

Emerald 171 Plugging Procedure

1. Confirm TD with winch unit. Believed to be 700', Plug depths will be adjusted accordingly.
2. Perforate 4 ½" casing at 670', assuming 700' PBTD
3. Run in hole with selected poly pipe or coiled tubing with weighted end to 670'
4. Spot 75 sack, 100 foot, construction cement balanced plug on bottom
5. Pull up, wash up and POH and WOC
6. Tag cement top with winch. If cement is at or above 570' proceed to next step.
7. Fill 4 ½" casing to within approximately 120' of surface with shale and sand mix. Mix 3 bags of dry cement in the last yard of material dumped.
8. Allow cement to set and then pressure 4 ½" casing to 200 psi to verify integrity.
9. If pressure test indicates holes in casing go to balanced plug approach.
10. If it holds pressure continue with circulation approach
11. Perforate 4 ½" casing at 100-110'
12. If 4 1/2" casing passed pressure test, pump down casing with water and see if well will circulate up 4 ½" – 8" annulus to surface.
13. If it will circulate, pump down casing with 75 sacks of construction cement and attempt to circulate cement in place behind 4 ½" casing. Once two barrels of good cement circulates to surface shut-down and allow it to settle out with 4 ½" casing valve shut
14. If it will not circulate, we will attempt a series of balanced plugs starting with a 75 sack plug through perfs at 670'.
15. If setting balanced plugs, perforate and spot a 50-75 sack balanced plug starting 10 feet above the depth the cement from the first plug settles out in the casing.
16. Clean out around 8" casing to 5 feet and attempt to pour very fluid cement into any voids detected around the 8" surface casing
17. After cement is cured. Cut off casings 4 feet below grade
18. Pump or spot cement into all possible void spaces at surface in 4 ½" or between 4 ½" and 8" surface casing.
19. Weld on cap with required information beaded on cap
20. Backfill over casing stub with 4 feet of cover
21. Clean-up site and reseed location and access as agreed upon with state inspector.