

Change in Program: HZ PREP to PLUG AND ABANDONMENT

(Rig on location to initially finish HZ prep work)

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1. Provide notice to COGCC prior to MIRU per Form 6 COA.
2. Notify IOC when rig moves on location to generate work order for flowline removal and one call for line locates.
3. Prepare location for base beam rig.
4. MIRU WO rig. Kill well; circulate as necessary, with water containing biocide. ND wellhead. NU BOP's. Unseat landing joint and lay down.
5. Place cement services on will call when rig moves on location, providing expected volumes of cement needed. (~310 sx for top plug; ~225 sx for SX/SH plug and 120 sx for NB/CD plug). See attached WBD for cement blends.
6. TOOH and stand back 2-3/8" TBG.
7. MIRU wireline services. RIH gauge ring for 4-1/2" casing to 7650'.
8. PU 4-1/2" CIBP and RIH on W/L to +/-7590'. Set CIBP. Dump bail 2 sacks of cement on top of CIBP. PT CIBP to 1000 psi.
9. P & SB 6480' (105 stands) of TBG. LD remainder.
10. PU two 1' 3-1/8" perf guns loaded with 3 spf, 0.5" EHD, 120 phasing. Shoot 1' of squeeze holes at 6850' and 6450'. RD wireline.
11. PU 4-1/2" CICR and RIH on 2-3/8" TBG to 6480'. Hydrotest TBG to 3000 psi while RIH. Set CICR.
12. Initiate circulation through CICR using water containing biocide. Note rate and pressure.
13. MIRU cementing services.

14. Pump 120 sacks of " 50/50 Poz "G" w/ 20% silica flour, 3% gel, 0.1% sodium metasilicate and 0.4% FL-52 mixed at 13.5 ppg and 1.71 cuft/sk. with 20% excess and 9" hole size. Cement from 6850' to 6450'.
15. Underdisplace by 3BBL. Unsting from CICR and dump remainder on CICR.
16. PUH 9 stands. Circulate (TBG Vol + Excess) to CLR TBG. RD cementing services.
17. P & SB 3870' (62 stands) of TBG. LD remainder.
18. PU two 1' 3-1/8" perf guns loaded with 3 spf, 0.5" EHD, 120 phasing. Shoot 1' of squeeze holes at 4240' and 3840'. RD wireline.
19. PU 4-1/2" CICR and RIH on 2-3/8" TBG to 3870'. Set CICR.
20. Initiate circulation through CICR using water containing biocide. Note rate and pressure.
21. MIRU cementing services. Preflush with 5 bbl of H2O; 20 bbl of sodium metasilicate; 5 bbl of H2O.
22. Pump 225 sacks of "G" w/ 0.25 pps cello flake, 0.4% CD-32, 0.4% ASA - 301, mixed at 15.8 ppg and 1.15 cuft/sk with 20% excess and 10" hole size. Cement from 4240' to 3840'.
23. Underdisplace by 3BBL. Unsting from CICR and dump remainder on CICR.
24. PUH 9 stands. Circulate (TBG Vol + Excess) to CLR TBG. RD cementing services.
25. P & SB 950' of 2-3/8" TBG.
26. RU wireline services. Crack closest coupling at 850' or shoot off. RD wireline.
27. Circulate with mud w/ biocide.
28. NDBOP, NDTH.
29. NU BOP on casing head. Install 4-1/2" pipe rams.
30. TOO H with 4-1/2" casing and lay down. Install 2-3/8" pipe rams.
31. RIH with 2-3/8" TBG into casing stub to 950'.
32. RU Cementing services. Spot 310 sx of Type III w/ cello flake and CaCl₂, mixed at 14.0 ppg and 1.53 cuft/sk, calculated with 12" hole size and 20% cement excess. Cement from 950' to 100'.

33. PUH to 100' & circulate 9.0 PPG mud w/ biocide to clear TBG. TOOH. WOC 4 hrs
34. TIH and tag cement plug. If plug top is below 100', top as necessary.
35. 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.
36. Instruct cementing and wireline contractors to e-mail copies of all job logs/job summaries and invoices to rscDJVendors@anadarko.com within 24 hrs of the completion of the job.
37. Wellsite supervisor turn all paper copies of cementing reports/invoices and logs in to Joleen Kramer. NOTE: During the job, wellsite supervisor should instruct the logging and cementing contractors to e-mail all logs, job reports/invoices to Joleen Kramer.
38. Have excavation contractor notify One-Call to clear for excavating around wellhead and flowline removal.
39. 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.
40. Have welder cut off 8-5/8" surface casing at least 5' below ground level.
41. MIRU ready cement mixer. Use 4,500 psi compressive strength redi-mix cement (sand and cement only, no gravel) Fill STUB. RDMO cement services.
42. 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.
43. Properly abandon flowlines as per Rule 1103.
44. Have excavation contractor back fill hole with native material. Clean up location and have leveled.
45. Submit Form 6 to COGCC. Provide "As Plugged" wellbore diagram identifying the specific plugging completed.