

MILLER FEDERAL 5-31

- 1 Call foreman or lead operator at least 24 hr prior to rig move. Request that they catch and remove the plunger, isolate production equipment and remove any automation prior to rig showing up. Install perimeter fence as needed.
- 2 GYRO run OCT11.
- 3 Provide notice of MIRU to COGCC field inspector as specified in approved form 6.
- 4 Notify IOC when rig mobilizes to location to generate workorder for flowline removal and one call for line locates.
- 5 Prepare location for base beam equipped rig
- 6 MIRU, kill as necessary using clean fresh water with biocide. ND WH. NU BOP. Unseat landing jt, LD.
- 7 Notify cementers to be on call. Provide volumes (30 sx "G" w/ 20% silica flour, 0.4% CD32, 0.4% ASA-301 and R-3 for 2:30 pump time 15.8ppg 1.38 cf/sk (In pipe only), 65 sx class G, 0.4% CD-32, 0.4% ASA-301 15.8ppg 1.15 yield (In pipe only), 240 sx Type III CaCl₂ cement 1.53 yield (10"+20%)).
- 8 TOO H 2 3/8" production tubing. Stand back.
- 9 MIRU WL. RIH gauge ring for 4.5" 10.5#/ft csg to 7800'.
- 10 RIH CIBP, set at 7698'. PT CIBP to 1000 psi. PU dump bailer, dump bail 2 sx class G cement on CIBP.
- 11 TIH to 7698'+/- hydrotesting tubing to 3000 psi. Circulate gas from wellbore using water containing biocide.
- 12 RU cement services.
- 13 Spot 30 sx "G" w/ 20% silica flour, 0.4% CD32, 0.4% ASA-301 and R-3 for 2:30 pump time 15 ppg 1.38 cf/sk (In pipe only) from 7058' to 6658' to ensure coverage of 400' above Niobrara/Codell.
- 14 PUH 6 stands. Circulate 30 BBL 9.0 ppg mud containing biocide to clear tbg. WOC 4 hrs.
- 15 TIH and tag plug. If below 6658', contact production engineer to discuss.
- 16 PUH to 4932'.
- 17 Spot 65 sx class G, 0.4% CD-32, 0.4% ASA-301 with 1.15 cuft/sk yield from 4932' to 4120'.
- 18 PUH 6 stands. Circulate 100 BBL 9ppg biocide drilling mud to clear tubing. WOC 4 hrs.
- 19 TIH and tag plug. If below 4120', contact production engineer to discuss.
- 20 P&SB 1030+/-' tbg. LD remainder.
- 21 RU WL. Crack coupling or shoot off casing at 930'. RDMO WL. Circulate hole using 100 BBL water containing biocide to remove any gas.
- 22 NDBOP, NDTH.
- 23 NU BOP on casing head, install pipe rams
- 24 TOO H with casing, LD.
- 25 TIH into csg stub using production tubing to 930'.
- 26 Spot 240 SX Type III CaCl₂ cement with 1.53cuft/sk yield.
- 27 TOO H. WOC 4 hrs.
- 28 TIH and tag. If cement is below 200', discuss with production engineer.

- 29 Fill casing with 9.0 ppg drilling mud containing biocide from TOC to 100'.
- 30 RU Wireline services. RIH 8-5/8" CIBP to 100'. Set, PT to 1000psi for 15 min. If tests, RDMO WL and WO rig.
- 31 Supervisor submit paper copies of all invoices, logs, and reports to Frantz, Sabrina.
- 32 Excavation crew to notify One Call to clear excavation area around wellhead and for flowlines.
- 33 Place Redi Mix cement on will call if cement top in 8 5/8" is more than 25' below surface.
- 34 Excavate hole around surface casing enough to allow welder to cut 8 5/8" casing minimum 5' below ground level.
- 35 Welder cut 8 5/8" casing minimum 5' below ground level.
- 36 MIRU redimix. Use 4500psi compressive strength cement, (NO gravel) fill stubout.
- 37 Weld on steel marker plate. Marker should contain Well name, number, legal location (1/4 ¼ descriptor) and API number
- 38 Properly abandon flowlines per Rule 1103.
- 39 Back fill hole with fill. Clean location, level.
- 40 Submit Form 6 to COGCC ensuring to provide "As performed" WBD identifying operations completed.