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appropriate district office
Sec Rule 401 & Rule 1122

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-122
Revised October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

| | | | | | | | | | | |
|---|-----------------------------|--|--------------------------------------|---|--|-------------------------------------|---------------------------------------|----------------------|------------------|------------------|
| Operator NEARBURG PRODUCING COMPANY | | | | Lease or Unit Name SIMMS 35 STATE | | | | | | |
| Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special | | | | Test Date 10/23/01 | | Well No. 3 | | | | |
| Completion Date 9/13/01 | | Total Depth 13513 | | Plug Back TD 13494 | | Elevation 3688 GL | | | | |
| Unit Ltr - Sec - TWP - Rge N 35 20 35 | | Perforations: From: 13174 To: 13308 | | County LEA | | Pool OSUDO MORROW WEST | | | | |
| Type Well-Single-Bradenhead-G.G or G.O Multiple SINGLE | | Packer Set At 13075 | | Formation MORROW "B" | | Connection CONOCO | | | | |
| Producing Thru Tbg Size | | Reservoir Temp °F 204.8 @ 13075 | | Mean Annual Temp °F 60 | | Baro. Press.-P _a 13.2 | | | | |
| I. 13075 | | H 13075 | | Gg 0.611 | | %CO ₂ 0.444 | | | | |
| | | | | %N ₂ 0.393 | | %H ₂ S N/A | | | | |
| | | | | Prover N/A | | Meter Run 3.068 | | | | |
| | | | | | | Taps FLG | | | | |
| FLOW DATA | | | | TUBING DATA | | | | CASING DATA | | |
| No | Prover Line Size | Orifice Size | Press p.s.i.g. | Diff h _w | Temp °F | Press p.s.i.g. | Temp °F | Press p.s.i.g. | Temp °F | Duration of Flow |
| SI | | | | | | 3727 | | PKR | | 8 DAYS |
| 1 | 3 X | 2.125 | 676 | 1 | 63 | 3670 | | " | | 1 HR |
| 2 | 3 X | 2.125 | 676 | 4 | 69 | 3613 | | " | | 1 HR |
| 3 | 3 X | 2.125 | 676 | 9 | 67 | 3552 | | " | | 1 HR |
| 4 | 3 X | 2.125 | 676 | 16 | 60 | 3497 | | " | | 1 HR |
| 5 | | | | | | | | | | |
| RATE OF FLOW CALCULATIONS | | | | | | | | | | |
| No | COEFFICIENT (24 Hour) | | $\sqrt{h_w P_m}$ | Pressure P _m | Flow Temp Factor Ft. | Gravity Factor F _g | Super Compress Factor F _{pv} | Rate of Flow Q, Mcfd | | |
| 1 | 24.76 | | 26.25 | 689.2 | 0.9971 | 1.279 | 1.061 | 879 | | |
| 2 | 24.76 | | 52.51 | 689.2 | 0.9915 | 1.279 | 1.062 | 1751 | | |
| 3 | 24.76 | | 78.76 | 689.2 | 0.9933 | 1.279 | 1.061 | 2629 | | |
| 4 | 24.76 | | 105.01 | 689.2 | 1 | 1.279 | 1.071 | 3562 | | |
| 5 | | | | | | | | | | |
| No | P _r | Temp °R | T _r | Z | Gas Liquid Hydrocarbon Ratio 56.5 Mcf/bbl | | | | | |
| 1 | 1.02 | 523 | 1.46 | 0.889 | A.P.I. Gravity of Liquid Hydrocarbons 54.5 @ 60 Deg. | | | | | |
| 2 | 1.02 | 529 | 1.44 | 0.887 | Specific Gravity Separator Gas 0.611 XXXXXXXX | | | | | |
| 3 | 1.02 | 527 | 1.45 | 0.888 | Specific Gravity Flowing Fluid XXXXX GMIX= 664 | | | | | |
| 4 | 1.02 | 520 | 1.43 | 0.876 | Critical Pressure 671 P.S.I.A. 670 P.S.I.A. | | | | | |
| 5 | | | | | Critical Temperature 362 R. 378 R. | | | | | |
| P _c 3740.2 | | P _{c2} 13989.1 | | | | | | | | |
| No | P _i ² | P _w | P _w ² | P _c ² - P _w ² | (1) $P_c^2 = \frac{12.435}{P_c^2 - P_w^2}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 12.435$ | | | | | |
| 1 | | 3687.8 | 13599.6 | 389.5 | | | | | | |
| 2 | | 3644.4 | 13281.8 | 707.3 | | | | | | |
| 3 | | 3606.6 | 13007.5 | 981.6 | | | | | | |
| 4 | | 3586.7 | 12864.2 | 1124.9 | | | | | | |
| 5 | | | | | 79825 $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 44.295$ | | | | | |
| Absolute Open Flow 44.295 | | Mcf/d @ 15.025 | | Angle of Slope (°) 45 | | Slope n 1 | | | | |
| REMARKS WELL PRODUCED 6.5 BBLs CONDENSATE | | | | | | | | | | |
| Approved By Division | | | Conducted By JAMES SERVICES, INC. | | | Calculated By BM | | | Checked By BM | |

DEC 1 1900