

Contact foreman or lead operator and request that they isolate production equipment, catch and remove plunger and remove automation equipment prior to workover rig mobilization. Install perimeter fence as needed. Provide 48 hr notice of MIRU to COGCC as required in approved Form 6. Place cement services on "will call" when rig moves on location.

- 1 MIRU slickline. Pull bumper spring/standing valve.
- 2 MIRU VES Gyro services. Run gyro from 7800' to surface. RDMO gyro services and slickline.
- 3 Notify CDC when rig moves on location to generate workorder for flowline removal and one call for line locates.
- 4 MIRU workover rig. Blow down/ kill well with clean water/biocide.
- 5 NDWH (upper wellhead). NUBOP.
- 6 Unland 2 3/8" production tubing string. TOOH while tally. Put cementers on notice.
- 7 MIRU E-line. RIH with gauge ring for 4 1/2", 11.6# casing to 7700'. RIH and set 4 1/2" 11.6# CIBP +/- 7680'. Dump bail two sacks of cement.
- 8 Fill well with water/biocide. Run segmented CBL from 7400' to surface (need all way to surface to determine csg cut depth). Note: Cement top is 6822', and across Sussex at 4912'-3610'. RDMO E-Line.
- 9 RIH with tubing and place EOT at 7400'.
- 10 MIRU cementer. Mix and pump balanced cement plug - 40 sxs 15.8 ppg "G" cement + 20% Silica Flour + 0.4% CD-32 + 0.4% ASA-301 (1:43 hrs pump time at 165F).
- 11 Pull up to 6820'. Circulate out cement with water/biocide. Pull up 6 stands, circulate tbg clean. WOC 6 hrs.
- 12 RIH with tubing and tag top of cement – record in open wells.
- 13 MIRU E-Line. RIH and perforate two 1/2" holes at 6806' and two 1/2" holes at 6600'. RDMO E-Line.
- 14 PU and RIH with CICR while hydrotesting tbg. Set at 6630'.
- 15 Establish injection rate. Note pressure and rate.
- 16 MIRU cementer. Mix and pump 100 sxs 13.5 ppg 50/50 POZ/"G" cement + 20% Silica Flour + 3% gel + 0.1% sodium metasilicate + 0.4% FL-52. Displace with 2 3/4 bbls (leaving 2 bbls cement in tbg to lay on top of CICR). Untsting from CICR. Pull six stands tubing. Circulate out cement with water/biocide. WOC cement 6 hours.
- 17 Turn hole over with min 9.0 ppg/36 vis mud treated with biocide. Circulate all gas from well.
- 18 PUH with tbg and place end of at 4700'. Lay down pulled tbg.
- 19 Circulate well with min 9.0 ppg/36 vis mud treated with biocide.
- 20 Mix and pump balanced cement plug – 65 sxs 15.8 ppg "G" cement + 0.4% CD-32 + 0.4% ASA-301 (4:13 hrs pump time at 120F). Pull six stands tubing. Circulate out cement with 9.0 ppg/36 vis mud treated with biocide; then circulate hole with mud.
- 21 POOH and standback about 750' tubing. WOC 8 hrs.
- 22 MIRU E-Line. Shoot off (or break a coupling) at ~600'. Standby e-line (for CIBP @ 100').
- 23 Remove BOP and tubing head. Unland 4 1/2" casing. Re-install BOP with 4 1/2" OD pipe rams on surface casing head. Circulate hole with min 9.0 ppg mud treated with biocide. Pull and laydown 4 1/2" casing. Change pipe rams back to 2 3/8".
- 24 RIH with tubing to ~700'.
- 25 MIRU cementer. Spot 120 sxs 14.0 ppg Type III +2% CaCl₂ (3:45 hrs pump time at 91F) from 600' up to ~200'. Pull and stack back 120' of tubing and lay down remainder. Circulate as deemed necessary. WOC min 4 hrs.
- 26 RIH with tubing and tag plug, POOH and stand back tbg. Contact engineer if cement tag is deeper than 200'. If cement is 100' or less, RDMO cementer.
- 27 RU E-line. Set CIBP in 8 5/8", 24# surface casing at 100'. Pressure test CIBP/casing to 1000 psi for 15 min. RDMO E-line.
- 28 Remove BOP. RDMO workover rig.
- 29 MIRU redi-mix cement mixer. Use 4,500 psi compressive strength redi-mix (cmt and sand only, no aggregate) to finish filling surface casing to top of cut off. RDMO ready cement mixer.
- 30 Wellsite supervisor turn all paper copies of cementing reports/invoices and logs to Sabrina Frantz. NOTE: During the job, wellsite supervisor should instruct the loggers & cementors to e-mail all logs, job reports/invoices to Sabrina Frantz.
- 31 Have excavation contractor notify One-Call to clear for digging around wellhead and flowline removal. Excavate hole around surface casing to allow welder to cut off 8 5/8" surface casing 5' below ground level. Weld steel plate across top of surface casing cut off. Information to be stamped on plate is: Well name and number, 1/4, 1/4 description of surface location and API number. Cover steel plate and backfill hole with native material removed.
- 32 Properly abandon flowlines as per Rule 1103. Reclaim location/ROW as required by surface owner(s).
- 33 Submit Form 6 to COGCC. Provide "As Plugged" wellbore diagram identifying the specific plugging completed.