

*REPAIR PROCEDURE  
VAN HOOK LS 1 MV*

October 12, 1993 (Original version)

1. Record TP, SICP, and SIBHP.
2. MIRU workover rig.
3. TOH with 2 3/8" tubing.
4. TIH with an EZ drill retainer and set at 4300'.
5. Sting into retainer and pump 200 sacks of 50/50 poz cement w/ 2% Gel - 1% FLA - 10% salt followed by 100 sacks of neat B cement w 2% retarder.
6. Run a GR/CBL from the retainer to surface. Determine TOC.
7. Perforate 2 squeeze holes within 100' of the TOC.  
Note: It is important that the Fruitland Coal has adequate cement across the entire interval from 2400' to 2870'.
8. Conduct cement squeezes and run bond logs until cement is to surface. Because 4 1/2" casing will eventually be set and cemented, pressure testing the squeeze perms may not be necessary.
9. RDMOSU.
10. MIRURT.
11. Drill out cement and sidetrack the well. A sidetracking procedure will be provided by Frank Seidel.
12. RDMORT.
13. MIRU workover rig.
14. Drill out cement and DV tool to PBTD.
15. Run a CBL, determine if squeeze work will be necessary prior to fracture stimulation.
16. Pressure test casing to 80% of burst rating.
17. Correlate CBL to Schlumberger's Electric, Gamma Ray, Induction Log dated 55/06/02. Also correlate the Fields A 4A Compensated Density Log dated 77/08/16.
18. Swab fluid level down to 4500'.
19. RU lubricator and perforate the Point Lookout, under balanced, with a 3 1/8" casing gun, 4 JSPF, 90 degree phasing, and 15 g charges. Depths are based on Schlumberger's Electric Log, so be sure to adjust these depths according to the correlation log before perforating.

PERFORATE

5126' - 28'   5156' - 59'   5170' - 5206'   5250' - 58'   5273' - 80'

20. Fracture stimulate according to the attached Point Lookout frac schedule.
21. TIH with a RBP and set at 5000'. Cap with sand.
22. Swab fluid level down to 4000'.
23. RU lubricator and perforate the Cliffhouse, under balanced, with a 3 1/8" casing gun, 4 JSPF, 90 degree phasing, and 15 g charges. Depths are based on Schlumberger's Electric Log, so be sure to adjust these depths according to the correlation log before perforating.

PERFORATE

4533' - 37'   4545' - 47'   4622' - 31'  
4634' - 43'   4681' - 90'   4698' - 4706'  
4715' - 37'   4740' - 48'   4758' - 66'

24. Fracture stimulate according to the attached Cliffhouse frac schedule.
25. Clean out to PBTD with N2, TOH with RBP.
26. Swab/flow back load.
27. Once sand entry has ceased, land tubing at 5250' with a mule shoe on bottom and a seating nipple one joint off bottom.
28. Tie well back into surface equipment and return to production.