

Submit in duplicate to appropriate district office See Rule 401 & Rule 1122

OIL CONSERVATION DIVISION

P.O. Box 2088 Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

| | | | | | | | |
|---|--|---------------------------------|--|--|--|--|--|
| Operator CONOCO, INC. | | | | Lease or Unit Name JACK B 17 | | | |
| Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special | | | | Test Date 9-13-94 | | Well No. 2 | |
| Completion Date 9-12-94 | | Total Depth 3653 | | Plug Back TD | | Elevation | |
| Csg. Size 5 1/2 | | Wt. 17# | | d 4.892 | | Perforations: From: 2893 To: 3156 | |
| Tbg. Size 2 3/8 | | Wt. 4.7# | | d 1.995 | | Perforations: From: To: | |
| Type Well - Single - Bradenhead - G.G. or S.O. Multiple single | | | | Packer Set At none | | Formation | |
| Producing Thru CSG | | Reservoir Temp. °F 88 | | Mean Annual Temp. °F 60° | | Baro. Press - P _a 13.2 | |
| L | | II | | Gg .671 | | % CO ₂ 1.19 | |
| | | | | % N ₂ 1.96 | | % H ₂ S | |
| | | | | Prover | | Meter Run 2.067 | |
| | | | | | | Taps FLG. | |

| FLOW DATA | | | | | TUBING DATA | | | CASING DATA | | Duration of Flow |
|-----------|------------------|--------------|-----------------|----------------------|-------------|-----------------|----------|-----------------|----------|------------------|
| 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 | |
| SI | | | | | | 0 | | 150 | | |
| 1. | 2.067 X 1.000 | | 60 | 14 | | 0 | | 139 | 60 | |
| 2. | 2.067 X 1.000 | | 60 | 25 | | 0 | | 130 | 60 | |
| 3. | 2.067 X 1.000 | | 60 | 28 | | 0 | | 110 | 60 | |
| 4. | 2.067 X 1.000 | | 60 | 28 | | 0 | | 94 | 60 | |
| 5. | | | | | | | | | | |

| RATE OF FLOW CALCULATIONS | | | | | | | |
|---------------------------|-----------------------|------------------|-------------------------|-----------------------|--------------------|---|----------------------|
| NO. | COEFFICIENT (24 HOUR) | $\sqrt{h_w P_m}$ | Pressure P _m | Flow Temp. Factor Ft. | Gravity Factor Fg. | Super Compress. Factor, F _{pv} | Rate of Flow Q, Mcfd |
| 1. | 4.946 | 32.01 | 73.2 | 1.000 | 1.221 | 1.009 | 195 |
| 2. | 4.946 | 42.78 | 73.2 | 1.000 | 1.221 | 1.009 | 261 |
| 3. | 4.946 | 45.27 | 73.2 | 1.000 | 1.221 | 1.009 | 276 |
| 4. | 4.946 | 45.27 | 73.2 | 1.000 | 1.221 | 1.009 | 276 |
| 5. | | | | | | | |

| NO. | P _r | Temp. °R | T _r | Z | Gas Liquid Hydrocarbon Ratio | Mcf/bbl. |
|-----|----------------|----------|----------------|------|--------------------------------|----------|
| 1. | .11 | 520 | 1.38 | .982 | DRY GAS | |
| 2. | .11 | 520 | 1.38 | .982 | DRY | |
| 3. | .11 | 520 | 1.38 | .982 | Specific Gravity Separator Gas | .671 |
| 4. | .11 | 520 | 1.38 | .982 | Specific Gravity Flowing Fluid | DRY |
| 5. | | | | | Critical Pressure | 672 |
| | | | | | Critical Temperature | 382 |

| NO. | P _i ² | P _w | P _w ² | P _c ² - P _w ² | 1) $\frac{P_c^2}{P_c^2 - P_w^2} = 7.824$ | 2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.797$ |
|-----|-----------------------------|----------------|-----------------------------|---|--|---|
| 1. | | 152.2 | 23.2 | 3.4 | | |
| 2. | | 143.2 | 20.5 | 6.1 | | |
| 3. | | 123.2 | 15.2 | 11.4 | | |
| 4. | | 107.2 | 11.5 | 15.1 | | |
| 5. | | | | | | |

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .545$

Absolute Open Flow **545** Mcfd @ 15.025 Angle of Slope θ **63.5** Slope, n **.500**

Remarks: **NO FLUID MADE DURING TEST * CORRECTED TO 1.19% CO₂**

Approved By Division **SEP 29 1994** Conducted By: **PRO WELL TESTER GB** Calculated By: **BM** Checked By: **BM**