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RE-ENTRY PLUG and ABANDONMENT PROCEDURE

BANGERT 31-19

1. Well is being re-entered to P&A well to current standards due to it being offset to upcoming fracs.
2. Provide 48 hour notice to COGCC prior to rig up per request on approved Form 6 (e.g. submit Form 42, etc.).
3. Locate and expose 8 5/8" casing stub. Extend stub to 12" below GL and install 8 5/8"x 11" SOW, 3M casing head with 3000 psi ball valves in both outlets.
4. Prepare location for base beam equipped rig. Install perimeter fence as needed. Spot in 780' of 3-1/2" work string (WS) to location.
5. MIRU Spud rig. NU 9" 3000 psi BOP stack on casing head. PT BOP and casing head. Function test BOP. Install a choke manifold on casing outlet. NU rotating head on BOP. Hook up return line to shale shaker. Ensure full
6. PU 7-7/8" PDC bit, 6-1/2" mud motor, X-Over to work string.
7. TIH and drill through 20 sx cement plug at surface. Once past cement plug and no cement is seen in returns, perform flow test.
8. Continue drilling to next 100 sx cement plug. TOC estimated to be at 473'. Continue down to estimated casing cut at 2345'. Perform flow test.
9. TOOH. LD Work string. Remove bit and mud motor.
10. RU Cementers. Pump Casing Cut Balanced Plug: 180 sx (279 cf, 49.7 bbl) 14 ppg & 1.55 cf/sk cement with 0.25 lb/sk Polyflake. Volume is based on 400' in the 7-7/8" drill bit size with 100% excess. Cement will be from 2345' - 1945'. RD cementers.
11. Slowly pull out of the cement and PUH to 1500'. Circulate to ensure no cement is left in the WS.
12. WOC per cement company recommendation. TIH and tag cement. Cement top needs to be at or above 1945'. Call engineering if tag is lower.
13. LD WS while TOOH to 1280'.
14. RU Cementers. Pump Surface Shoe Plug: 330 sx (511.5 cf, 91.1 bbl) 14 ppg & 1.55 cf/sk cement with 0.25 lb/sk Polyflake. Volume is based on 593' in the 7-7/8" drill bit size with 100% excess and 207' inside 8-5/8", 24#/ft surface casing with 50% excess. Cement will be from 1280' - 460'. RDMO Cementers.
15. Slowly pull out of the cement and PUH to 100'. Circulate to ensure no cement is left in the WS or above 100' in the casing.
16. TOOH, laying down remainder of WS.
17. WOC per cement company recommendation.
18. MIRU WL. RIH and tag cement top at +/- 460'. Record depth of tag in OpenWells. Cement top needs to be at or above 460'. Call engineering if tag is lower.
19. PU and RIH 8-5/8", 24# CIBP to 80'. RDMO WL and spud 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 Platteville 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 8 5/8" casing head to 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 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.