

HSR Piccadilly 8-25 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 7260' to surface with stops every 100'. RDMO slickline services.
3. Provide 24 hour notice of MIRU to Mike Hickey via e-mail at [mike.hickey@state.co.us](mailto:mike.hickey@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 ~ 100 sx; third job ~ 205 sx; fourth job ~65 sx)
7. TOO H and stand back ~ 6890' of 2-3/8" tubing. (Collapsed tubing fish @ 7268' that could not be previously recovered.)
8. MIRU Wireline services. PU 4- 1/2" gauge ring & RIH to top of fish (~7268') to confirm no restrictions. POOH and lay down gauge ring.
9. PU 4- 1/2" CIBP w/ wireline, RIH and set CIBP @ 10' above fish (~7258'). POOH. Test CIBP to 2,000 psi.
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, and 1' of 3 spf, 0.6" EHD, 7" penetration, 120 degree phasing. RIH to 6980' and shoot 1' of the 0.38" EHD stage squeeze holes. PUH to 6680' and shoot 1' of the 0.52" stage squeeze holes. POOH. Place wireline services on standby.
12. PU 2- 3/8" tbg with 4-1/2" CICR, TIH to 6710' while hydrotesting to min of 3000 psi. Set CICR.
13. MIRU Cementing services. Establish circulation through CICR. 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 ft<sup>3</sup>/sx, ~26.5 bbl). Displace w/ 22.5 bbl (underdisplacement of 3 bbl to leave on top of CICR). **(NOTE IN OPENWELLS % OF CIRCULATION DURING CEMENT JOB AND VOLUME OF DISPLACEMENT!)**
14. PUH 7 jts (~220') and reverse circulate hole with 105 bbl of at least 9 ppg mud to fill hole and remove any cement. PUH to 6000'
15. Mix and pump 100 sx of class "G" cement with 1/4 #/sx cello-flake from 6000'-4668' (yield 1.16 ft<sup>3</sup>/sx, ~ 20.5 bbl). Displace w 14.5 bbl of mud. Place cementing services on standby.
16. PUH 43 jts (~1365) and reverse circulate hole with 36 bbl of at least 9 ppg mud to remove any cement. WOC 4 hrs or overnight.
17. RIH and tag top of cement plug. NOTE DEPTH OF CEMENT PLUG TOP IN OPENWELLS!!! TOO H and stand back 1654' of tbg.
18. NDBOP NDTH. Unland casing from slips and shoot off @ 1554'.
19. NU BOP on casing head. Install 4-1/2" pipe rams.

20. PU casing and conventionally circulate 200 bbl. If circulation cannot be established contact engineer and COGCC for change in procedure.
21. TOOH with 4-1/2" casing and lay down.
22. PU 2-3/8" tbg and TIH inside 4-1/2" casing stub to 1654'. RU cementing services.
23. Mix and pump 205 sx of class "G" neat cement plug (yield 1.15 ft<sup>3</sup>/sx, ~42 bbl), 1654-1000'. Displace with 3.5 bbl of mud. PUH 21 jts (~660'). Place cementing services on standby.
24. Reverse circulate 8 bbl of mud to remove any excess cement. WOC 4 hrs or overnight.
25. RIH and tag top of cement plug. NOTE DEPTH OF CEMENT PLUG TOP IN OPENWELLS!!! Assuming plug is above 1354' TOOH and stand back ~ 200' of tbg.
26. RU wireline services. PU 8-5/8" CIBP. RIH and set CIBP @ 200'. POOH.
27. Pressure test CIBP to 1000 psi for 15 minutes. RDMO wireline services.
28. PU 2-3/8" tbg and TIH to CIBP. PU 10'
29. RU cementing services. Mix and pump 65 sx of class "G" neat cement from 200'-surface (yield 1.15 ft<sup>3</sup>/sx, ~13 bbl) TOOH and lay down tbg. RDMO cementing services.
30. WOC overnight. If cement is within 50' of surface then ND BOP, RDMO WO rig.
31. Wellsite supervisor turn all paper copies of cementing reports/invoices and logs in to the 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. If cement is not of sufficient height (less than 25' below ground level), place redi-mix cementer on will call.
34. 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.
35. Have welder cut off 8-5/8" surface casing at least 5' below ground level.
36. 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.
37. 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.
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.