx) of Type III with ¼ lb/sk cello-flake mixed at 14.8 ppg and 1.33 cuft/sk blended for a 3 hr pump time (cement from 1000' to 400').
- 23 TOOH 1.66" tubing to 300' and reverse circulate 2X tbg volume to clean up. TOOH & LD remaining 1.66" tubing.
- 24 Break lines, clean up with fresh water, RMDO cement company.
- 25 ND BOP, ND dual entry flange, and re-land 4 ½" casing. If needed, NU new WHI 7 1/16", 5000 psi flanged tubing head complete w/ 5000 psi rated casing valves and NU BOP. Leave well shut in minimum of 24 hours.
- 26 MIRU WL and run CCL-GR-CBL-VDL from 3500' to 0'. If cement coverage is not above 400', contact Evans Engineering for further instructions. Email logs to Evans Engineering and DJVendors@anadarko.com. RDMO WL.
- 27 ND BOP, NU 7 1/16", 5000 psi flanged tubing head adaptor w/ new 2 1/16", 5000 psi flanged master valve.
- 28 MIRU hydrotester. Pressure test the casing and tubing head to 5000 psi for 15 minutes. If pressure test fails, contact Evans Engineering for possible change in procedure.
- 29 ND WH, NU BOP.
- 30 TIH with 2 3/8" tubing and retrieving head and tag sand above RBP at +/- 6750'. Circulate sand off RBP. Latch onto RBP and release RBP. TOOH standing back all 2 3/8" tubing and LD RBP.
- 31 PU and TIH with 2 3/8" NC, 2 3/8" XN nipple, and 2 3/8" 4.7# J-55 tubing. Clean out as necessary. Land 2 3/8" tubing at +/- 7055' (1 joint above top Codell perf).
- 32 RU rig lubricator. Broach tubing to XN nipple. RD rig lubricator.
- 33 ND BOP, NU WH.
- 34 MIRU hydrotester. Install 2 3/8" pup joint above master valve. Hydrotest wellhead to 5000 psi from below tubing head through master valve for 15 minutes.
- 35 RMDO WO rig. Return well to production team.
- 36 Clean location. Notify field foreman/field coordinator of finished work and turn well back over to production team.

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