

Plug and Abandon Procedure

Writebol #1

1980' FNL & 1980' FEL

31-8N-53W

Logan County, CO, *Shield Field*

API #: 05-075-07535

40.618399, -103.341948

Procedure

1. Submit Form 42 72 hrs prior to MIRU WSU (3 business days)
2. Notify COGCC Field Inspector 24 hrs prior to MIRU
3. MIRU WSU & POOH w/ rods, LD same
4. NU 3M manual BOP & TOOH w/ tbg
5. MIRU WLU & make gauge ring/junk basket run t/ +/- 4910'.
6. Set CIBP (5-1/2"/14#) @ 4900', dump bail 3 sx cmt on top.
7. Set CIBP @ 4000'. Dump bail 3 sx cmt on top of CIBP.
8. MU perf guns & perforate the following **one-foot** intervals (4 spf/90° phasing):
 - a. 2,500' – CICR & Squeeze
 - i. NOTE – csg leak identified from 2450' – 2046' after failed MIT on 12/13/2021, COGCC doc #402897906
 - b. 950' – CICR & Squeeze (Upper Pierre)
 - c. 150' – Bullhead (shoe)
9. RIH 2-7/8" tbg & set CICR's at the depths and specifications below:
 - a. **Cement specs:**
 - i. Class: G neat
 - ii. Weight: 15.8 ppg
 - iii. Yield: 1.15 ft³/sk
 - iv. Mix water: +/- 8.1
 - b. **CICR #1** – Set @ 2000' & pump 165 sx of cmt. Pump 155 sx below CICR (assume 25% OH excess, 500' of annulus) & spot 10 sx on top
 - c. **CICR #2** - Set CICR @ 900' & pump 50 sx of cmt. Pump 40 sx below CICR & spot 10 sx on top
10. POOH & LD remaining tbg. RU to pump down csg & take returns up annulus. Pump 50 sx surface plug (22 sx left in 5-1/2" csg, 38 sx in 5-1/2" X 8-5/8" annulus). Pump until cement seen @ surface.
11. Cut-off csg 5' below GL, weld on cap w/ weep hole & install P&A marker.
12. RDMO WSU.