

February 27, 1962
Attachment for USGS Form 9-330

Shell Oil Company
Henshaw Deep Unit # 4
Sec. 13-16S-30E
Eddy County, New Mexico

HISTORY OF OIL OR GAS WELL

Henshaw Deep Unit No. 4 was spudded at 10:00 AM, 12-16-61 w/Cable Tools. Drilled 13 3/4" hole to 520'. Cemented 10 3/4" casing at 518' w/175 sx. Placed 6 yards pea gravel in annulus. Released Cable Tools and moved in Rotary Tools. Began drilling 9 7/8" hole w/Rotary Tools at 1:00 AM, 12-31-61. Cemented 7 5/8" casing at 3030' w/350 sx. Began drilling 6 3/4" hole. Drilled w/water to 8300'. Mudded up at 8300' w/Chem-bentonite FW mud. SIM at 8464', no correction. Lost bit cone and shank in hole at 8894'. Drilled up junk and proceeded drilling. Drilled to 9030'. Ran Schlumberger GR/N log 9030' to surface. Ran DST # 1: Straddle test, 8675' - 8860' (185' lower Wolfcamp). Tool open 3 hours thru 5/8" BC, 1/2" TC, 3 1/2" DP. Opened w/strong blow, gas to surface in 50 minutes, decreasing to fair in 1 hour, continued fair to end of test. Recovery 200' (1 bbl.) O&GCM. 60 minutes ISIBHP 1920 psi. FBHP 192 - 214 psi. 60 minutes FSIBHP 1245 psi. HMP 4230 - 4230 psi. Recovery mud titrated 2000 ppm Cl⁻. Pit mud titrated 2000 ppm Cl⁻. Maximum temperature 152 deg. Conclusive Test. (Cook) Drilled to 9402'. Ran DST # 2: 9351' - 9400' (49' Pennsylvanian). Tool open 48 minutes thru 5/8" BC, 1/2" TC, 3 1/2" DP. Opened w/strong blow decreasing to weak in 30 minutes, died in 40 minutes. Recovery 1350' (10 bbls.) DM + 6450' (43 bbls.) sulfur water. 60 minutes ISIBHP 3478 psi. FBHP 1883 - 3464 psi. 60 minutes FSIBHP 3464 psi. HMP 4220 - 4168 psi. Recovery water titrated 23,000 ppm Cl⁻. Pit mud titrated 2000 ppm Cl⁻. Maximum temperature 162 deg. Conclusive Test. (Cook) Drilled to 9600'. Ran Schlumberger GR/N, 2ILL, and ML logs. Ran DST # 3: Straddle test, 9135' - 9190' (55' Pennsylvanian). Tool open 2 hours thru 5/8" BC, 1/2" TC, 3 1/2" DP. Opened w/strong blow decreasing to weak at end of test. NGTS. Recovery 1800' (13 bbls.) MCW + 6000' (43 bbls.) sulfur water. 60 minutes ISIBHP 3560 psi. FBHP 1340 - 3560 psi. 60 minutes FSIBHP 3560 psi. HMP 4340 psi. Recovery water titrated 8000 ppm Cl⁻. Pit mud titrated 700 ppm Cl⁻. Bottom chart indicated leakage by bottom packer for first 15 minutes of test. Inconclusive Test. (Cook) Set HOWCO DC squeeze packer at 9240' as open hole bridge plug. Cemented 4 1/2" casing at 9128' w/350 sx. PBTD 9095'. Ran 2" tubing open-ended. Reversed out water w/oil and spotted 200 gallons 15% BDA on bottom. Pulled tubing. Ran Western GR/CCL log 9072' - 7000'. Perforated 8953' - 8959' and 8963' - 8966' w/2 JSPF. Ran 2" tubing w/packer and hydraulic holddown to 8586'. Displaced 200 gallons 15% BDA to formation. Lowered tubing to 8933', set packer at 8925' - 8933'. Swabbed 1 to 3 BF/hour, cut 20% water. Treated w/3000 gallons 15% NEA. Recovered load.

On OPT flowed 175 BOPD + 9 BWPD thru 18/64" choke. FTP 250 - 325 psi. Gravity 42.2 deg. API. GOR 1760. Official Completion Date: February 23, 1962.