

minutes ISIBHP 6330 psi. FBHP 125 - 250 psi. 120 minutes FSIBHP 5960 psi. HMP in and out 7135psi - 7070 psi. Recovered water titrated 1600 ppm Cl^- . Pit mud titrated 400 ppm Cl^- . Conclusive Test. (HOWCO) The Fusselman, Montoya, and Simpson sections were drilled without significant shows. DST # 8: 17,435' - 17,475' (40' Ellenburger). Packers failed. Misrun. DST # 9: 17,480' - 17,550' (70' Ellenburger). Used 3000' (22 bbls.) water blanket. Pressured drill pipe w/Nitrogen to 1800 psi surface pressure (Nitrogen and water blanket total 4400 psi back pressure). Tool open 2 1/2 hours thru 5/8" BC, 3/4" TD, 3 1/2" & 4 1/2" DP. Nitrogen bled from 1800 psi to fair blow in bucket in 1 hour 45 minutes, increased to good blow at end of test. NGTS. Recovered 3000' (22 bbls.) slight gas cut water blanket + 100' (0.6 bbls.) slightly gas cut mud. 90 minutes ISIBHP 7586 psi. FBHP 4406 - 1510 psi. 120 minutes FSIBHP 7490 psi. HMP 8388 - 8417 psi. Recovered water blanket titrated 300 ppm Cl^- . Recovered mud titrated 600 ppm Cl^- . Pit mud 400 ppm Cl^- . BHT 226 deg. Conclusive Test. (Cook) DST # 10: 17,533' - 17,713' (180' Ellenburger). Used 3000' (22 bbls.) water blanket. Pressured drill pipe w/Nitrogen to 2030 psi surface pressure. (Nitrogen and water blanket total 4496 psi back pressure). Tool open 4 hours thru 5/8" BC, 3/4" TC, 3 1/2" & 4 1/2" DP. GTS 1 hour 55 minutes. Maximum rate 185 MCF/D. FSP 20 psi. Minimum and final rate 172 MCF/D. FSP 16 psi. Recovered 2840' (21 bbls.) slightly mud cut water blanket + 400' (2.4 bbls.) slightly water and heavily gas cut mud. Recovered mud titrated 1200 ppm Cl^- . Pit mud titrated 400 ppm Cl^- . 90 minutes ISIBHP failed. FBHP 4496 psi decreasing to 1238 psi then increased to 1298 psi at end of test. 120 minutes FSIBHP 7520 psi. HMP 8417 - 8500 psi. BHT 234 deg. Conclusive Test. (Cook). Cemented 5 1/2" casing at 17,432' w/900 sx. Subsequent production tests of the Ellenburger open-hole interval, 17,432' - 17,840', failed to establish commercial production. One production test of the Fusselman, 16,140' - 16,220', and two in the lower Silurian, 15,216' - 15,278' and 15,017' - 15,074', all produced water. Core #1: 17,550' - 17,585' (35'). Recovered 6' shale & 28' dolomite w/scattered poor porosity and shows. Core # 2: 17,585' - 17,595' (10'). Recovered 9' dolomite w/scattered poor porosity and shows. The lower Pennsylvanian Zone that caused the second blowout was perforated and quickly exhibited an abnormally high reservoir pressure. Temporary testing equipment was pulled and permanent production equipment was run. Subsequent testing established a CAOPF of 38 MMCF/D. The Well has been officially completed in the Pennsylvanian from perforations in the gross interval 12,898' - 13,153'. In 21 hours the well flowed at the rate of 60 BOPD + 7076 MCFGPD with a flowing tubing pressure of 6770 psi and an average gas-liquid ratio of 116,667 (or 9 bbls. condensate/MMCF).

LOG TOPS:

Base Red Beds	1045'	(+2522')
Base Salt	4843'	(-1276')
Delaware Limestone	5131'	(-1564')
Delaware Sand	5170'	(-1603')
Bone Spring	8727'	(-5160')
Wolfcamp	11518'	(-7951')
Pennsylvanian	11866'	(-8299')
Des Moines	11948'	(-8381')
Atoka	12092'	(-8525')
Mississippian (Barnet Shale)	14001'	(-10434')
Mississippian Limestone	14062'	(-10495')
Woodford	14432'	(-10865')
Silurian	14648'	(-11081')
Montoya	16316'	(-12749')
Simpson	16672'	(-13105')
McKee	17027'	(-13460')
Ellenburger	17428'	(-13861')

R. A. Lowery
 R. A. Lowery
 District Exploitation Engineer