



Exploration and Production Remedial Production Cement Procedure

Wellname: **RG 921-24-299D**
Location: **Sec 24 T2S R99W**
Field: **Ryan Gulch**
County: **Rio Blanco, CO**
API: **05-103-12674**

Casing: 13-3/8" 54.5# J-55 @ 1,335'
9-5/8" 36# J-55 @ 2,985'
5-1/2" 17# HCP-110 @ 9,204'

Top of Cement: 6,400' CBL (TWG CBL - 7/31/2024)

Purpose: Establish sufficient TOC on backside of 5-1/2" production casing

Proposed Procedure

- 1 Rig up Calfrac on RG 921-24-299D and proceed with frac operations on the lower lles injection interval (includes step rate test and water sample c
- 2 Wireline set composite 10K bridge plug at 8,110' (50' above lower injection zone top perf)
- 3 Wireline set composite 10K bridge plug at 6,370' (50' below planned squeeze perforation)
- 4 Check casing pressure to verify well is static
- 5 Rig down and release Calfrac
- 6 Rig up workover rig on RG 921-24-299D
- 7 Check casing pressure to verify well is static
- 8 NU and test BOPE
- 9 Perforate 4 squeeze holes at 6,320'
- 10 If well is static after perforating, Make up tubing set squeeze retainer on tubing and RIH to 6,270'
- 11 If well has pressure after perforating, make up wireline set cement retainer and RIH on wireline and set at 6,270'
- 12 TOOH with wireline
- 13 Establish injection rates through perforations
- 14 Pump 71 bbls (198 sacks at 2.01 cuft/sack) of 13.5 ppg Class G cement through squeeze perforations
- 15 Displace cement with fresh water to cement retainer (Planned estimated TOC at 5,235'). Sting out of retainer with tubing and POOH.
- 16 Wait on cement 24 hours and run CBL to verify TOC
- 17 If CBL indicates sufficient TOC, drill out retainer and cement, Rig down and wait for frac crew to finish proposed Williams Fork interval
- 18 If CBL indicates insufficient TOC, Notify COGCC and BLM of contingency plan