

Carle# 1 (T30N-R11W, Sec. 20 NW/4)

PC: Deepen to Mesa Verde

Completion Procedure

30045702939800

1. MIRU Big 'A' daylight completion rig and auxiliary equipment.
2. NU BOP.
3. TIH w/ 3-7/8" bit on tbg and CO 4-1/2" csg to PBTD.
4. Load hole w/ 1% KCl wtr. TOOH w/ tbg & bit.
5. RU Bluejet & RIH w/ GR-CCL-CBL, log GR-CBL from TD (4950') to Int Csg Shoe @ 2025'.
RIH w/ GR-GSL and log GR-GSL from TD 2025' (Int. Csg).
6. RIH w/ select-fire perforating guns and perf Point Lookout/MV w/ 25-Shots.
7. Pump 1000-Gals 15% HCl w/ Ball Sealers to BD Point Lookout/MV perms.
8. RIH w/ junk basket on W/L to retrieve Ball Sealers. (If necessary NU Tree Saver)
9. Slick-water frac Point Lookout/MV w/ 87,500-Gals 1% KCl water and 100,000# 20/40 AZ SD @ 50 BPM as follows:
 - a) 20,000-Gals 1% KCl Slick-water pad
 - b) 10,000-Gals 1% KCl Slick-water w/ 1.0 ppg 20/40 AZ SD
 - c) 20,000-Gals 1% KCl Slick-water w/ 1.5 ppg 20/40 AZ SD
 - d) 30,000-Gals 1% KCl Slick-water w/ 2.0 ppg 20/40 AZ SD
 - e) 3,150-Gals 1% KCl Slick-water flush
10. (If necessary ND tree-saver)
11. RIH w/ CIBP on W/L and set @ 4500'. Begin loading hole w/ 1% KCl wtr as soon as CIBP is set, test CIBP to 3000#.
12. RIH w/ select-fire perforating guns and perf Menefee/MV w/ 25-Shots.
13. Pump 1000-Gals 15% HCl w/ Ball Sealers to BD Menefee/MV perms.
14. RIH w/ junk basket on W/L to retrieve Ball Sealers. (If necessary NU Tree Saver)
15. Slick-water frac Menefee/MV w/ 47,200-Gals 1% KCl water and 50,000# 20/40 AZ SD @ 50 BPM as follows:
 - a) 10,000-Gals 1% KCl Slick-water pad
 - b) 5,000-Gals 1% KCl Slick-water w/ 1.0 ppg 20/40 AZ SD
 - c) 10,000-Gals 1% KCl Slick-water w/ 1.5 ppg 20/40 AZ SD
 - d) 15,000-Gals 1% KCl Slick-water w/ 2.0 ppg 20/40 AZ SD
 - e) 2,850-Gals 1% KCl Slick-water flush
16. (If necessary ND tree-saver)

4382
4619
32

USE FRAC EOPT
ON B/D

4020
4201
32

32