

Antone Heit C Unit 1

- 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 complete 11/29/2012.
- 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 (50 sx Poz:G:Gel + 20% Silica flour + 0.4% CFL + 0.1% SMS + 0.05% CR-4, 13.5 ppg 1.66 cuft/sk (In pipe only), 360 sx Poz:III:Gel + 3%(BWOW)KCL + 1% SMS + 0.4% CR-4 + 0.2% SPC-2 + 2lb/sk PS Flake, 12.5 ppg, 1.93 cuft/sk, 285 sx Type III + 0.2% SPC-2 + 2 lb/sk PS Flake, 14.2 ppg, 1.46 cuft/sk yield.
- 8 TOOH 2 3/8" production tubing. Stand back 7600', LD remainder.
- 9 MIRU WL. RIH gauge ring for 4.5" 11.6#/ft csg to 8050' (note there are mix casing weights in this well)
- 10 RIH CIBP, set at 8040' (This should be 11.6# pipe, no CBL for collars). PU dump bailer, dump bail 2 sx class G cement on CIBP.
- 11 RIH with 2nd CIBP, set at 7590' (This should be 11.6# pipe, collar at 7600'). Pressure test to 1000 psi (squeeze perfs held in 1996 at 1000 psi)
- 12 TIH to 7590'+/- hydrotesting tubing to 3000 psi. Circulate gas from wellbore using water containing biocide.
- 12 RU cement services.
- 13 Spot 50 sx Poz:G:Gel + 20% Silica flour + 0.4% CFL + 0.1% SMS + 0.05% CR-4, 13.5 ppg 1.66 cuft/sk for 4:20 pump time, from 7590' to 6850' to ensure coverage of 400' above Niobrara/Codell and of squeeze hole at 6950'.
- 14 PUH 22 stands. Circulate with 9.0 ppg mud containing biocide to clear tbg. TOOH with tubing, SB 5350', LD remainder. MO cementers.
- 15 MIRU wireline. PU two 1' 3-1/8" perf guns loaded with 3 spf, 0.5" EHD, 120 phasing. Shoot 1' of squeeze holes at 5310' and 4450'. RD wireline
- 16 PU 4-1/2" CICR and RIH on 2 3/8" production tubing to 4480'. Set CICR.
- 17 Initiate circulation through CICR using water containing biocide. Note rate and pressure.
- 18 MIRU cementing services. Pump 360 sx Poz:III:Gel + 3%(BWOW)KCL + 1% SMS + 0.4% CR-4 + 0.2% SPC-2 + 2lb/sk PS Flake, 12.5 ppg, 1.93 cuft/sk, underdisplace by 3 bbls, release from CICR, PUH and displace remainder of cement on top of CICR.
- 19 PUH. Circulate (TBG Vol + Excess) to CLR TBG. RD cementing services
- 20 Load hole and circulate with 9.0 ppg mud containing biocide.
- 21 TIH and tag, if below 4450', contact production engineer to discuss.

- 22 P&SB 930+/-' tbg. LD remainder.
- 23 PU two 1' 3-1/8" perf guns loaded with 3 spf, 0.5" EHD, 120 phasing. Shoot 1' of squeeze holes at 1450' and 900'. RD wireline
- 25 PU 4-1/2" CICR and RIH on 2 3/8" production tubing to 930'. Set CICR.
- 26 Initiate circulation through CICR using water containing biocide. Note rate and pressure.
- 27 MIRU cementing services. Pump 285 sx Type III + 0.2% SPC-2 + 2 lb/sk PS Flake, 14.2 ppg, 1.46 cuft/sk yield, underdisplace by 13 bbls (hope to have cement to 118'), release from CICR, PUH and displace remainder of cement on top of CICR.
- 28 Circulate (TBG Vol + Excess) to CLR TBG. TOO H with tubing. RD cementing services
- 29 Load hole and circulate with 9.0 ppg mud containing biocide.
- 30 WOC 4 hrs.
- 31 TIH and tag. If cement is below 118', discuss with production engineer
- 32 Fill casing with 9.0 ppg drilling mud containing biocide from TOC to 100'.
- 37 RU Wireline services. RIH 4-1/2" CIBP to 75' (11.6# pipe). Set, PT to 1000psi for 15 min. If tests, RDMO WL and WO rig.
- 38 Supervisor submit paper copies of all invoices, logs, and reports to Frantz, Sabrina.
- 37 Excavation crew to notify One Call to clear excavation area around wellhead and for flowlines.
- 39 Place Redi Mix cement on will call if cement top in 8 5/8" is more than 25' below surface.
- 40 Excavate hole around surface casing enough to allow welder to cut 8 5/8" casing minimum 5' below ground level.
- 41 Welder cut 8 5/8" casing minimum 5' below ground level.
- 42 MIRU Redi Mix. Use 4500psi compressive strength cement, (NO gravel) fill stubout.
- 43 Weld on steel marker plate. Marker should contain Well name, number, legal location (1/4 ¼ descriptor) and API number
- 44 Properly abandon flowlines per Rule 1103.
- 45 Back fill hole with fill. Clean location, level.
- 46 Submit Form 6 to COGCC ensuring to provide "As performed" WBD identifying operations completed.