

Berry 24-8 – Annular Fill Procedure

- 1 Well needs a single stage annular fill.
- 2 Gyro survey completed on this well 12/27/2013.
- 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 @ 7,249').
- 5 Prepare location for base beam rig.
- 6 Spot 40 joints of 2-3/8" 4.7# J-55 8RD EUE tubing.
- 7 Spot 45 joints 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. TOOH with 2 3/8" tubing. EMI tubing 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.
- 15 TIH 2 3/8" tubing with 4.5" RBP (4.5" 11.6# I-80). Set RBP at +/- 6,800' (Collars at 6,818' and 6,776').
- 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. TOOH with 2 3/8" tubing, SB tubing.
- 18 ND BOP, un-land 4 1/2" casing, RU dual-entry flange, NU BOP. Stretch calculations show that with a 65,000-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 1,200'. While tripping in, pump Alcomer 74L sweeps periodically based on visual inspection of returns with a final sweep at 1,200'.
- 20 Circulate 91 bbls biocide treated water with rig pump (circulate at least 1.5x annular volume from 1,200') with 10 ppg mud spotted at the end until well is dead.

Well needs a single stage annular fill

Well offset to the Goose 4-15HZ Pad; ~1887' from closest planned horizontal

Prep Type: Full Circle

Crops

Gyro survey completed on this well 12/27/2013

Nio Top: 6846'; Sx Top: 4102'; TOC: 2890'

Last casing pressure test: 5000 psi on 3/11/2014

- 21 TOO H 1.66" tubing to 1,000'.
- 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 33 bbl (140 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 1,000' to 550').
- 23 TOO H 1.66" tubing to 400' and reverse circulate 2X tbq volume to clean up. TOO H & LD remaining 1.66" tubing.
- 24 Break lines, clean up with fresh water, RMDO cement company.
- 25 ND BOP, ND dual entry flange, re-land 4 ½" casing, and NU BOP. Leave well shut in minimum of 24 hours.
- 26 MIRU WL and run CCL-GR-CBL-VDL from 3,000' to 0'. If cement coverage is not above 550', contact Evans Engineering for further instructions. Email logs to Evans Engineering and DJVendors@anadarko.com. RDMO WL.
- 27 TIH with 2 3/8" tubing and retrieving head and tag sand above RBP at +/- 6,800'. Circulate sand off RBP. Latch onto RBP and release RBP. TOO H standing back all 2 3/8" tubing and LD RBP.
- 28 PU and TIH with 2 3/8" notched collar, 2 3/8" XN nipple, and 2 3/8" 4.7# J-55 tubing. Clean out as necessary. Land 2 3/8" tubing at +/- 7,100' (1 joint above top Codell perf).
- 29 ND BOP, NU 7 1/16", 5,000 psi flanged tubing head adaptor w/ 2 1/16", 5,000 psi flanged master valve.
- 30 MIRU hydrotester. Install 2 3/8" pup joint above master valve. Hydrotest wellhead to 5,000 psi from below tubing head through master valve for 15 minutes.
- 31 RDMO WO rig. Return well to production team.
- 32 Clean location. Notify field foreman/field coordinator of finished work and turn well back over to production team.

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