

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

2000

| | | | | | | | | | | |
|--|------------------------|-----------------------------|-------------------------------------|------------------------------|---|-------------------------------------|--|--|----------------------|------|
| Operator Williams Production Company | | | | | Lease or Unit Name Rosa Unit | | | | | |
| Test Type X Initial Annual Special | | | Test Date 9/19/2000 | | Well Number #181A | | | | | |
| Completion Date 9/8/2000 | | Total Depth 6833' | | Plug Back TD 6750' | | Elevation 6267' | | Unit Sec Twp Rng P 10 31N 6W | | |
| Casing Size 4-1/2" | | Weight 10.5# | d | Set At 6833' | Perforations: 5966' - 6169' | | | County Rio Arriba | | |
| Tubing Size 2-3/8" | | Weight 4.7# | d | Set At 6562' | Perforations: 6195' - 6558' | | | Pool Blanco MV | | |
| Type Well - Single-Bradenhead-GG or GO Multiple | | | | Packer Set At | | | Formation MV | | | |
| Producing Thru Tubing | | Reservoir Temp. oF | | Mean Annual Temp. oF | | | Barometer Pressure - Pa | | Connection | |
| L | H | Gq 0.6 | %CO2 | | %N2 | %H2S | | Prover 3/4" | Meter Run | Taps |
| FLOW DATA | | | | | TUBING DATA | | | CASING DATA | | |
| NO | Prover Line Size | X Orifice Size | Pressure p.s.i.q | Temperature oF | Pressure p.s.i.q | Temperature oF | Pressure p.s.i.q | Temperature oF | Duration of Flow | |
| SI | | 2" X 3/4" | | | 1090 | 80 | 1090 | | 0 | |
| 1 | | | | | 260 | 68 | 925 | | 0.5 hr | |
| 2 | | | | | 240 | 68 | 890 | | 1.0 hr | |
| 3 | | | | | 235 | 68 | 865 | | 1.5 hrs | |
| 4 | | | | | 235 | 68 | 840 | | 2.0 hrs | |
| 5 | | | | | 230 | 68 | 810 | | 3.0 hrs | |
| RATE OF FLOW CALCULATION | | | | | | | | | | |
| NO | Coefficient (24 Hours) | | | hwPm | Pressure Pm | Flow Temp. Factor Fl | Gravity Factor Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd | |
| 1 | 9.604 | | | | 242 | 0.9924 | 1.29 | 1.023 | 3044 | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| NO | Pr | Temp. oR | Tr | Z | Gas Liquid Hydrocarbon Ration | | | | Mcf/bbl. | |
| 1 | | | | | A.P.I Gravity of Liquid Hydrocabrons _____ | | | | Deq. | |
| 2 | | | | | Specific Gravity Separator _____ | | | | XXXXXX | |
| 3 | | | | | Specific Gravity Flowing Fluid xxxxxxxxxxxx | | | | | |
| 4 | | | | | Critical Pressure _____ p.s.i.a. | | | | _____ p.s.i.a. | |
| 5 | | | | | Critical Temperature _____ R | | | | _____ R | |
| Pc | 1102 | Pc2 | 1214404 | | | | | | | |
| NO | Pt1 | Pw | Pw2 | Pc2-Pw2 | (1) Pc2 = 2.2542397 Pc2-Pw2 | | (2) Pc2^n = 1.839713 Pc2-Pw2 | | | |
| 1 | | 822 | 675684 | 538720 | | | | | | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | AOF = Q Pc2^n = 5600 Pc2 - Pw2 | | | | | |
| Absolute Open Flow | | 5600 | | Mcf/d @ 15.025 | | Angle of Slope _____ | | Slope, n 0.75 | | |
| Remarks: | | | | | | | | | | |
| Approved By Commission: | | | Conducted By: Mark Lepich | | | Calculated By: Tracy Ross | | Checked By: David Spitz | | |