

Engineer: Trey Sloan  
Cell Phone Number: 918-534-6637

SAFETY PREP PROCEDUR  
Retainer Suicide Squeeze (Bradenhead), Nio Squeeze, Packer, and Wellhead

FLORENCE BERRY UNIT 1

Description

1. Well needs a retainer suicide squeeze from 1000'-600' for bradenhead issues, Niobrara squeeze, a packer, and wellhead.
2. Well has gyro ran on 02/12/2015.
3. MIRU Slickline. Pull production equipment. Record tag depth in OpenWells. RD slickline.
4. Prepare location for base beam equipped rig. Install perimeter fence as needed.
5. Check and record bradenhead pressure. If bradenhead valve is not accessible, re-plumb so that valve is above GL. Blow down bradenhead and re-check pressure the next day. Repeat until pressure stays at 0 psi.
6. MIRU WO rig. Spot 25 jts of 2-3/8" 4.7# J-55 tbg.
7. Kill well as necessary with biocide treated freshwater. Attach a hardline from the bradenhead/surface casing valve to a flowback tank and blowdown any bradenhead pressure. If pressure does not blow down within 1 hour contact engineer, otherwise proceed.
8. ND wellhead, NU BOP.
9. PU 8-10' pup joint with TIW valve on top and screw into the tbg hanger. Unseat and LD the landing joint.
10. MIRU EMI services. EMI 2-3/8" tbg while TOO H and tally while standing back. Lay down joints that have greater than 35% penetration or wall loss. Replace all joints that fail EMI testing. Document joint numbers and depth of bad tubing and create a Production Equipment Failure Report in OpenWells. RDMO EMI services.
11. PU and TIH with (4.5", 10.5#) Bit and Scraper on 2-3/8" tubing to 7710'. TOO H and SB all tbg. LD Bit and Scraper.
12. MIRU WL. PU and RIH with (4.5", 10.5#) CIBP. Set CIBP at +/- 7700'. POOH. RDMO WL.
13. TIH with 2-3/8" tbg to 7700'. Pumping biocide treated fresh water, circulate gas out, pressure test CIBP and production casing to 500 psi for 15 minutes. If test fails, contact Engineering.
14. TOO H and SB all 2-3/8" tubing.
15. MIRU WL and run CCL-GR-CBL-VDL from +/- 7700' to surface to confirm squeeze hole and collar locations. Forward to Engineering. In addition to normal handling, of logs/job summaries, email copies of all cement job logs/job summaries and invoices to DJVendors@anadarko.com within 24 hours of completion of the job.
16. PU and RIH with two 1' 3-1/8" perf guns with 3 spf, 0.5" EHD, 120° phasing. Shoot 1' of squeeze holes at 7300' and 6655'. POOH. RDMO WL.
17. PU and TIH with (4.5", 10.5#) CICR on 2-3/8" tbg while hydrotesting to 4000 psi and set at +/- 6685'. Establish circulation through squeeze holes with biocide treated freshwater and circulate a minimum of 200 bbls through squeeze holes. If rate is less than 1 bpm at 1000 psi, contact engineer.

18. MIRU Cementing. Establish circulation and pump 20 bbls (5 bbls of water, 10 bbls of sodium silicate, and 5 bbls water) spacer, 185 sx Niobrara Squeeze cement (279 cf, 49.8 bbls) 15.8 ppg, 1.51 yld. Underdisplace by 3 bbls. Calculations based on 645' in the annulus between 7.88" hole and 4.5" casing with 40% excess, 615' below CICR in 4.5" casing, and 188' above CICR. Attempt to cement from 7300' to 6655'.
19. PUH to 6000' and reverse circulate tbg clean to ensure no cement is left in tbg. TOOH. SB all tbg. LD stinger.
20. MIRU WL. PU and RIH with two 1' 3-1/8" perf guns with 3 spf, 0.5" EHD, 120° phasing. Shoot 1' of squeeze holes at 1000' and 600'. POOH. RDMO WL.
21. PU and TIH with (4.5", 10.5#) CICR on 2-3/8" tbg and set at +/- 630'. Establish circulation through squeeze holes with biocide treated freshwater and circulate a minimum of 200 bbls through squeeze holes. If rate is less than 1 bpm at 1000 psi, contact engineer.
22. MIRU Cementing. Establish circulation and pump 20 bbls (5 bbls of water, 10 bbls of sodium silicate, and 5 bbls water) spacer, 130 sx Fox Hills Squeeze cement (196.3 cf, 35 bbls) 15.8 ppg, 1.51 yld. Underdisplace by 3 bbls. Calculations based on 400' in the annulus between 7.88" hole and 4.5" casing with 60% excess, 370' below CICR in 4.5" casing, and 188' above CICR. Attempt to cement from 1000' to 600'.
23. PUH to 300' and reverse circulate tbg clean to ensure no cement is left in tbg. TOOH, SB all tbg. LD stinger. WOC 24 hours.
24. PU and TIH with 3-7/8" bit and appropriate number of 3-1/2" drill collars on 2-3/8" tbg. Time drill cement above CICR (~188'). If ROP is faster than 2 min/ft, SD and WOC 24 hours and repeat. Drill down to CICR located at +/- 630'. Pressure test top holes to 500 psi for 5 minutes. Drill CICR and cement past lower perf at 1000' and pressure test to 500 psi for 5 minutes. Repeat for CICR at 6685'.
25. TOOH and SB tbg, LD drill collars, LD bit.
26. MIRU WL and run CCL-GR-CBL-VDL from +/- 7500' to surface. Forward to Engineering. In addition to normal handling, of logs/job summaries, email copies of all cement job logs/job summaries and invoices to DJVendors@anadarko.com within 24 hours of completion of the job.
27. PU and TIH with bit on 2-3/8" tbg. Drillout CIBP at +/- 7700 and chase down to 7921'.
28. TOOH. SB all tbg. LD bit.
29. PU 2-3/8" NC, 2-3/8" XN nipple (be sure to correctly input into OpenWells), ~24 jts of 2-3/8" tbg (to set packer at 7000'), 4-1/2" Arrowset AS-1X packer (10k rated above and below), and 2-3/8" 4.7# J-55 tbg to surface.
30. Set packer at +/- 7000'. Load backside with packer fluid and test to 500 psi.
31. RU rig lubricator. Broach tubing to XN seating nipple. RD rig lubricator. ND BOP.
32. Install 7-1/16" flanged 5000 psi tubing head adaptor with studded top, 2-1/16" flanged 5000 psi master valve, flanged 5000 psi 2-3/8" plunger lubricator (side outlets threaded). Make sure all wellhead valves are rated to 5,000 psi. Document wellhead components in an OpenWells wellhead report.
33. 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 using hydrotester. If wellhead does not pressure test, replace wellhead/wellhead valves as necessary with 5,000 psi rated equipment.
34. NU WH. RDMO WO rig. Return well to production team.