

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

Form C-122  
Revised 9-1-65

| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                             |                  |                                 |   | Test Date  |   |                      |                       |  |                         |                           |                            |  |                |
|---|-----------------------------|------------------|---------------------------------|---|--|---|----------------------|-----------------------|--|-------------------------|---------------------------|----------------------------|--|----------------|
| Company<br>Amoco Production Company   |                             |                  |                                 |   | Connection   |   |                      |                       |  |                         |                           |                            |  |                |
| Pool Bravo Dome Carbon Dioxide Gas Unit-640 Acre Area   |                             |                  |                                 |   | Formation  |   |                      |                       |  | Unit<br>BDCDGU          |                           |                            |  |                |
| Completion Date<br>12-30-85   |                             |                  | Total Depth<br>2222             |   |  | Plug Back TD<br>2194                    |                      |                       | Elevation<br>4465                      |                         |                           | Farm or Lease Name         |  |                |
| Csg. Size<br>7  |                             | Wt.<br>20        |                                 | Set At<br>2223  |  | Perforations:<br>From 2077 To 2139      |                      |                       | Well No.<br>1836 061F                  |                         |                           |                            |  |                |
| Tbg. Size<br>3-1/2  |                             | Wt.<br>9.3       |                                 | Set At<br>1923  |  | Perforations:<br>From To                |                      |                       | Unit<br>F                              |                         | Sec. Twp. Rge.<br>6 18 36 |                            |  |                |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single   |                             |                  |                                 |   |  |   |                      | Packer Set At<br>1892 |  |                         | County<br>Union           |                            |  |                |
| Producing Thru<br>Tubing  |                             |                  | Reservoir Temp. °F<br>90 @ 2108 |   |  | Mean Annual Temp. °F<br>50              |                      |                       | Baro. Press. - P <sub>a</sub><br>12.25 |                         |                           | State<br>New Mexico        |  |                |
| L<br>2108   |                             | H<br>2108        |                                 | G <sub>g</sub><br>1.529                                   |  | % CO <sub>2</sub><br>100                |                      | % N <sub>2</sub><br>0 |  | % H <sub>2</sub> S<br>0 |                           | Prover<br>Meter Run<br>4.0 |  | Taps<br>Flange |
| FLOW DATA   |                             |                  |                                 |   |  |   | TUBING DATA          |                       | CASING DATA                            |                         | Duration of Flow          |                            |  |                |
| 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.                        | Temp. °F                | Duration of Flow          |                            |  |                |
| SI  |                             |                  |                                 |   |  |   | 360                  |                       |  |                         |                           |                            |  |                |
| 1.  | 4.026 x 2.500               |                  |                                 | 181.2   | 12   | 44                                      | 193.45               | 44                    |  |                         | 1.5                       |                            |  |                |
| 2.  | 4.026 x 2.500               |                  |                                 | 151.8   | 16   | 46                                      | 164.05               | 46                    |  |                         | 1.5                       |                            |  |                |
| 3.  | 4.026 x 2.500               |                  |                                 | 122.0   | 22   | 46                                      | 134.25               | 46                    |  |                         | 1.5                       |                            |  |                |
| 4.  | 4.026 x 2.500               |                  |                                 | 93.3  | 30.5   | 47                                      | 105.55               | 47                    |  |                         | 1.5                       |                            |  |                |
| 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> | Rate of Flow Q, Mcfd |                       |  |                         |                           |                            |  |                |
| 1.  |                             |                  |                                 |   |  |   | 1327                 |                       |  |                         |                           |                            |  |                |
| 2.  |                             |                  |                                 |   |  |   | 1403                 |                       |  |                         |                           |                            |  |                |
| 3.  |                             |                  |                                 |   |  |   | 1484                 |                       |  |                         |                           |                            |  |                |
| 4.  |                             |                  |                                 |   |  |   | 1535                 |                       |  |                         |                           |                            |  |                |
| 5.  |                             |                  |                                 |   |  |   |                      |                       |  |                         |                           |                            |  |                |
| NO.   | P <sub>t</sub>              | Temp. °R         | T <sub>f</sub>                  | Z   | Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.  |   |                      |                       |  |                         |                           |                            |  |                |
| 1.  |                             |                  |                                 |   | A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.   |   |                      |                       |  |                         |                           |                            |  |                |
| 2.  |                             |                  |                                 |   | Specific Gravity Separator Gas 1.529      X X X X X X X X X  |   |                      |                       |  |                         |                           |                            |  |                |
| 3.  |                             |                  |                                 |   | Specific Gravity Flowing Fluid X X X X X   |   |                      |                       |  |                         |                           |                            |  |                |
| 4.  |                             |                  |                                 |   | Critical Pressure 1072 P.S.I.A.      P.S.I.A.  |   |                      |                       |  |                         |                           |                            |  |                |
| 5.  |                             |                  |                                 |   | Critical Temperature 496 R      R  |   |                      |                       |  |                         |                           |                            |  |                |
| P <sub>c</sub> 372.2      P <sub>c</sub> <sup>2</sup> 138,532   |                             |                  |                                 |   |  |   |                      |                       |  |                         |                           |                            |  |                |
| NO.   | P <sub>t</sub> <sup>2</sup> | P <sub>w</sub>   | P <sub>w</sub> <sup>2</sup>     | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.08$ (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.05$ |   |                      |                       |  |                         |                           |                            |  |                |
| 1.  |                             | 193.5            |                                 | 101.090   | AOF = Q $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1611$                                      |   |                      |                       |  |                         |                           |                            |  |                |
| 2.  |                             | 164              |                                 | 111.636   |  |   |                      |                       |  |                         |                           |                            |  |                |
| 3.  |                             | 134              |                                 | 120.577   |  |   |                      |                       |  |                         |                           |                            |  |                |
| 4.  |                             | 105.6            |                                 | 127.381   |  |   |                      |                       |  |                         |                           |                            |  |                |
| 5.  |                             |                  |                                 |   |  |   |                      |                       |  |                         |                           |                            |  |                |
| Absolute Open Flow 1611 Mcfd @ 15.025   |                             |                  |                                 |   | Angle of Slope θ _____   |   |                      |                       | Slope, n .63                           |                         |                           |                            |  |                |
| Remarks:  |                             |                  |                                 |   |  |   |                      |                       |  |                         |                           |                            |  |                |
| Approved By Commission:   |                             |                  | Conducted By:                   |   |  | Calculated By:<br>Don Kimble            |                      |                       | Checked By:                            |                         |                           |                            |  |                |