Engineer: David Hasz
Cell Phone Number: 970-371-8820

PLUG and ABANDONMENT PROCEDURE

CLC RED W 15-09

Description

1. Provide 48 hour notice to COGCC prior to rig up per request on approved Form 6 (e.g. call field coordinator, submit Form 42, etc.). Notify Automation Removal Group at least 24 hours prior to rig move. Request they catch and remove plunger, isolate production equipment, and remove any automation prior to rig MIRU.
2. MIRU Slickline. Pull production equipment and tag bottom. Record tag depth in Open Wells. Gyro was run on 09/03/14. RDMO Slickline.
3. Prepare location for base beam equipped rig. Install perimeter fence as needed.
4. Verify COAs before RU.
5. Upon RU, check and record bradenhead pressure. If bradenhead valve is not accessible, re-plumb so that valve is above GL. Blow down bradenhead and re-check pressure the next day. Repeat until pressure stays at 0 psi.
6. MIRU WO rig. Spot a min of 263 jts of 1.25" 2.33#, J-55, IJ tbg. Kill well as necessary using clean fresh water with biocide. ND WH. NU BOP. No tubing believed to be in hole.
7. MIRU hydrotesters. TIH with 1.25" tbg to tag sand plug at +/- 7427' while hydrotesting to 3000 psi. RDMO hydrotesters.
8. Load hole with biocide treated fresh water and circulate all gas out of well. PT CIBP to 1000psi for 15 minutes.
9. MIRU Cementers. Pump Niobrara Balance Plug: Pump 15 sxs (23cf), assuming 15.8 ppg & 1.53 cf/sk. Volume based on 590' inside 2.875", 6.5# production casing with no excess. Cement will be from 7420'-6830'. RD cementers.
10. Slowly pull out of the cement. LD tbg while TOOH to 4895'.
11. Establish circulation to surface with biocide treated fresh water.
12. RU Cementers. Pump Sussex Balance Plug: Pump 15 sx (23 cf), assuming 15.8 ppg & 1.53 cf/sk. Volume is based on 500' inside 2.875", 6.5# production casing with no excess. Cement will be from 4895'-4395'. RD cementers.
13. Slowly pull out of the cement and TOOH to 3895'. Reverse circulate to ensure no cement is left in the tbg.
14. WOC per cement company guidelines. TIH and tag cement. Cement top needs to be at or above 4395' (200' above the SX top at 4595'). Call Engineering if tag is lower than 4395'.
15. TOOH to 1550'. LD remaining tbg.
16. Establish circulation to surface with biocide treated fresh water.
17. RU Cementers. Pump Fox Hills Balance Plug: 20 sxs (30 cf) assuming 15.8 ppg & 1.50 cf/sk. Volume is based on 845' in 2.875", 6.5# production casing with no excess. The plug is designed to cover 1550'-705'. RDMO cementers.
18. Slowly pull out of the cement and TOOH to 100'. Reverse circulate using biocide treated fresh water, to ensure the tubing is clean. TOOH, LD all 1.25" tbg.
19. MIRU WL. Tag cement as needed. RIH 2.875", 6.5# CIBP to 80'. RDMO WL and WO rig.

20. Instruct cementing and wireline contractors to e-mail copies of all job logs/job summaries to rscDJVendors@anadarko.com within 24 hours of completion of the job.
21. Supervisor submit paper copies of all invoices, logs, and reports to VWP Engineering Specialist.
22. Excavation crew to notify One Call to clear excavation area around wellhead and for flow lines.
23. Capping crew will set and secure night cap on 2.875", 6.5# casing head, restrain the casing head, pressure test CIBP to 500 psi with hydrotest pump, then remove night cap and casing head restraints.
24. Excavate hole around surface casing enough to allow welder to cut casing a minimum 5' below ground level.
25. Welder cut casing minimum 5' below ground level.
26. Fill production casing and surface casing to surface using 4500 psi compressive strength cement (NO gravel).
27. Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API number.
28. Obtain GPS location data as per COGCC Rule 215 and send to rscDJVendors@anadarko.com.
29. Properly abandon flow lines per Rule 1103. File electronic Form 42 once abandonment is complete.
30. Back fill hole with fill. Clean location, and level.
31. Submit Form 6 to COGCC ensuring to provide 'As performed' WBD identifying operations completed.