

PLUG AND ABANDONMENT PROCEDURE

Sekich Farms 19-7L

1. Note: Production Casing = 4 1/2" OD, 11.6#/ft, WC-75; Production Hole Drilled @ 7 7/8."
2. Provide 48 hr notice to COGCC prior to rig up per request on approved Form 6 (e.g. call field coordinator, submit Form 42, etc.). Call IOC (970-506-5980) at least 24 hr prior to rig move. Request they catch and remove plunger, isolate production equipment and remove any automation prior to rig MIRU.
3. MIRU slickline services. Pull bumper spring and tag bottom. RD slickline services.
4. Prepare location for base beam equipped rig. Install perimeter fence as needed.
5. Check and record Bradenhead pressure. If Bradenhead valve is not accessible, re-plumb so that valve is above GL.
6. MIRU, kill as necessary using clean fresh water with biocide and circulate. ND WH. NU BOP. Unseat landing jt, LD.
7. Notify cementers to be on call. Provide volumes listed below:
 - 7.1 Niobrara Plug: 41 cu ft/ 30 sx "G" w/20% silica flour, 0.4% CD-32, 0.4% ASA-301 and R-3 mixed at 15.8 ppg and 1.38 cuft/sk yield (400' inside 4-1/2" casing).
 - 7.2 SX Suicide: 184 cu ft/ 160 sx class "G" w/0.25 pps cello flake, 0.4% CD-32, 0.4% ASA-301 mixed at 15.8 ppg and 1.15 cf/sx (400' between 7-7/8" OH + 60% excess. 400' inside 4 1/2" casing, no excess).
 - 7.3 Stub Plug: 280 cu ft/ 210 sx Type III CaCl₂ cement w/0.25 pps cello flake mixed at 14.8 ppg and 1.33 cf/sx (100' inside 4-1/2" casing, 346' inside 7-7/8" + 60% excess, and 204' inside 8 5/8" surface casing).
8. TOOH 2 3/8" production tubing. Stand back.
9. RU WL. RIH gauge ring to 7000'. TOOH.
10. RIH CIBP w/WL. Set at +/- 6920'. PT CIBP to 1000 psi. POOH.
11. Run CBL from top of CIBP to surface. Send results to Tyler.Davis@anadarko.com and Brent.Marchant@anadarko.com. Check cement interval with WBD. If CBL cement doesn't match with WBD existing cement, contact engineering. RD WL. Note: it is important to get a good quality CBL. It may be necessary to circulate from just above CIBP to surface in order to get gas out of the hole.
12. RU Cementers. Pump Niobrara Balanced Plug: 41 cu ft/ 30 sx "G" w/20% silica flour, 0.4% CD-32, 0.4% ASA-301 and R-3 Mixed at 15.8 ppg and 1.38 cuft/sk yield from 6920' to 6520'.
13. PUH to 6300'. Circulate 100 bbls water containing biocide to clear tubing. Then, TOOH and LD all but 3980' of tubing.
14. RU WL. PU 3-1/8" perf guns with 3 spf, 0.5" dia 120deg phasing. Shoot 1' of squeeze holes at 4250' and 3850'. RD WL.
15. PU and RIH w/ CICR on 2-3/8" tubing and set CICR at approximately 30' below the top perf pending collar locator.
16. RU Cementers. Pump 5 bbl water w/biocide, 20 bbl Sodium Metasilicate, and another 5 bbl spacer immediately preceding cement.

17. Pump SX Suicide: 184 cu ft/ 160 sx class "G" w/0.25 pps cello flake, 0.4% CD-32, 0.4% ASA-301 mixed at 15.8 ppg and 1.15 cf/sx to place suicide squeeze between perms and in casing from 4250' to 3850'. Under displace and sting out of CICR to leave 3 bbls on top of retainer.
18. PUH to 3500'. Circulate 55 bbls water containing biocide to clear tubing. Then, TOO H and LD all but 960' of tbg.
19. MIRU WL. Shoot off casing at 860'. RDMO WL. Circulate water containing biocide to remove any gas.
20. NDBOP, NDTH.
21. Install BOP on casing head with 4-1/2" pipe rams.
22. TOO H with 4-1/2" casing, LD.
23. RIH with 2-3/8 " tubing to 960'.
24. RU Cementers. Pump 10 bbl SAPP with a minimum of 20 bbl fresh water spacer. Pump FH Suicide: 280 cu ft/ 210 sx Type III CaCl₂ cement w/0.25 pps cello flake mixed at 14.8 ppg and 1.33 cf/sx from 960' to 310'.
25. PUH to 100'. Circulate 5 bbls water containing biocide to clear tubing. Then, TOO H.
26. WOC 4 hrs. Tag Cement. Cement top needs to be at or above 310'; Proceed assuming TOC is at or above 310'. Otherwise, call production engineer.
27. MIRU WL. RIH 8-5/8" CIBP to 80'. Set, PT to 1000 psi for 15 min. If tests, RDMO WL and WO rig.
28. Instruct cementing and wireline contractors to e-mail copies of all job logs/job summaries and invoices to rscDJVendors@anadarko.com within 24 hrs of the completion of the job.
29. Supervisor submit paper copies of all invoices, logs, and reports to Joleen Kramer.
30. Excavation crew to notify One Call to clear excavation area around wellhead and for flowlines.
31. Excavate hole around surface casing enough to allow welder to cut 8 5/8" casing minimum 5' below ground level.
32. Welder cut 8 5/8" casing minimum 5' below ground level.
33. MIRU ready cement mixer. Use 4500 psi compressive strength cement, (NO gravel) fill stubout.
34. Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API number.
35. Obtain GPS location data as per COGCC Rule 215 and send to rscDJVendors@anadarko.com.
36. Properly abandon flowlines per Rule 1103.
37. Back fill hole with fill. Clean location, level.
38. Submit Form 6 to COGCC ensuring to provide 'As performed' WBD identifying operations completed. File electronic Form 42 once abandonment complete.