

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

Form C-122  
Revised 9-1-65

| Type Test                                                         |                       | <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                             | Test Date: 5-10-85                                        |                                                               |                             |                      |          |                 |          |                  |
|-------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------|---------------------------------------------------------------|-----------------------------|----------------------|----------|-----------------|----------|------------------|
| Company<br>Amoco Production Company                               |                       |                                                                                                              | Connection                  |                                                           |                                                               |                             |                      |          |                 |          |                  |
| Pool<br>Bravo Dome Carbon Dioxide Gas Unit 640-acre area          |                       |                                                                                                              | Formation<br>Tubb           |                                                           | Unit<br>BDCDGU                                                |                             |                      |          |                 |          |                  |
| Completion Date<br>1-26-84                                        |                       | Total Depth<br>2687'                                                                                         |                             | Plug Back TD<br>2630'                                     | Elevation<br>4970 GL                                          |                             |                      |          |                 |          |                  |
| Csg. Size<br>7"                                                   | Wt.<br>20#            | d                                                                                                            | Set At<br>2687'             | Perforations:<br>From 2380 To 2470                        |                                                               |                             |                      |          |                 |          |                  |
| Tbg. Size<br>3-1/2"                                               | Wt.<br>9.3#           | d                                                                                                            | Set At<br>2350              | Perforations:<br>From To                                  |                                                               |                             |                      |          |                 |          |                  |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single |                       |                                                                                                              |                             | Packer Set At<br>2320'                                    | County<br>Harding                                             |                             |                      |          |                 |          |                  |
| Producing Thru<br>Tubing                                          |                       | Reservoir Temp. °F<br>88°@ 2425'                                                                             |                             | Mean Annual Temp. °F<br>50                                | Baro. Press. - P <sub>a</sub><br>12.2                         |                             |                      |          |                 |          |                  |
| L<br>2425'                                                        | H<br>2425'            | Cg<br>1.529                                                                                                  | % CO <sub>2</sub><br>100    | % N <sub>2</sub><br>0                                     | % H <sub>2</sub> S<br>0                                       |                             |                      |          |                 |          |                  |
| Prover                                                            |                       |                                                                                                              |                             | Meter Run<br>4.0"                                         | Taps<br>Flange                                                |                             |                      |          |                 |          |                  |
| FLOW DATA                                                         |                       |                                                                                                              |                             |                                                           |                                                               |                             |                      |          |                 |          |                  |
| NO.                                                               | Prover Line Size      | X                                                                                                            | Orifice Size                | Press. p.s.i.g.                                           | Diff. hw                                                      | Temp. °F                    | Press. p.s.i.g.      | Temp. °F | Press. p.s.i.g. | Temp. °F | Duration of Flow |
| 1.                                                                | 4.026 x 1.500         |                                                                                                              |                             | 226                                                       | 5                                                             | 60                          | 238.2                | 50       |                 |          | 24 hrs           |
| 2.                                                                | 4.026 x 1.500         |                                                                                                              |                             | 249                                                       | 26                                                            | 58                          | 261.2                | 50       |                 |          | 24 hrs           |
| 3.                                                                | 4.026 x 1.500         |                                                                                                              |                             | 268                                                       | 11                                                            | 57                          | 280.2                | 50       |                 |          | 24 hrs           |
| 4.                                                                | 4.026 x 1.500         |                                                                                                              |                             | 294                                                       | 1                                                             | 54                          | 306.2                | 50       |                 |          | 24 hrs           |
| 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 Fg                                             | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd |          |                 |          |                  |
| 1                                                                 |                       |                                                                                                              |                             |                                                           |                                                               |                             | 998                  |          |                 |          |                  |
| 2                                                                 |                       |                                                                                                              |                             |                                                           |                                                               |                             | 749                  |          |                 |          |                  |
| 3                                                                 |                       |                                                                                                              |                             |                                                           |                                                               |                             | 522                  |          |                 |          |                  |
| 4                                                                 |                       |                                                                                                              |                             |                                                           |                                                               |                             | 196                  |          |                 |          |                  |
| 5                                                                 |                       |                                                                                                              |                             |                                                           |                                                               |                             |                      |          |                 |          |                  |
| NO.                                                               | P <sub>r</sub>        | Temp. °R                                                                                                     | T <sub>r</sub>              | Z                                                         | Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.                   |                             |                      |          |                 |          |                  |
| 1                                                                 |                       |                                                                                                              |                             |                                                           | A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.              |                             |                      |          |                 |          |                  |
| 2                                                                 |                       |                                                                                                              |                             |                                                           | Specific Gravity Separator Gas _____                          |                             |                      |          |                 |          |                  |
| 3                                                                 |                       |                                                                                                              |                             |                                                           | Specific Gravity Flowing Fluid _____                          |                             |                      |          |                 |          |                  |
| 4                                                                 |                       |                                                                                                              |                             |                                                           | Critical Pressure _____ P.S.I.A.                              |                             |                      |          |                 |          |                  |
| 5                                                                 |                       |                                                                                                              |                             |                                                           | Critical Temperature _____ R                                  |                             |                      |          |                 |          |                  |
| P <sub>c</sub> 312.2    P <sub>c</sub> <sup>2</sup> 97.479        |                       |                                                                                                              |                             |                                                           |                                                               |                             |                      |          |                 |          |                  |
| NO.                                                               | P <sub>r</sub>        | 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) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.39$                      |                             |                      |          |                 |          |                  |
| 1                                                                 |                       | 238.2                                                                                                        |                             | 40.730                                                    | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.097$    |                             |                      |          |                 |          |                  |
| 2                                                                 |                       | 261.2                                                                                                        |                             | 29.243                                                    |                                                               |                             |                      |          |                 |          |                  |
| 3                                                                 |                       | 280.2                                                                                                        |                             | 18.957                                                    |                                                               |                             |                      |          |                 |          |                  |
| 4                                                                 |                       | 306.2                                                                                                        |                             | 3.710                                                     | ACF = Q $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2093$ |                             |                      |          |                 |          |                  |
| 5                                                                 |                       |                                                                                                              |                             |                                                           |                                                               |                             |                      |          |                 |          |                  |
| Absolute Oper. Flow 2093 Mcfd @ 15.025                            |                       |                                                                                                              |                             |                                                           | Angle of Slope θ _____                                        |                             | Slope, n .85         |          |                 |          |                  |
| Remarks: _____                                                    |                       |                                                                                                              |                             |                                                           |                                                               |                             |                      |          |                 |          |                  |
| Approved By Commission:                                           |                       | Conducted By:                                                                                                |                             | Calculated By:<br>D. D. Kimble                            |                                                               | Checked By:                 |                      |          |                 |          |                  |