

John Henry Stolz Unit #1

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. Confirm in OpenWells or with Engineer that Gyro has been ran and tools pulled. No gyro yet ran as of 5/7/2013
5. Place cement services on will call when rig moves on location, providing expected volumes of cement needed. (~170 sx plug #1; ~265 sx plug #2; ~140 sx plug #3)
6. MIRU WO rig. Kill well, as necessary, with water containing biocide. ND wellhead. NU BOP's. Unseat landing joint and lay down.
7. TOOH and stand back 6800' of 2-3/8" tbg.
8. PU and TIH with casing scraper & bit for 4-1/2" casing. Scrape casing to ~7910'. Circulate hole clean. TOOH and lay down scraper and bit and stand back tubing.
9. MIRU wireline services. PU 4-1/2" CIBP and RIH to 7900', set CIBP. POOH.
10. PU cement bailer. RIH to CIBP and dump bail 2 sx of cement on top of CIBP. POOH
11. PU 4-1/2" CIBP and RIH to 7420', set CIBP. POOH.
12. PU cement bailer. RIH to CIBP and dump bail 2 sx of cement on top of CIBP. POOH
13. Pressure test plug to 1500 psi for 15 min. Note: Squeeze holes @ 7325' & 4965'
14. PU CBL. Run CBL from 5500' to surface.
15. Contact APC Engineer with cement depths and change procedure accordingly.
16. PU perf gun loaded with 3' of 3 spf, 0.6" EHD, 7" penetration, 120 phasing. RIH to 7300' and shoot 1' of perfs.
17. PUH to 6760' and shoot remaining 2' of perfs. POOH. RDMO wireline services.
18. PU 4-1/2" CICR and TIH w/ 2-3/8" tbg hydrotesting to 3000psi. Set CICR @ 6800'. Establish circulation through CICR.
19. MIRU cementing services. Mix and Pump 170 sx of 50/50 Poz "G" w/20% silica flour, 3% gel, 0.1% sodium metasilicate and 0.4% FL-52. (yield 1.71 ft³/sx, 13.5 ppg, ~51.5 bbl slurry) (Open Hole calculated at 9" with 20% excess). Pump cement through CICR. Underdisplace cement by 3 bbl; leaving 3 bbl of cement on top of CICR. RDMO cementing services.
20. PUH 8 jts (~252') to 6548' laying down tubing and circulate hole with 110 bbl of at least 9 ppg mud w/ biocide to fill hole and remove any cement. TOOH and stand back 5100' of tbg, lay down remaining tubing.
21. MIRU wireline services. PU perf gun loaded with 3' of 3 spf, 0.6" EHD, 7" penetration, 120 phasing. RIH to 5390' and shoot 1' of perfs.
22. PUH to 5050' and shoot remaining 2' of perfs. POOH RDMO wireline services.
23. PU 4-1/2" CICR and TIH w/ 2-3/8" tbg to 5100' and set CICR. Establish circulation through CICR.
24. MIRU cementing services. Preflush with 5 bbl H₂O, 20 bbl of sodium metasilicate, 5 bbl H₂O.

25. Mix and Pump 265 sx of Class "G" cement with ¼ #/sx cello-flake, 0.4% CD-32 and 0.4% ASA-301 through CICR (yield 1.15 ft³/sx, 15.8 ppg, ~54 bbl slurry) (Open hole calculated at 10.5" with 20% excess). Pump cement 42 bbl of cement through CICR.
26. PU out of CICR and place 12 bbl balanced plug from CICR to 4365'.
27. PUH 128 jts (~4032') to 1068' laying down tubing and circulate hole with at least 9 ppg mud to remove any cement. RDMO cementing services. TOOH and stand back 900' of tbg, lay down remaining tubing.
28. MIRU wireline services. PU perf gun loaded with 3' of 3 spf, 0.6" EHD, 7" penetration, 120 phasing. RIH to 1000' and shoot 1' of perfs.
29. PUH to 850' and shoot remaining 2' of perfs. POOH.
30. PU 4-1/2" CICR and RIH. Set CICR @ 900'. POOH. RDMO wireline services.
31. PU 2-3/8" tbg and sting into CICR @ 900'. Establish circulation through CICR.
32. MIRU cementing services. Mix and pump 140 sx of Type III cement (yield 1.53 ft³/sx, 14 ppg, ~38 bbl slurry) (Open hole calculated at 11" with 40% excess). Pump cement 23.5 bbl of cement through CICR.
33. PU out of CICR and place 14.5 bbl balanced plug from CICR to surface.
34. TOOH and lay down tubing. WOC 4 hrs or overnight. If cement is within 50' of surface RDMO WO rig.
35. 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.
36. Have excavation contractor notify One-Call to clear for digging around wellhead and flowline removal.
37. Check top of cement inside 8-5/8" surface casing., place redi-mix cementer on will call.
38. 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.
39. Have welder cut off 8-5/8" surface casing at least 5' below ground level.
40. 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.
41. 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.
42. Properly abandon flowlines as per Rule 1103.
43. Have excavation contractor back fill hole with native material. Clean up location and have leveled to plant any vegetation required.
44. Submit Form 6 to COGCC. Provide "As Plugged" wellbore diagram identifying the specific plugging completed.

The John Henry Stolz #1 is a 1974 J-Sand well that is up for Vertical frac safety prep. Due to age of wellbore and low production it is believed P&A is best option. Current Producing NPV of \$44,452. WO#88367455