



DFIT Procedure

Well Name: RG 713-29-298 Niobrara HN1 DFIT

1. MIRU Monument workover rig TOOH 2 3/8" tubing and stand back
2. Pick up HES 10K Cast Iron Retainer (425 degree elements) and run into 13,350' set and psi test to 4,000 psi
3. Rig up Halliburton Cement and pump 15 sks of 16.5# cement balance plug above CIR
4. RIH tag balance plug and dress up to 13,275' total, POOH 2 3/8" tubing; RD BOP stack
5. NU 15k Frac tree PSI Test Casing to 12,500 psi, hold test for 30 mins(Record Data Per BLM)
6. MIRU wireline
7. RIH and perforate DFIT holes at 12,800' (6 spf)
 - a. Use Titan Superhero Charges with .4" EH
8. RDMO wireline
9. MIRU pump trucks
10. Rig up 2 x 15k EMR pressure gauges. Make sure the gauges are isolated by a valve such that the pressure recordings are not affected by the rig down
 - a. Make sure to have proper connections on location
11. Make sure valves are open prior to pumping such that data can be recorded
12. Begin to pump DFIT. Ensure breakdown of formation has occurred
 - a. If you don't see good breakdown within the first 10 bbls, increase rate by a couple bpm until 15 bpm or pressure out.
 - b. If no breakdown occurs, call engineer
 - c. If breakdown occurs, continue to pump DFIT per procedure
13. Pump DFIT
 - a. After initial break, pump at 3-5bpm for 5 minutes. **Do NOT change rate during DFIT**
 - b. Perform step rate test at end of job
 - i. Need 3 steps
 - c. Get ISIP, 5, 10 and 15 minutes pressures
 - i. Make sure ISIP is a hard shut in
14. Halliburton should remain rigged up for one hour to record data in the van
15. RD Halliburton
16. Leave gauges on for 5 days
17. Pull gauges and send data to:
 - a. Jason Bundick- Jason.Bundick@wpxenergy.com
 - b. Mark Graeve- Mark.Graeve@wpxenergy.com