

KNOX 11-3 (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 1.66" tbg, 2.33# , J-55 tbg of 29,416 lbs. (80% of upset joint yield strength).
7. TOO H with 1.66" tbg and LD.
8. MIRU slickline services. RU VES and run gyro survey on slickline (from 6800 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'. TOO H with Junk Basket/Gauge Ring.
10. PU and RIH with CIBP for 2-7/8", 6.5# production casing. Set CIBP at 6830' (60' above NB perfs). POOH. Pressure test CIBP to 1000 psi for 15 min. MO WL.
11. RU cementer. TIH and circulate 15 sx 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) to set a balanced plug @ 6190'-6830'. RDMO cementer.
12. RU WL. Run in hole with free point to cut casing at closest joint to 6000' (10' above TOC). RDMO WL.
13. ND BOP & tbg head.
14. NU BOP w/ 2-7/8" pipe rams on the 8-5/8" csg head.
15. PU csg. Circulate wellbore with drilling mud. TOO H and SB 2-7/8" csg. If unable to pull production csg contact engineer/COGCC for plugging modification.
16. RIH w/ 2-7/8" casing to 4980' (200' below base of Shannon), hydrotest while RIH. Establish circulation.
17. 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 425 sx (8.5" caliper & 40% excess) of cement ("G" w/ 0.25 pps cello flake, 0.4% CD-32, 0.4% ASA-30) from 3850' and 4980'. Note returns during cement job in OpenWells report.
18. PUH to 3550' (300' above estimated top of cement) with 2-7/8" csg and circulate conventionally with drilling mud until no cement returns to surface.
19. WOC and tag plug. Record tagging plug in Openwells report.
20. PU 2-7/8" production csg to land EOT at 1425' (200' below base of Fox Hills). LD remainder.
21. Spot 310 sx of (8" caliper in open hole, 0.0636 bbl/Lnft in Surface csg & 40% excess) cement (Type III w/ CaCl₂) from 1425' in the 7-7/8" production hole to 460' inside the surface casing

(plug from 1425'-460'). TOOH & LD 2-7/8" production csg, stand back 460' 2-7/8" production csg in derrick. RDMO Cementer.

22. WOC 4 hours or overnight.
23. TIH with 2-7/8" production casing and tag cement plug. Record tagging plug in Openwells report. Lay down all production csg.
24. RU WL. Set 8-5/8" CIBP at approximately 100' inside surface casing. Pressure test CIBP to 1000 psi for 15 min. (If CIBP does not hold do not RDMO WO rig, contact Evans engineer).
25. RDMO WO rig.
26. Wellsite supervisor turn all paper copies of cementing reports/invoices and logs in to Sabrina Frantz.
27. NOTE: During the job, wellsite supervisor should instruct the logging and cementing contractors to e-mail all logs, job reports/invoices to Sabrina Frantz.
28. Have excavation contractor notify One-Call to clear for digging around wellhead and flowline removal.
29. 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 will call.
30. 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.
31. Have welder cut off 8-5/8" surface casing at least 5' below ground level.
32. 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.
33. 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.
34. Properly abandon flowlines as per Rule 1103.
35. Have excavation contractor back fill hole with native material. Clean up location and have leveled to plant any vegetation required.
36. Submit Form 6 to COGCC. Provide "As Plugged" wellbore diagram identifying the specific plugging completed.