

## **Emerald 79X Proposed Procedure**

1. MIRU workover rig. N/D Tree N/U BOPE and test.
2. TOOH with ESP and L/D pump.
3. P/U bit and scraper. Make bit and scraper run to top perf @ 6,185'. TOOH L/D bit and scraper.
4. P/U 7" packer/RBP combo. TIH to 4,630' and set RBP. Pull up 1 joint and set packer and test RBP to ensure holding.
5. Release packer. Test casing from RBP @ 4,630' to surface at maximum injection pressure for 30 minutes.
  - a. NOTE: If casing does not test communicate with Tech Team and COGCC on revised plan forward.
6. Latch RBP and TIH to 6,135' and set. Test casing to 500 psi for 15 minutes.
  - a. NOTE: If casing does not test communicate with Tech and COGCC on revised plan forward.
7. Latch RBP. TOOH L/D RBP and Packer.
8. P/U 7" CICR and TIH and set @ 6,135'. Pressure test tubing to 2000 psi. Establish Injection rate through CICR.
9. MIRU cement providers. Test lines to 500 psi above established injection rate.
10. Squeeze Weber perforations with ~105 sacks of 1.15 cuft/sk Neat G cement (21.5 bbls)
  - a. NOTE: Volume equal to 468' of perms plus 20% excess.
11. Sting out retainer leaving 150' or 28 sacks of Neat G cement on top of the retainer. Pull up 100' and reverse tubing clean 1-1/2 tubing volumes. TOOH.
12. P/U RBP and TIH to 1000' and set. Test to 500 psi for 15 min.
13. N/D BOPE. Upgrade wellhead to properly rated equipment. N/U BOPE and test.
14. MIRU E-line equipment. RIH and perforate Navajo from 4,678' to 5,166' with guns loaded 4 SPF and 90 degree phasing. POOH verify guns fired.
15. P/U treating packer and TIH to 4,630' and breakdown Navajo perms and acidized as needed.
16. TOOH L/D packer.
17. RIH with injection Equipment.
18. N/D BOPE. RDMO. Turn well over to operations.