Anadarko
Petroleum Corporation

Williams 25-20 – Bradenhead

1. Well already has directional survey.
2. 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.
3. MIRU SL. Fish plunger if necessary and tag PBMD (should be 7899'). Inform engineer of tag depth.
4. Prepare location for base beam rig.
5. Spot 25 jts of 2-3/8" 4.7# J-55 8RD EUE tbg.
6. Spot 54 jts of 1-1/4" 2.33# J-55 10rd IJ tbg.
7. WH should be rated to 5000 psi. Ensure all valves, fittings, and plugs on well head are rated to 5000 psi.
8. MIRU WO rig. Kill well with fresh water and biocide. ND WH, NU BOP.
9. PU tbg to break any possible sand bridges. Do not exceed 80% of tubing tensile strength, or 57,384 lb. LD landing jt.
10. Unseat tbg hanger. Install rubber wiper in stripping head.
11. MIRU EMI equipment. TOOH with 2-3/8" tbg. EMI tbg while TOOH. Lay down jts with wall loss or penetrations >35%. Replace jts as necessary. Keep yellow and blue band tbg. Note jt number and depth of tubing leak(s) on production equipment failure report in OpenWells. Clearly mark all junk (red band) tbg sent to yard.
12. PU and TIH with 235 jts of 2-3/8" tbg with 4.5" RBP (4.5" 11.6# I-80). Set RBP at +/- 7400' (Collars at 7385' and 7426'). Spot 2 sx sand on top of RBP. TOOH. Stand back tbg.
13. Pressure test RBP to 1000 psi for 15 minutes. If pressure test passes, proceed.
14. Current cement logs are unclear. MIRU WL and run CCL-GR-CBL-VDL from 3000' to 0' under 1000 psi. Contact engineer to discuss using top of cement indicated on CBL for proceeding steps (could be as high as 1660'). Email logs to engineering and DJVendors@anadarko.com. RDMO WL.
15. ND BOP, ND tbg head. Unland 4-1/2" 11.6# I-80 csg (Do not exceed 130,000-lb pull weight). NU double entry flange, NU BOP.
16. PU and TIH with 54 jts of 1-1/4" tbg outside 4-1/2" csg to +/- 1700'.
17. Circulate and condition hole with ~115 bbls of drilling mud with rig pump (1.5x annular volume from 1700'), or until well is completely dead. Spot 40 bbls of 10 ppg drilling mud.
18. TOOH with 7 jts 1-1/4" tbg to 1500'.
19. MIRU cement company. Commence pumping cement job consisting 5 bbl fresh water, 20 bbl sodium metasilicate and 5 bbl fresh water; 190 sx of Type III with ¼ lb/sk cello-flake mixed at 14.8 ppg and 1.33 cf/sk blended for a 3 hr pump time (cement from 1500' to 674').

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20   TOOH with 35 jts of 1-1/4" tbg to +/- 400' and circulate 2x tbg volume to clean up.

21   TOOH with remaining 1-1/4" tbg and LD.

22   Break lines and clean up with fresh water. RMDO cement company.

23   ND BOP, ND double entry flange, re-land 4-1/2" csg. NU BOP.

24   Leave well SI for minimum of 24 hours.

25   MIRU WL and run CCL-GR-CBL-VDL from 1700' to 0' (cement should be from +/- 1500' to 674'). If Fox Hills plug is not above 674', contact engineering for further instructions. Email logs to engineering and DJVendors@anadarko.com. RDMO WL.

26   Pressure test csg to 1000 psi. If pressure test does not hold, call engineering.

27   Pressure test the tubing head from below the tubing head through the master valve to 5000 psi with hydro tester. NU BOP.

28   TIH with 2-3/8" tbg and retrieving head to tag sand above RBP at +/- 7400'. Circulate sand off RBP, latch onto RBP and TOOH. SB tbg, LD RBP.

29   PU and TIH with 2-3/8" NC, 2-3/8" XN, and 245 jts 2-3/8" tbg. If necessary, drop down with extra jts and circulate to cleanout sand. PUH and land tbg at +/- 7711' (1 jt above top Codell perf).

30   ND BOP, NU WH.

31   RMDO WO rig. Return well to production team.

32   Clean location and swab well back to production. Notify field foreman/field coordinator of finished work and turn well back over to production team.

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