

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

## MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

|                                                                                                                           |                             |                             |                             |                                                           |                                                           |
|---------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                             |                             |                             | Test Date<br>12-2-82                                      |                                                           |
| Company<br>Joel B. Burr, Jr.                                                                                              |                             |                             | Connection                  |                                                           |                                                           |
| Pool<br>undesignated                                                                                                      |                             |                             | Formation<br>Fruitland      |                                                           | Unit                                                      |
| Completion Date<br>11-24-82                                                                                               |                             | Total Depth<br>1800         | Plug Back TD<br>1765        |                                                           | Elevation<br>5620' g.1                                    |
| Casing Size<br>2 7/8                                                                                                      | Wt.<br>6.4                  | d<br>2.441                  | Set At<br>1793              | Perforations:<br>From 1352 To 1360                        |                                                           |
| Tubing Size<br>N/a                                                                                                        | Wt.                         | d                           | Set At                      | Perforations:<br>From To                                  |                                                           |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>single                                                         |                             |                             |                             | Packer Set At<br>n/a                                      |                                                           |
| Producing Thru casing                                                                                                     |                             | Reservoir Temp. °F<br>#     | Mean Annual Temp. °F        |                                                           | Baro. Press. - P <sub>a</sub><br>12                       |
| L                                                                                                                         | H                           | G <sub>g</sub><br>.60       | % CO <sub>2</sub>           | % N <sub>2</sub>                                          | % H <sub>2</sub> S                                        |
|                                                                                                                           |                             | Prover                      | Meter Run                   |                                                           | Taps                                                      |
| FLOW DATA                                                                                                                 |                             |                             | TUBING DATA                 |                                                           | CASING DATA                                               |
| NO.                                                                                                                       | Prover Line Size            | X                           | Orifice Size                | Press. p.s.i.g.                                           | Diff. h <sub>w</sub>                                      |
|                                                                                                                           |                             |                             |                             | Temp. °F                                                  | Press. p.s.i.g.                                           |
|                                                                                                                           |                             |                             |                             | Temp. °F                                                  | Press. p.s.i.g.                                           |
| SI                                                                                                                        |                             |                             |                             |                                                           | 467                                                       |
| 1.                                                                                                                        | 2" x 6" x 3/4"              |                             |                             |                                                           | 120                                                       |
| 2.                                                                                                                        |                             |                             |                             |                                                           | 38                                                        |
| 3.                                                                                                                        |                             |                             |                             |                                                           |                                                           |
| 4.                                                                                                                        |                             |                             |                             |                                                           |                                                           |
| 5.                                                                                                                        |                             |                             |                             |                                                           |                                                           |
| RATE OF FLOW CALCULATIONS                                                                                                 |                             |                             |                             |                                                           |                                                           |
| NO.                                                                                                                       | Coefficient (24 Hour)       | $\sqrt{h_w P_m}$            | Pressure P <sub>m</sub>     | Flow Temp. Factor Ft.                                     | Gravity Factor F <sub>g</sub>                             |
|                                                                                                                           |                             |                             |                             |                                                           | Super Compress. Factor, F <sub>pv</sub>                   |
| 1                                                                                                                         | 11                          |                             | 132                         | 1.022                                                     | 1.291                                                     |
| 2.                                                                                                                        |                             |                             |                             |                                                           | 1.014                                                     |
| 3.                                                                                                                        |                             |                             |                             |                                                           |                                                           |
| 4.                                                                                                                        |                             |                             |                             |                                                           |                                                           |
| 5.                                                                                                                        |                             |                             |                             |                                                           |                                                           |
| NO.                                                                                                                       | R <sub>f</sub>              | Temp. °R                    | T <sub>f</sub>              | Z                                                         | Gas Liquid Hydrocarbon Ratio Mcf/bbl.                     |
|                                                                                                                           |                             |                             |                             |                                                           | A.P.I. Gravity of Liquid Hydrocarbons Deg.                |
| 1                                                                                                                         | .20                         | 498                         | 1.39                        | .973                                                      | Specific Gravity Separator Gas X X X X X X X X            |
| 2.                                                                                                                        |                             |                             |                             |                                                           | Specific Gravity Flowing Fluid X X X X X                  |
| 3.                                                                                                                        |                             |                             |                             |                                                           | Critical Pressure P.S.I.A. P.S.I.A.                       |
| 4                                                                                                                         |                             |                             |                             |                                                           | Critical Temperature R R                                  |
| 5                                                                                                                         |                             |                             |                             |                                                           |                                                           |
| NO.                                                                                                                       | P <sub>1</sub> <sup>2</sup> | P <sub>w</sub> <sup>2</sup> | P <sub>w</sub> <sup>2</sup> | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.117$                 |
| 1                                                                                                                         |                             | 155                         | 24                          | 205                                                       | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.10$ |
| 2                                                                                                                         |                             |                             |                             |                                                           |                                                           |
| 3                                                                                                                         |                             |                             |                             |                                                           |                                                           |
| 4                                                                                                                         |                             |                             |                             |                                                           |                                                           |
| 5                                                                                                                         |                             |                             |                             |                                                           |                                                           |
| Absolute Open Flow 2,137 Mcf @ 15.025                                                                                     |                             |                             |                             | Angle of Slope @ Slope, n = 0.65                          |                                                           |
| Remarks: all squared pressures are times 1,000 psi                                                                        |                             |                             |                             |                                                           |                                                           |
| Approved by Division                                                                                                      |                             | Conducted by: R. S. Sano    |                             | Calculated by: 1. Alexander                               |                                                           |
|                                                                                                                           |                             |                             |                             | Checked By:                                               |                                                           |