

SHERRY 5-28 (HSR)

1. Provide notice to COGCC prior to MIRU per Form 6 COA.
2. Call foreman or Lead Operator before rig up to isolate and remove automation and production equipment. Install fence if needed.
3. Notify CDC when rig moves on location to generate work order for flowline removal and one call for line locates.
4. MIRU slickline services. Pull bumper spring and tag for fill. POOH. RDMO slickline services.
5. Place cement services on will call when rig moves on location, providing expected volumes of cement needed. (~10 sx plug #1; ~400 sx plug #2; ~125 sx plug #3)
6. MIRU WO rig. MI additional 30 jts 2 7/8" 6.5# N-80 for work string.
7. Kill well, as necessary, with water containing biocide. ND wellhead. NU BOP's. Unseat landing joint and lay down.
8. TOOH and stand back tbg.
9. PU and TIH with casing scraper & bit for 2-7/8" casing. Scrape casing to ~6885'. Circulate hole clean. TOOH and lay down scraper and bit and stand back 4955' of tubing.
10. MIRU slickline services. Run gyro from 6900' to surface making stops every 100'. RDMO slickline services.
11. MIRU wireline services. PU 2-7/8" CIBP and RIH to 6875', set CIBP. POOH.
12. Pressure test plug to 1500 psi for 15 min. RDMO wireline services.
13. TIH w/ 1-1/4" tubing (hydrotesting to 3000 psi) to CIBP @ 6875'.
14. Circulate wellbore full with at least 9 ppg mud containing biociden (~40 bbl).
15. MIRU cementing services. Mix and Pump 10 sx of Class "G" w/20% silica flour, 0.4% CD-32, 0.4% ASA-301 and R-3 to achieve 2:30 pump time (yield 1.38 ft3/sx, 15.8 ppg, ~2.4 bbl slurry). Place balanced plug from 6875'-6492'. RDMO cementing services.
16. PUH ~58 jts (1827') to 5078', laying down tubing. Circulate hole with at least 9 ppg mud to remove any cement. TOOH and lay down tubing.
17. MIRU wireline services. Cut casing @ 4805'. POOH. RDMO wireline services
18. NDBOP NDTH. Unland casing from slips.
19. NU BOP on casing head. Install 2-7/8" pipe rams.
20. PU casing and conventionally circulate 450 bbl of mud. If circulation cannot be established contact engineer and COGCC for change in procedure.
21. TOOH with 2-7/8" casing stand back to be used as workstring.
22. RIH w/ 2-7/8" work string to 4905' hydrotesting to 3000 psi.
23. MIRU cementing services. Mix and Pump 425 sx of Class "G" cement with ¼ #/sx cello-flake, 0.4% CD-32 and 0.4% ASA-301 (yield 1.15 ft3/sx, 15.8 ppg, ~87 bbl slurry) (Open hole calculated at 8.5" with 20% excess). Place balanced plug from 4905'-3874'.
24. PUH to 3000', standing back 1000' and laying down remaining work string. Circulate hole with at least 9 ppg mud to remove any cement. RDMO cementing services. WOC 4 hrs or overnight.
25. RIH and tag cement top. If cement is above 3974' continue with procedure. IF cement top is below 3974' contact APC engineer for new procedure.

26. PUH to 885', laying down work string.
27. MIRU cementing services. Mix and pump 125 sx of Type III cement from 885'-500' (yield 1.53 ft<sup>3</sup>/sx, 15.8 ppg, ~34 bbl slurry) (Open hole calculated at 8.5" with 20% excess). Place balanced plug from 885' – 500'. PUH to 100' and circulate 10 bbl of mud to remove any cement. RDMO cementing services. TOOH and stand back 500' of tubing, lay down remaining tubing. WOC 4 hrs or overnight.
28. TIH and tag cement plug, NOTE: DEPTH OF PLUG IN OPENWELLS. If plug top is above 500' TOOH and lay down tubing.
29. MIRU wireline services. PU 8-5/8" CIBP and RIH to 100'. Set CIBP and POOH. Pressure test CIBP to 1000 psi for 15 minutes. RDMO wireline services.
30. Assuming CIBP tests, RDMO
31. Wellsite supervisor turn all paper copies of cementing reports/invoices and logs in to Sabrina Frantz. NOTE: During the job, wellsite supervisor should instruct the logging and cementing contractors to e-mail all logs, job reports/invoices to Sabrina Frantz.
32. Have excavation contractor notify One-Call to clear for digging around wellhead and flowline removal.
33. Check top of cement inside 8-5/8" surface casing., place redi-mix cementer on will call. (6.5 bbl)
34. Excavate hole around surface casing of sufficient size and depth to allow welder to cut off 8-5/8" surface casing and at least 5' below ground level.
35. Have welder cut off 8-5/8" surface casing at least 5' below ground level.
36. MIRU ready cement mixer. Use 4,500 psi compressive strength redi-mix cement (sand and cement only, no gravel) to finish filling surface casing and production casing to top of cut off.
37. Have welder spot weld steel marker plate on top of surface casing. (Note: marker shall be labeled with well name and number, legal location (¼ ¼ description) and API number.
38. Properly abandon flowlines as per Rule 1103.
39. Have excavation contractor back fill hole with native material. Clean up location and have leveled to plant any vegetation required.
40. Submit Form 6 to COGCC. Provide "As Plugged" wellbore diagram identifying the specific plugging completed.

1994 slimhole CD/NB. Well has decreased in production making little production averaging 10 mscf/day and 0.4 bopd. Propose P&A