

The Shideler 30-2C well on the O19EB pad (API # 05-045-21834) does not meet the TOC requirement of 500' of cement above the top of gas. The top of gas is at 5,325' MD and the top of cement is at 5,450' MD. To repair this, Encana proposes the following remediation procedure:

1. Set solid composite plug at 4,270'. Pressure test the plug to 2,000 psi.
2. Shoot 4 squeeze holes at 4,200'
3. Establish injection rate with freshwater (establish circulation to surface if possible).
4. RIH w/ cement retainer on wireline. Set retainer at 4,100'.
5. RIH with tbg. Establish circulation to surface. Squeeze at least 50 sx of class G cmt plus fluid loss additives and dispersants.
6. POOH w/ tbg.
7. RIH with tbg and tri-cone bit and drill out cement retainer and cement. Do not drill out composite plug at 4,270'. POOH.
8. RU wireline and run CBL from 4,270' to surface. Report new TOC to the COGCC for approval prior to continuing.
9. Pressure test squeeze holes to 1,500 psi and hold for 15 minutes.
10. Report new TOC and the pressure test results to the COGCC for approval prior to continuing.
11. If approval is granted, RIH with bit and tbg and drillout plug at 4,270'.
12. POOH with tbg and RIH with a packer and a frac string and set the packer at 4,300'.
13. Set the wellhead and frac valves. Pressure test to 4,500 psi.
14. Based on the CBL, the highest perforation will be placed no closer than 200' from the top of cement.
15. Begin fracturing operations. Monitor bradenhead and tubing-production annulus pressures throughout fracturing.
  - a. If bradenhead pressure increases more than 150 psi OR if pressure increases more than 50 psi in 10 seconds, shut down frac operations immediately and notify the COGCC.
  - b. If tubing-production annulus pressure exceeds 500 psi, shut down immediately and notify the COGCC.