

**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<br>5-30-85                                       |                                       |
| Company<br>Amoco Production Company                                                                                        |                                | Connection                                                 |                                       |
| Pool<br>Bravo Dome Carbon Dioxide Gas Unit 640-acre area                                                                   |                                | Formation<br>Tubb                                          |                                       |
| Completion Date<br>11-24-83                                                                                                |                                | Total Depth<br>2748'                                       | Plug Back TD<br>2605'                 |
|                                                                                                                            |                                | Elevation<br>4732'                                         | Farm or Lease Name                    |
| Csg. Size<br>7"                                                                                                            | Wt.<br>20#                     | d                                                          | Set At<br>2748'                       |
| Perforations:<br>From 2157' To 2332'                                                                                       |                                | Well No.<br>1834 021B                                      |                                       |
| Tbg. Size<br>3-1/2"                                                                                                        | Wt.<br>9.3#                    | d                                                          | Set At<br>2245'                       |
| Perforations:<br>From To                                                                                                   |                                | Unit    Sec.    Twp.    Rge.<br>B       2       18      34 |                                       |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single                                                          |                                | Packer Set At<br>2088'                                     | County<br>Union                       |
| Producing Thru<br>Tubing                                                                                                   | Reservoir Temp. °F<br>88° 2245 | Mean Annual Temp. °F<br>50                                 | Baro. Press. - P <sub>a</sub><br>12.2 |
| State<br>New Mexico                                                                                                        |                                |                                                            |                                       |
| L<br>2245'                                                                                                                 | H<br>2245'                     | 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                                                     | 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. |                  |
| SI        |                  |   |              |                 |                      |             | 300             |             |                 |                  |
| 1.        | 4.026 x 2.75     |   |              | 208             | 37                   | 63          | 220.2           | 50          |                 |                  |
| 2.        | 4.026 x 2.75     |   |              | 229             | 25                   | 64          | 241.2           | 50          |                 |                  |
| 3.        | 4.026 x 2.75     |   |              | 252             | 15                   | 65          | 264.2           | 50          |                 |                  |
| 4.        | 4.026 x 2.75     |   |              | 277             | 7                    | 65          | 289.2           | 50          |                 |                  |
| 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                         |                       |                  |                         |                       |                               |                                         | 3049                 |
| 2                         |                       |                  |                         |                       |                               |                                         | 2661                 |
| 3                         |                       |                  |                         |                       |                               |                                         | 2153                 |
| 4                         |                       |                  |                         |                       |                               |                                         | 1556                 |
| 5                         |                       |                  |                         |                       |                               |                                         |                      |

  

|     |                |          |                |   |                                                             |
|-----|----------------|----------|----------------|---|-------------------------------------------------------------|
| NO. | P <sub>r</sub> | Temp. °R | T <sub>r</sub> | Z | Gas Liquid Hydrocarbon Ratio _____ 0 Mcl/bbl.               |
| 1   |                |          |                |   | A.P.I. Gravity of Liquid Hydrocarbons _____ 0 Deg.          |
| 2   |                |          |                |   | Specific Gravity Separator Gas <u>1.529</u> X X X X X X X X |
| 3   |                |          |                |   | Specific Gravity Flowing Fluid _____ X X X X X              |
| 4   |                |          |                |   | Critical Pressure <u>1072</u> P.S.I.A. _____ P.S.I.A.       |
| 5   |                |          |                |   | Critical Temperature <u>547</u> R _____ R                   |

  

|                             |                                           |                |                             |                                                           |                                          |                                                           |
|-----------------------------|-------------------------------------------|----------------|-----------------------------|-----------------------------------------------------------|------------------------------------------|-----------------------------------------------------------|
| P <sub>c</sub> <u>312.2</u> | P <sub>c</sub> <sup>2</sup> <u>97.469</u> |                |                             |                                                           |                                          |                                                           |
| NO.                         | P <sub>r</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) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.99$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.44$ |
| 1                           |                                           | 220.2          |                             | 48.980                                                    |                                          |                                                           |
| 2                           |                                           | 241.2          |                             | 39.291                                                    |                                          |                                                           |
| 3                           |                                           | 264.2          |                             | 27.667                                                    |                                          |                                                           |
| 4                           |                                           | 289.2          |                             | 13.832                                                    |                                          |                                                           |
| 5                           |                                           |                |                             |                                                           |                                          |                                                           |

  

$AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4390$

  

|                                              |                               |                                |
|----------------------------------------------|-------------------------------|--------------------------------|
| Absolute Open Flow <u>4390</u> Mcfd @ 15.025 | Angle of Slope $\Theta$ _____ | Slope, n <u>.53</u>            |
| Remarks: _____                               |                               |                                |
|                                              |                               |                                |
| Approved By Commission:                      | Conducted By:                 | Calculated By:<br>D. D. Kimble |
|                                              |                               | Checked By:                    |