

ERICSON 9-19A (HSR)

1. Gyro ran on 10/24/2011 from 7443' to surface with stops every 100'.
2. Call Foreman or Lead Operator at least 24 hr prior to rig move. Request that they catch and remove plunger, isolate production equipment and remove any automation equipment prior to the rig showing up. Install perimeter fence as needed.
3. Provide notice of MIRU to COGCC field inspector as specified in approved Form 6.
4. Notify CDC when rig moves on location to generate workorder for flowline removal and one call for line locates.
5. Prepare location for base beam rig.
6. MIRU WO rig. Kill well using water and biocide. ND wellhead.NU BOP.
7. PUH w/ tbg to break any sand bridges, noting not to exceed the safety tensile load of 2-3/8", 4.7# tbg of 57,3847 lbs. (80% of upset joint yield strength).
8. TOOH with 2-3/8" tbg and stand back.
9. MIRU WL.
10. RIH with Junk Basket/Gauge Ring on WL to 7975' in 2-7/8" liner. TOOH with Junk Basket/Gauge Ring.
11. PU and RIH with CIBP for 2-7/8" N-80 liner. Set CIBP at 7760'.POOH. Dump 2 sx of cement on CIBP.
12. RDMO WL.
13. PU and RIH with CCL and 3-1/8" perf gun and perforate casing at 6770' with 3 spf, 0.38" EHD, 33.65" penetration, 120 deg phasing, 1' net, 3 shot total.
14. PU and TIH with 4.5" CICR and setting tool on 2-3/8" tubing to set CICR at 6700' in 4-1/2" casing. Hydrotest while RIH. Set CICR and establish injection.
15. MIRU Baker.
16. Pump 100 sx of cement ( Class G + 35% Silica Flour, 0.2% R-3). Sting out of retainer and dump 2 sx cement on top of retainer. P & SB tubing for next depth (4100'), LD remainder. Circulate wellbore with drilling mud.
17. MIRU WL.
18. PU and RIH with CCL and 3-1/8" perf gun and perforate casing at 5205' (200' below base of Shannon) with 3 spf, 0.38" EHD, 33.65" penetration, 120 deg phasing, 1' net, 3 shot total.
19. PUH and perf casing at 4075' (230' above top of Sx) with 3 spf, 0.50" EHD, 76.0" penetration, 120 deg phasing, 1' net, 3 shot total.
20. POOH with CCL and perf guns and RDMO WL.
21. PU and RIH with 4.5" CICR on setting tool and 2-3/8" tubing to set CICR at 4105' (30' below top perms) in 4-1/2" casing. Set CICR and establish circulation through squeeze holes at 4075' and 5205' and note returns in OpenWells report.
22. Once pumping rate has been established, pump 20 bbl Sodium Metasilicate ahead of cement.
23. Pump 550 sx of cement (Class G + 0.25 pps Cello Flake) from 4075' to 5205'. Sting out of retainer and dump 2 sx Metasilicate on top of retainer. Note returns during cement job in OpenWells report.

24. PUH to 3770' (300' above estimated top of cement) with 2-3/8" tubing and reverse circulate with drilling mud until no cement returns to surface.
25. TOOH with tubing. LD setting tools. RDMO Baker.
26. ND BOP's and tubing head. Unland 4-1/2", 11.6#, I-70 casing from slips and work casing.
27. NU BOP w/ 4-1/2" pipe rams on the 8-5/8" csg head.
28. RU WL contractor. TIH with jet cutter and cut casing at 690' (200' below bottom of Surface casing). RDMO WL.
29. PU csg. Circulate wellbore with drilling mud. TOOH and LD 4-1/2" csg. If unable to pull production csg contact engineer/COGCC for plugging modification.
30. TIH open ended to land EOT 100' below production casing stub at 790'. While TIH Hydrotest to 5000 psi.
31. MIRU Baker. Spot 250 sx of cement (Class G+ 2.0% CaCl<sub>2</sub>) from 100' below the 4-1/2" sub to approximately 150' inside the surface casing. WOC and tag.
32. RU WL. Set 8-5/8" CIBP above cement top. Pressure test CIBP to 1000 psi.
33. Set 50 sx of Cement (Class G+2% CaCl<sub>2</sub>) plug from top of CIBP 150' to surface.
34. RDMO cementing services.
35. RDMO WO rig.
36. Cut surface casing 5 ft below ground level and weld on cap.
37. Wellsite supervisor turn all paper copies of cementing reports/invoices and logs in to Sabrina Frantz.
38. NOTE: During the job, wellsite supervisor should instruct the logging and cementing contractors to e-mail all logs, job reports/invoices to Sabrina Frantz.
39. Have excavation contractor notify One-Call to clear for digging around wellhead and flowline removal.
40. Check top of cement inside 8-5/8" surface casing. If cement is not of sufficient height (less than 25' below ground level), place redi-mix cementer on will call.
41. Excavate hole around surface casing of sufficient size and depth to allow welder to cut off 8-5/8" surface casing at least 5' below ground level.
42. Have welder cut off 8-5/8" surface casing at least 5' below ground level.
43. If needed, MIRU ready cement mixer. Use 4,500 psi compressive strength redi-mix cement (sand and cement only, no gravel) to finish filling surface casing to top of cut off.
44. Have welder weld on steel marker plate. (Note: marker shall be labeled with well name and number, legal location (¼ ¼ description) and API number.
45. Properly abandon flowlines as per Rule 1103.
46. Have excavation contractor back fill hole with native material. Clean up location and have leveled to plant any vegetation required.
47. Submit Form 6 to COGCC. Provide "As Plugged" wellbore diagram identifying the specific plugging completed.