

**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: 4-23-85       |                                      |
| Company: Amoco Production Company                                                                                       |                               | Connection:              |                                      |
| Pool: Bravo Dome Carbon Dioxide Unit - 640 acre area                                                                    |                               | Formation: Tubb          |                                      |
| Completion Date: 3-7-81                                                                                                 |                               | Total Depth: 2688'       | Plug Back TD: 2650                   |
| Elevation: 4958                                                                                                         |                               | Farm or Lease Name:      |                                      |
| Csg. Size: 5.5                                                                                                          | Wt.:                          | Set At: 2688             | Perforations: From 2357 To 2601      |
| Thq. Size: 2-7/8                                                                                                        | Wt.: 6.5                      | Set At: 2162             | Perforations: From To                |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple                                                                 |                               | Packer Set At: 2154      | Well No.: 1934 071F                  |
| Producing Thru: Tubing                                                                                                  | Reservoir Temp. °F: 90°@ 2479 | Mean Annual Temp. °F: 50 | Baro. Press. - P <sub>a</sub> : 12.2 |
| County: Union                                                                                                           | State: New Mexico             |                          |                                      |
| L: 2479                                                                                                                 | H: 2479                       | G <sub>g</sub> : 1.529   | % CO <sub>2</sub> : 100              |
| % N <sub>2</sub> : 0                                                                                                    | % H <sub>2</sub> S: 0         | Prover:                  | Meter Run: 4.0                       |
| Taps: 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 |
| SI        |                  |   |              |                 |                      |             | 304             |             |                 |                  |          |
| 1.        | 4.026 x 2.375    |   |              | 215             | 33                   | 57          | 227.2           | 50          |                 |                  | 24 hr.   |
| 2.        | 4.026 x 2.375    |   |              | 239             | 22                   | 61          | 251.2           | 50          |                 |                  | 24 hr.   |
| 3.        | 4.026 x 2.375    |   |              | 249             | 18                   | 60          | 261.2           | 50          |                 |                  | 24 hr.   |
| 4.        | 4.026 x 2.375    |   |              | 274             | 9                    | 62          | 286.2           | 50          |                 |                  | 24 hr.   |
| 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                         |                       |                  |                         |                       |                               |                                         | 2307                 |
| 2                         |                       |                  |                         |                       |                               |                                         | 1827                 |
| 3                         |                       |                  |                         |                       |                               |                                         | 1683                 |
| 4                         |                       |                  |                         |                       |                               |                                         | 1254                 |
| 5                         |                       |                  |                         |                       |                               |                                         |                      |

  

| NO. | P <sub>t</sub> | Temp. °R | T <sub>t</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                            | 0                                     | 1.529                          | X X X X X X X X                | 1072              | 547                  |
| 2.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 3.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 4.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 5.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |

  

|                        |                                      |                                          |                                                           |
|------------------------|--------------------------------------|------------------------------------------|-----------------------------------------------------------|
| P <sub>c</sub> : 316.2 | P <sub>c</sub> <sup>2</sup> : 99.982 | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.07$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.57$ |
| NO.                    | P <sub>t</sub> <sup>2</sup>          | P <sub>w</sub>                           | P <sub>w</sub> <sup>2</sup>                               |
| 1                      | 227.2                                |                                          | 48.363                                                    |
| 2                      | 251.2                                |                                          | 36.881                                                    |
| 3                      | 261.2                                |                                          | 31.757                                                    |
| 4                      | 286.2                                |                                          | 18.072                                                    |
| 5                      |                                      |                                          |                                                           |

  

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3619$

  

|                          |               |                             |               |
|--------------------------|---------------|-----------------------------|---------------|
| Absolute Open Flow: 3619 | Mcfd @ 15.025 | Angle of Slope θ            | Slope, n: .62 |
| Remarks:                 |               |                             |               |
| Approved By Commission:  |               |                             |               |
| Conducted By:            |               | Calculated By: D. D. Kimble |               |
|                          |               | Checked By:                 |               |