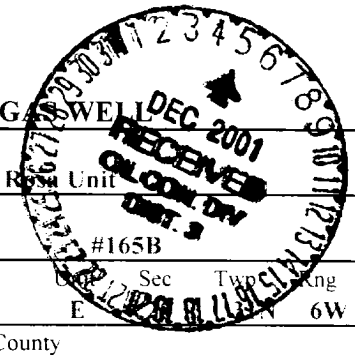


# NEW MEXICO OIL CONSERVATION COMMISSION
## MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Operator: **Williams Production Company** | | | | | Lease or Unit Name: **Rosa Unit** | | | |
| Test Type: ***X Initial*** **Annual** **Special** | | | Test Date: **11/12/2001** | | | Well Number: **#165B** | | |
| Completion Date: **10/21/2001** | Total Depth: **7955'** | | Plug Back TD: **7930'** | | Elevation: **6311'** | Unit: **E** | Sec | Twp: Rng: **6W** |
| Casing Size: **5 1/2"** | Weight: **17#** | d | Set At: **7955'** | Perforations: **7787' - 7914'** | | County: **Rio Arriba** | | |
| Tubing Size: **2 1/16"** | Weight: **3.25#** | d | Set At: **7853'** | Perforations: | | Pool: **Basin** | | |
| Type Well - Single-Bradenhead-GG or GO Multiple | | | | Packer Set At: **6003'** | | Formation: **DK** | | |
| Producing Thru: **Tubing** | Reservoir Temp. oF | | Mean Annual Temp. oF | | | Barometer Pressure - Pa | | Connection |

| I | H | Gq | %CO2 | %N2 | %H2S | Prover | Meter Run | Taps |
|---|---|---|---|---|---|---|---|---|
| | | **0.6** | | | | **3/4"** | | |

| | 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"** | | | | **1330** | **67** | **900** | | **0** |
| 1 | | | | | **340** | **93** | **905** | | **0.5 hr** |
| 2 | | | | | **130** | **78** | **905** | | **1.0 hr** |
| 3 | | | | | **100** | **75** | **905** | | **1.5 hrs** |
| 4 | | | | | **80** | **75** | **905** | | **2.0 hrs** |
| 5 | | | | | **70** | **73** | **905** | | **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** | | **82** | **0.9877** | **1.29** | **1.010** | **1013** |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |

| NO | Pr | Temp. oR | Tr | Z |
|---|---|---|---|---|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| Pc | **912** | Pc2 | **831744** | |

| NO | Pt1 | Pw | Pw2 | Pc2-Pw2 |
|---|---|---|---|---|
| 1 | | **917** | **840889** | **-9145** |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |

Gas Liquid Hydrocarbon Ration _____ Mcf/bbl.
A.P.I Gravity of Liquid Hydrocabrons _____ Deq.
Specific Gravity Separator _____ XXXXXX
Specific Gravity Flowing Fluid xxxxxxxxxx
Critical Pressure _____ p.s.i.a. ____p.s.i.a.
Critical Temperature _____ R ____ R

(1) Pc2 / (Pc2-Pw2) = **-90.950683** (2) Pc2^n / (Pc2-Pw2) = **#NUM!**

AOF = Q Pc2^n / (Pc2 - Pw2) = **#NUM!**

Absolute Open Flow **#NUM!** Mcfd @ 15.025 Angle of Slope _____ Slope, n **0.75**

Remarks:

| Approved By Commission: | Conducted By: | Calculated By: | Checked By: |
|---|---|---|---|
| | Larry Higgins | Tracy Ross | |