

# 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>6-20-87     |                            |
| Company<br>Amoco Production Company                                                                                       |                     | Connection               |                            |
| Pool<br>Bravo Dome                                                                                                        |                     | Formation<br>Tubb        |                            |
| Completion Date<br>12-8-80                                                                                                | Total Depth<br>2633 | Plug Back TD<br>2587     | Elevation<br>4786          |
| Unit<br>BDCDGU                                                                                                            |                     | Farm or Lease Name       |                            |
| Csg. Size<br>5.50                                                                                                         | Wt.<br>14           | d<br>4.9                 | Set At<br>2633             |
| Perforations:<br>From 2198                                                                                                | To 2433             | Well No.<br>1934-021K    |                            |
| Tub. Size<br>2.875                                                                                                        | Wt.<br>6.5          | d<br>2.441               | Set At<br>2138             |
| Perforations:<br>From                                                                                                     | To                  | Unit<br>K                | Sec. 2                     |
| Type Well - Single - Frodenhead - G.G. or G.O. Multiple<br>Single                                                         |                     | Packer Set At<br>2133    | Twp. 19                    |
| Producing Thru<br>Tubing                                                                                                  |                     | Reservoir Temp. °F<br>90 | Mean Annual Temp. °F<br>50 |
| Baro. Press. - P <sub>a</sub><br>12.25                                                                                    |                     | State<br>New Mexico      |                            |
| L                                                                                                                         | H                   | G <sub>g</sub>           | % 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. |                  |
| 1.        | 4.026 x          | 2.375 | 193          | 20              | 59                   | 195         | 59              | 0           |                 | 24 hrs           |
| 2.        | 4.026 x          | 2.375 | 202          | 16              | 59                   | 204         | 59              | 0           |                 | 24 hrs           |
| 3.        | 4.026 x          | 2.375 | 209          | 11              | 61                   | 214         | 61              | 0           |                 | 24 hrs           |
| 4.        | 4.026 x          | 2.375 | 227          | 8               | 60                   | 229         | 60              | 0           |                 | 24 hrs           |
| 5.        |                  |       |              |                 |                      |             |                 | 0           |                 | 24 hrs           |

  

| RATE OF FLOW CALCULATIONS |                       |                  |                         |                                  |                               |                                         |                      |
|---------------------------|-----------------------|------------------|-------------------------|----------------------------------|-------------------------------|-----------------------------------------|----------------------|
| NO.                       | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure P <sub>m</sub> | Flow Temp. Factor F <sub>L</sub> | Gravity Factor F <sub>g</sub> | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow O, Mcfd |
| 1.                        |                       |                  |                         |                                  |                               |                                         | 1567                 |
| 2.                        |                       |                  |                         |                                  |                               |                                         | 1433                 |
| 3.                        |                       |                  |                         |                                  |                               |                                         | 1278                 |
| 4.                        |                       |                  |                         |                                  |                               |                                         | 1103                 |
| 5.                        |                       |                  |                         |                                  |                               |                                         |                      |

  

| NO. | P <sub>t</sub> | Temp. °R | T <sub>r</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                            |                                       | 1.529                          | X X X X X                      | 1072              | 496                  |
| 2.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 3.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 4.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 5.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |

  

|                                                          |                |                |                             |                                                           |                                            |  |                                                             |  |
|----------------------------------------------------------|----------------|----------------|-----------------------------|-----------------------------------------------------------|--------------------------------------------|--|-------------------------------------------------------------|--|
| P <sub>c</sub> 315.25 P <sub>c</sub> <sup>2</sup> 99,382 |                |                |                             |                                                           | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.0622$ |  | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.0622$ |  |
| NO.                                                      | P <sub>t</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.                                                       |                | 207.25         | 42.952                      | 56,430                                                    |                                            |  |                                                             |  |
| 2.                                                       |                | 216.25         | 46,764                      | 52,618                                                    |                                            |  |                                                             |  |
| 3.                                                       |                | 226.25         | 51,189                      | 48,293                                                    |                                            |  |                                                             |  |
| 4.                                                       |                | 241.25         | 58,201                      | 41,181                                                    |                                            |  |                                                             |  |
| 5.                                                       |                |                |                             |                                                           |                                            |  |                                                             |  |

  

|                                                                                                                                |  |  |                              |               |  |                              |  |               |             |  |
|--------------------------------------------------------------------------------------------------------------------------------|--|--|------------------------------|---------------|--|------------------------------|--|---------------|-------------|--|
| Absolute Open Flow 2635                                                                                                        |  |  |                              | Mcfd @ 15.025 |  | Angle of Slope @ 45.0        |  | Slope, n 1.00 |             |  |
| Remarks: Test was run from a low flowing tubing pressure to a high flowing tubing pressure to minimize liquid loading effects. |  |  |                              |               |  |                              |  |               |             |  |
| Approved by Commission:                                                                                                        |  |  | Conducted By: RANDY MAHANNAH |               |  | Calculated By: RICHARD ROETH |  |               | Checked By: |  |