


Shell Oil Company
Federal BE # 1
NW/4 NE/4 Section 4,
T-24-S, R-34-E,
Lea County, New Mexico

1. Set Baker Model D packer at 17,335'. Ran Baker Seal Assembly and 508' of 2 1/16" Textube tubing tail pipe on 161 jts. (5003') 2", EUE, 8rd thd, N-80 tubing and 422 jts. (12,332') 2 1/2", EUE, 8rd thd, N-80 tubing.
2. Spotted 5000 gallons 15% NEA over open hole interval 17,432' - 17,843', set packer and injected acid.
3. In 12 hours flowed 20 BW thru 20/64" choke. FTP 125 psi. Gas volume at end of test 950 MCF/D.
4. Hung BHP bomb at 17,130' on wireline, shut in for 24-hour build-up.
5. Pulled BHP bomb, 24-hour static pressure - 4835 psi. P* - 6350 psi. FBHP 817 psi. Indicated very low permeability.
6. Spotted 50 sx. Class E cement 17,010' - 17,435', packer at 17,335', set Baker CIBP at 17,325'.
7. Perforated Fusselman 16,140' - 16,156', 16,170' - 16,180', 16,210' - 16,220' w/1 JSPF.
8. Ran tubing and set packer at 16,035' and treated w/2000 gallons 15% NEA.
9. In 3 hours flowed 48 BF and died. In 20 hours swabbed and flowed 52 BO + 154 BW.
10. Pulled tubing. Squeezed perforations 16,140' - 16,220' to 4200 psi w/70 sx.
11. Set CIBP at 15,310'.
12. Perforated 15,216' - 15,222', 15,232' - 15,234', 15,242' - 15,248', 15,262' - 15,266', 15,270' - 15,278' w/1 JSPF.
13. Set Baker Model D packer on tubing at 15,180'.
14. Treated w/2000 gallons 15% MCA.
15. Swabbed 62 BW.
16. Pulled tubing.
17. Squeezed perforations 15,216' - 15,278' to 5000 psi w/82 sx. cement.
18. Perforated 15,017' - 15,022', 15,038' - 15,042', 15,060' - 15,064', 15,070' - 15,074' w/1 JSPF.
19. Set CI Model D packer on tubing at 14,990'.
20. Treated w/2000 gallons 15% MCA.
21. In 20 hours swabbed and flowed 56 BO + 240 BW. Last 14 hours swabbed 177 BW.
22. Pulled tubing.
23. Squeezed perforations 15,017' - 15,074' to 5100 psi w/62 sx. cement.
24. PBTD 14,990'.
25. Perforated Pennsylvanian (Morrow) at 12,898', 12,903', 12,909', 12,910', 12,913', 12,915', 12,916', 12,982', 12,983', 12,984', 12,986', 12,993', 12,994', 13,118', 13,119', 13,120', 13,147', 13,149', 13,151', 13,153' w/1 JSPF.
26. Ran 4" seal nipples, 21 jts. (657') 2 1/2" CS Hydril + 414 jts. (12,127') 2 1/2", 6.5#, EUE, 8rd thd, N-80, tubing hydrotested to 8000 psi; 1-10' sub, 1-6' sub (below top jt.); Otis S-1 Nipple at 12,687'; Otis flow sleeve 12,684' - 12,687', S-2 Nipple at 12,591'; flow sleeve 12,588' - 12,591'; S-3 Nipple at 12,495'; flow sleeve 12,492' - 12,495'. Installed back pressure valve in tubing hanger. Hung tubing at 12,780'.
27. In 21 hours flowed at the rate of 60 BOPD + 7076 MCF/GPD with a flowing tubing pressure of 6770 psi and an average gas-liquid ratio of 116,667 (or 9 bbls. condensate/MMCF).


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September 25, 1963