

Herrman 21-10 – Bradenhead Procedure

- 1 A directional survey of this well has already been completed.
- 2 Last record of casing pressure test was to 6000 psi on 4/25/2007.
- 3 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.
- 4 MIRU Slick line. Fish plunger if necessary and tag PBMD (Should be 8051').
- 5 Prepare location for base beam rig.
- 6 Spot 25 jts of 2-3/8" 4.7# J-55 8RD EUE tbg.
- 7 Spot 57 jts of 1-1/4" 2.33# J-55 IJ tbg.
- 8 Notify mud company to have 10.0 ppg drilling mud on standby.
- 9 Check wellhead for flanged-style connections and 5,000 psi rating. If wellhead is not rated to 5,000 psi or does not have flanged-style connections, install one that does prior to completing the job.
- 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 tbg hanger. Back out the lock down pins and pull up on the tbg string to break any possible sand bridges. Do not exceed 80% of tubing tensile strength, or 57,384-lb.
- 13 Unseat tbg hanger and LD tbg hanger and landing joint. Install rubber wiper in stripping head.
- 14 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.
- 15 PU and TIH with 233 jts of 2-3/8" 4.7# J-55 tbg with 4.5" RBP (4.5" 11.6# I-80). Set RBP at +/- 7000' (Collars at 6980' and 7026'). Spot 2 sx sand on top of RBP. TOOH. SB tbg.
- 16 Pressure test RBP to 2,000 psi for 15 minutes. (Pressure test to make sure plug is set correctly)
- 17 ND BOP, un-land 4-1/2" csg, RU dual-entry flange, NU BOP.
- 18 PU and TIH with 57 jts 1-1/4" 2.33# IJ tbg to 1700'.
- 19 Circulate 120 bbls with rig pump (Circulate at least 1.5x annular volume from 1700') with 10.0 ppg mud sweep at the end.
- 20 TOOH 7 jts 1-1/4" tbg to +/- 1500'.
- 21 ND BOP, MIRU cement company.
- 22 Commence pumping cement job consisting of 5 bbls fresh water, 20 bbls sodium metasilicate, 5 bbls fresh water and 57 bbl (240 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 1500' to 484').
- 23 Break lines, clean up with fresh water, RMDO cement company.
- 24 ND BOP, ND dual entry flange, re-land 4-1/2" csg and NU BOP. Leave well shut in minimum of 24 hours.
- 25 MIRU wire line and run CCL-GR-CBL-VDL from 1600' to 0'. If Fox Hill plug is not above 488', contact engineering for further instructions. Email logs to engineering and DJVendors@anadarko.com. RDMO wire line.

- 26 PU and TIH with 2-3/8" notched collar, 2-3/8" XN, 2-3/8" 4.7# J-55 tbg. Land 2-3/8" tbg @ +/- 7868' (1 jt above top J Sand perf).
- 27 ND BOP, NU master valve.
- 28 Install 7 1/16" x 5,000 psi tubing head adaptor with new 5,000 psi master valve threaded 2 3/8" connection. Make sure all wellhead valves are rated to 5,000 psi.
- 29 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.
- 30 RMDO WO rig. Return well to production team.
- 31 Clean location and swab well back to production. Notify field foreman/field coordinator of finished work and turn well back over to production team.