

KNOX 6-3 (HSR)

1. Call Foreman or Lead Operator at least 24 hr prior to rig move. 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.
2. Provide notice of MIRU to COGCC field inspector as specified in approved Form 6.
3. Notify CDC when rig moves on location to generate workorder for flowline removal and one call for line locates.
4. Prepare location for base beam rig.
5. MIRU WO rig. Kill well using water and biocide. ND wellhead. NU BOP.
6. PUH w/ tbg to break any sand bridges, noting not to exceed the safety tensile load of 1.315", 1.70 # tbg of 21,728 lbs. (80% of upset joint yield strength).
7. TOOH with 1.315" tbg and LD.
8. MIRU slickline services. RU VES and run gyro survey on slickline (from 6850 to surface with stops every 100') (Note: 2-7/8" Production csg). Forward gyro survey data to Sabrina Frantz and invoices to John Tonello. RDMO slickline services (and VES).
9. MIRU WL. RIH with Junk Basket/Gauge Ring on WL to \pm 6800'. TOOH with Junk Basket/Gauge Ring.
10. PU and RIH with CIBP for 2-7/8", 6.5#, N-80 production casing. Set CIBP at 6790' (60' above NB perfs).POOH. Pressure test CIBP to 1000 psi for 15 min. Dump bail 2 sx of cement on CIBP. RDMO WL.
11. Run in hole with free point to cut casing at closest joint to 6170' (40' above TOC). RDMO WL.
12. ND BOP & tbg head.
13. NU BOP w/ 2-7/8" pipe rams on the 8-5/8" csg head.
14. PU csg. Circulate wellbore with drilling mud. TOOH and SB 2-7/8" csg. If unable to pull production csg contact engineer/COGCC for plugging modification.
15. RIH w/ 2-7/8" casing to 6170' (above cut casing at 6170'), hydrotest while RIH. Establish circulation.
16. MIRU Cementing services. Spot 100 sx (8.5" caliper & 40% excess)of cement (50/50 poz Class G w/ 20% Silica four, 0.4% CD-32, 0.4% ASA-301 and R-3 mixed at 15.8 ppg and 1.38 cuft/sx) from 5920'-6170'. Pull 2 stand tbg and circulate hole with min 9.0 ppg drilling mud (150 bbls, 1.5 volume of hole). Circulate to get any cement out of the hole. SB cementer.
17. PU w/ 2-7/8" casing to 4920' (200' below base of Shannon). Establish circulation.
18. RU cementer. Once pumping rate has been established, pump 5 bbl water, followed by 20 bbl Sodium Metasilicate ahead of cement, followed by 5 bbl water. Spot 400 sx (8.5" caliper & 40% excess) of cement ("G" w/ 0.25 pps cello flake, 0.4% CD-32, 0.4% ASA-30) from 3800' and 4920'. Note returns during cement job in OpenWells report.
19. PUH to 3500' (300' above estimated top of cement) with 2-7/8" csg and circulate conventionally with drilling mud until no cement returns to surface.
20. P & LD 2-7/8" production csg for next depth (1350'), LD remainder. Circulate wellbore with drilling mud. RD cementer.
21. TIH with 2-7/8" production csg open ended to land EOC 1350' (200' below base of Fox Hills).

22. MIRU cementer. Spot 350 sx of (8.5" caliper in open hole, 0.0636 bbl/Lnft in Surface csg & 40% excess) cement (Type III w/ CaCl₂) from 1350' in the 7-7/8" production hole to 100' inside the surface casing (plug from 1350'-100'). TOOH & LD 2-7/8" production csg, stand back 100' 2-7/8" production csg in derrick. RDMO Cementer.
23. WOC 4 hours or overnight.
24. TIH with 2-7/8" production casing and tag cement plug. Record tagging plug in Openwells report. Lay down all production csg.
25. RU WL. Set 8-5/8" CIBP above cement top at approximately 100'. Pressure test CIBP to 1000 psi for 15 min. (If CIBP does not hold do not RDMO WO rig, contact Evans engineer).
26. RDMO WO rig.
27. Wellsite supervisor turn all paper copies of cementing reports/invoices and logs in to Sabrina Frantz.
28. NOTE: During the job, wellsite supervisor should instruct the logging and cementing contractors to e-mail all logs, job reports/invoices to Sabrina Frantz.
29. Have excavation contractor notify One-Call to clear for digging around wellhead and flowline removal.
30. Check top of cement inside 8-5/8" surface casing. If cement is not of sufficient height (less than 25' below ground level), place redi-mix cementer on well call.
31. Excavate hole around surface casing of sufficient size and depth to allow welder to cut off 8-5/8" surface casing at least 5' below ground level.
32. Have welder cut off 8-5/8" surface casing at least 5' below ground level.
33. MIRU ready cement mixer. Fill the last 100' inside the 8-5/8" surface casing. Use 4,500 psi compressive strength redi-mix cement (sand and cement only, no gravel) to finish filling surface casing to top of cut off.
34. Have welder spot weld on steel marker plate. (Note: marker shall be labeled with well name and number, legal location (¼ ¼ description) and API number.
35. Properly abandon flowlines as per Rule 1103.
36. Have excavation contractor back fill hole with native material. Clean up location and have leveled to plant any vegetation required.
37. Submit Form 6 to COGCC. Provide "As Plugged" wellbore diagram identifying the specific plugging completed.