

HSR Dreyer 5-5 P&A

1. Call foreman or Lead Operator before rig up to isolate production equipment. Catch and remove plunger. Call 24 hours prior to the rig moving onto the location so that any automation equipment can be removed prior to the rig showing up. Install fence if needed.
2. MIRU slickline services. Pull bumper spring and run gyro survey from 8100' to surface with stops every 100'. Forward gyro survey data to Sabrina Frantz and invoices to John Tonello. RDMO slickline services.
3. Provide 24 hour notice of MIRU to Jim Precup via e-mail at jim.precup@state.co.us
4. Notify CDC when rig moves on location to generate workorder for flowline removal and one call for line locates.
5. MIRU WO rig. Kill well, as necessary, with water containing biocide. ND wellhead. NU BOP's. Unseat landing joint and lay down.
6. Place cement services on will call when rig moves on location, providing expected volumes of cement needed. (first job ~100 sx; second job ~ 290 sx; third job ~ 120 sx)
7. TOOH and stand back 6870' of 2-3/8" tubing.
8. MIRU Wireline services. PU 4- 1/2" gauge ring & RIH to 7870' to confirm no restrictions. POOH and lay down gauge ring.
9. PU 4- 1/2" CIBP w/ wireline, RIH and set CIBP @ 7860'. POOH. Test CIBP to 2,000 psi for 15 minutes.
10. PU cement bailer, RIH and dump 2 sx of cement on top of CIBP. POOH
11. PU perf gun loaded with 1' of 3 spf, 0.38" EHD, 33.65" penetration, 120 degree phasing. RIH to 6900' and shoot squeeze holes. POOH.
12. PU 4-1/2" CICR and RIH to 6870' and set CICR.
13. Pressure test CICR to 2000 psi for 15 minutes. Place wireline services on standby.
14. PU 2- 3/8" tbg. TIH while hydrotesting to min of 3000 psi and sting into CICR @.
15. MIRU Cementing services. Mix and pump 100 sx of Class "G" cement w/ 35% silica flour, and 0.2% R-3 mixed at 15.8 ppg (yield 1.49 ft³/sx, ~26.5 bbl). Displace w/ 21.5 bbl (underdisplacement of 5 bbl to leave on top of CICR). Place cementing services on standby.
16. PUH 11 jts (~350') and reverse circulate hole with 105 bbl of at least 9 ppg mud to fill hole and remove any cement. TOOH and stand back ~4530' of tubing.
17. RU wireline services. PU perf gun loaded with 1' of 3 spf, 0.38" EHD, 33.65" penetration, 120 degree phasing, and 1' of 3 spf, 0.6" EHD, 7" penetration, 120 degree phasing. RIH to 5126' and shoot 1' of the 0.38" EHD stage squeeze holes. PUH to 4500' and shoot 1' of the 0.52" stage squeeze holes. POOH. Place wireline services on standby.
18. PU 2- 3/8" tbg and 4- 1/2" CICR. TIH and set CICR @ 4530'.
19. RU cementing services. Establish circulation through CICR.
20. Pump 5 bbl H₂O, 20 bbl of Sodium Metasilicate, 5 bbl H₂O pre-flush.
21. Mix and pump 290 sx of class "G" cement with 1/4 #/sx cello-flake through CICR (yield 1.16 ft³/sx, ~ 60 bbl). Displace w 14.5 bbl of mud (underdisplacement of 3 bbl to leave on top of CICR), Place

cementing services on standby. **(NOTE IN OPENWELLS % OF CIRCULATION DURING CEMENT JOB AND VOLUME OF DISPLACEMENT!)**

22. PUH 7 jts (~220) and reverse circulate hole with 34 bbl of at least 9 ppg mud to remove any cement. TOOH and stand back 1550' of tbg.
23. RU wireline services. PU 4-1/2" CIBP and RIH to 1550', set CIBP.
24. Pressure test CIBP to 1000 psi for 15 minutes. RDMO wireline services.
25. PU 2-3/8" tbg and TIH to CIBP. PUH 10'. RU cementing services.
26. Mix and pump 120 sx of class "G" neat cement plug (yield 1.15 ft³/sx, ~24.5 bbl), 1550'-surface. RDMO Cementing services.
27. WOC overnight. If cement is within 50' of surface then RDMO WO rig.
28. Wellsite supervisor turn all paper copies of cementing reports/invoices and logs in to Sabrina Frantz who wrote the prog. 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. Place redi-mix cementer on will call to cement 8-5/8" casing and if cement inside 4-1/2" is not of sufficient height.
31. Excavate hole around surface casing of sufficient size and depth to allow welder to cut off 8-5/8" surface casing and 4-1/2" production casing at least 5' below ground level.
32. Have welder cut off 8-5/8" surface casing and 4-1/2" production casing at least 5' below ground level.
33. If needed, MIRU ready cement mixer. 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 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.