

Richardson V 3-15 (H5947)

1. Call foreman or Lead Operator before rig up to isolate and remove automation and production equipment. Install fence if needed.
2. MIRU slickline services & VES. Pull bumper spring, tag bottom (Gyro ordered 12/27/13). RDMO SL.
3. Provide notice to COGCC prior to MIRU per Form 6 COA.
4. Notify IOC when rig moves on location to generate work order for flowline removal and one call for line locates.
5. Prepare location for base beam rig.
6. MIRU WO rig. Kill well; circulate as necessary, with water containing biocide. ND wellhead. NU BOP's. Unseat landing joint and lay down.
7. Place cement services on will call when rig moves on location, providing expected volumes of cement needed. (~310sx for top plug; ~225 sx for SX/SH plug and 20 sx for NB/CD plug).
8. TOOH and stand back 1-1/2" TBG.
9. MIRU wireline services. RIH gauge ring for 2-7/8" casing to 7200'. RDMO W/L
10. PU 2-7/8" CIBP and RIH on TBG to 7150' and hydrotest TBG to 3000 psi while RIH. Set CIBP.
11. Initiate circulation using water containing biocide. Note rate and pressure.
12. MIRU cementing services. Pump 20 sx of 1:1:3 'Poz:G:Gel' + 20% silica flour +0.4% CFL-2 + 0.1%SMS + 0.05%CR-4 Density 13.5 ppg Thickening Time : 4:19 at 200 F, Yield 1.66 cuft/ sk.
13. PUH 25 stands. Circulate (TBG Vol + Excess) to CLR TBG. RD cementing services
14. Load hole and circulate with 9.0 ppg mud containing biocide.
15. P & SB 5060' of TBG. LD remainder.

16. RU wireline services. PU one 1' 3-1/8" perf guns loaded with 3 spf, 0.5" EHD, 120 phasing. Shoot 1' of squeeze holes at 5060'. RD wireline.
17. RIH w/ TBG, attempt to pump into perf. RU cementing services. Preflush with 5 bbl H2O, 20 bbl of sodium metasilicate, 5 bbl H2O
18. Spot 225 sx of 1:2:3 'Poz:III: Gel' + 3% (BWOW) KCl +1% SMS +0.4% CR-4 +0.2% SPC-2 + 2lb/sk PS Flake ; Density = 12.5 ppg, Water Requirement = 10.52 gal/sk , Yield = 1.93 cuft/sk , Thickening Time = 3:12 at 160 F. Cement from 5060' to 4250'.
19. WOC for 4 hrs. TIH and tag cement plug. If plug is below 4250', top as necessary.
20. PUH to 4250'. Circulate 9.0 ppg mud with biocide to CLR TBG.
21. P&SB 1350' TBG, LD remainder. WOC for 4 hrs. RD cementing services.
22. RU wireline services. Crack closest coupling at 1200' or shoot off. RD wireline.
23. Circulate with mud w/ biocide.
24. NDBOP, NDTH.
25. NU BOP on casing head. Install 2-7/8" pipe rams.
26. TOOH with 2-7/8" casing and lay down.
27. RIH with 1-1/2" TBG into casing stub to 1300'.
28. RU Cementing services. Spot 310 sx of Type III + 0.2 % SPC 02 ; Density 14.2 ppg , Water Requirement = 7.32 gal/sk ; Yield = 1.46 cuft/sk ; Thickening Time = 2:49 at 80 F. Cement from 1350' to 550' . PUH to 300' & circulate 9.0 PPG mud w/ biocide to clear TBG. TOOH. WOC 4 hrs
29. TIH and tag cement plug. If plug top is below 300', top as necessary.
30. MIRU wireline services. PU 8-5/8" CIBP and RIH to 100'. Set CIBP. Pressure test CIBP to 1000 psi for 15 minutes. If plug tests, RDMO wireline and WO rig.

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 excavating around wellhead and flowline removal.
33. 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.
34. Have welder cut off 8-5/8" surface casing at least 5' below ground level.
35. MIRU ready cement mixer. Use 4,500 psi compressive strength redi-mix cement (sand and cement only, no gravel) Fill STUB. RDMO cement services.
36. 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.
37. Properly abandon flowlines as per Rule 1103.
38. Have excavation contractor back fill hole with native material. Clean up location and have leveled.
39. Submit Form 6 to COGCC. Provide "As Plugged" wellbore diagram identifying the specific plugging completed.