

# 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                  |                                        |
| Completion Date<br>11-4-85                                                                                                |                                 | Total Depth<br>2664        | Plug Back TD<br>2650                   |
|                                                                                                                           |                                 | Elevation<br>5012          |                                        |
| Csg. Size<br>7                                                                                                            | Wt.<br>20                       | Set At<br>2663             | Perforations:<br>From 2424 To 2610     |
| Tbg. Size<br>3-1/2                                                                                                        | Wt.<br>9.3                      | Set At<br>2270             | Perforations:<br>From To               |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single                                                         |                                 | Packer Set At<br>2239      | Unit<br>BDCDGU                         |
| Producing Thru<br>Tubing                                                                                                  | Reservoir Temp. °F<br>90 @ 2517 | Mean Annual Temp. °F<br>50 | Baro. Press. - P <sub>g</sub><br>12.25 |
| L<br>2517                                                                                                                 | H<br>2517                       | C <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                     | Meter Run<br>4.0                       |
|                                                                                                                           |                                 |                            | Taps<br>Flange                         |

  

| FLOW DATA |                  |   |              |                 |                        |          |                 |          |                  |
|-----------|------------------|---|--------------|-----------------|------------------------|----------|-----------------|----------|------------------|
| NO.       | Prover Line Size | X | Orifice Size | Press. p.s.i.g. | Diff. h <sub>w</sub> ' | Temp. °F | TUBING DATA     |          | CASING DATA      |
|           |                  |   |              |                 |                        |          | Press. p.s.i.g. | Temp. °F | Press. p.s.i.g.  |
|           |                  |   |              |                 |                        |          |                 |          | Temp. °F         |
|           |                  |   |              |                 |                        |          |                 |          | Duration of Flow |
| 1.        | 4.026 x 2.500    |   |              | 180.4           | 8.2                    | 44       | 295             |          |                  |
| 2.        | 4.026 x 2.500    |   |              | 150.1           | 10                     | 46       | 192.65          | 44       |                  |
| 3.        | 4.026 x 2.500    |   |              | 120.7           | 11                     | 48       | 162.35          | 46       | 1.5              |
| 4.        | 4.026 x 2.500    |   |              | 91.8            | 13                     | 49       | 132.95          | 48       | 1.5              |
| 5.        |                  |   |              |                 |                        |          | 104.05          | 49       | 1.5              |

  

| RATE OF FLOW CALCULATIONS |                       |                  |                         |                                  |                               |                                         |                      |
|---------------------------|-----------------------|------------------|-------------------------|----------------------------------|-------------------------------|-----------------------------------------|----------------------|
| NO.                       | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure P <sub>m</sub> | Flow Temp. Factor F <sub>t</sub> | Gravity Factor F <sub>g</sub> | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mcfd |
| 1.                        |                       |                  |                         |                                  |                               |                                         | 850                  |
| 2.                        |                       |                  |                         |                                  |                               |                                         | 970                  |
| 3.                        |                       |                  |                         |                                  |                               |                                         | 1050                 |
| 4.                        |                       |                  |                         |                                  |                               |                                         | 1180                 |
| 5.                        |                       |                  |                         |                                  |                               |                                         |                      |

  

| NO. | P <sub>t</sub> | Temp. °R | T <sub>g</sub> | Z | Gas Liquid Hydrocarbon Ratio | A.P.I. Gravity of Liquid Hydrocarbons | Specific Gravity Separator Gas | Specific Gravity Flowing Fluid | Critical Pressure | Critical Temperature |
|-----|----------------|----------|----------------|---|------------------------------|---------------------------------------|--------------------------------|--------------------------------|-------------------|----------------------|
| 1.  |                |          |                |   | 0                            |                                       |                                |                                |                   |                      |
| 2.  |                |          |                |   |                              |                                       | 1.529                          |                                | 1072              | 496                  |
| 3.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 4.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 5.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |

  

|                      |                                    |                                          |                                                           |
|----------------------|------------------------------------|------------------------------------------|-----------------------------------------------------------|
| P <sub>c</sub> 307.2 | P <sub>c</sub> <sup>2</sup> 94,372 | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.13$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.09$ |
| NO.                  | P <sub>t</sub> <sup>2</sup>        | P <sub>w</sub>                           | P <sub>w</sub> <sup>2</sup>                               |
| 1.                   |                                    | 193                                      | 57.123                                                    |
| 2.                   |                                    | 162                                      | 68.128                                                    |
| 3.                   |                                    | 133                                      | 76.682                                                    |
| 4.                   |                                    | 104                                      | 83.556                                                    |
| 5.                   |                                    |                                          |                                                           |

  

AOFP = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1207$

  

|                    |      |               |                  |              |
|--------------------|------|---------------|------------------|--------------|
| Absolute Open Flow | 1207 | Mcfd @ 15.025 | Angle of Slope θ | Slope, n .70 |
|--------------------|------|---------------|------------------|--------------|

  

|                         |               |                              |             |
|-------------------------|---------------|------------------------------|-------------|
| Approved By Commission: | Conducted By: | Calculated By:<br>Don Kimble | Checked By: |
|-------------------------|---------------|------------------------------|-------------|