

**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>8/5/80                                  |                      |
| Company<br>Conoco Inc.                                                                                                    |                    | Connection<br>None                                   |                      |
| Pool<br>South Blanco                                                                                                      |                    | Formation<br>Mesa Verde                              |                      |
| Completion Date<br>7/12/80                                                                                                |                    | Total Depth<br>6190 K.B.                             |                      |
| Plug Back TD<br>6,172 K.B.                                                                                                |                    | Elevation<br>7207 G.L.                               |                      |
| Farm or Lease Name<br>AXI Apache                                                                                          |                    | Well No.<br>N-16A                                    |                      |
| Csg. Size<br>4 1/2"                                                                                                       | Wt.<br>10.5#       | d<br>4.052                                           | Set At<br>6,172 K.B. |
| Perforations:<br>From 5383 To 5963                                                                                        |                    | Well No.<br>N-16A                                    |                      |
| Teg. Size<br>2 3/8                                                                                                        | Wt.<br>4.7#        | d<br>1.995                                           | Set At<br>5,896 K.B. |
| Perforations:<br>From OPEN To                                                                                             |                    | Unit    Sec.    Twp.    Rge.<br>C    12    25N    4W |                      |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single - Gas                                                   |                    | Packer Set At<br>None                                |                      |
| County<br>Rio Arriba                                                                                                      |                    | State<br>N.M.                                        |                      |
| Producing Thru<br>Tubing                                                                                                  |                    | Reservoir Temp. °F<br>138°                           |                      |
| Mean Annual Temp. °F<br>50°                                                                                               |                    | Baro. Press. - P <sub>a</sub><br>12.2                |                      |
| L<br>5,887                                                                                                                | H<br>5,887         | G <sub>g</sub><br>.690                               | % CO <sub>2</sub>    |
| % N <sub>2</sub>                                                                                                          | % H <sub>2</sub> S | Prover<br>3/4" x 6"                                  | Meter Run            |
| Taps                                                                                                                      |                    |                                                      |                      |

  

| 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        | S.I. 7 DAYS      |   |              |                 |                      |             | 12.42"          |             | 12.42"          |                  | S.I.     |
| 1.        | .750 x 6" Choke  |   |              |                 |                      | 170#        |                 | 170#        | 69°             | 650#             | 3 HOURS  |
| 2.        |                  |   |              |                 |                      |             |                 |             |                 |                  |          |
| 3.        |                  |   |              |                 |                      |             |                 |             |                 |                  |          |
| 4.        |                  |   |              |                 |                      |             |                 |             |                 |                  |          |
| 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                         | 11.0                  |                  | 182.2                   | .9915                 | 1.204                         |                                         | 2392.5               |
| 2.                        |                       |                  |                         |                       |                               |                                         |                      |
| 3.                        |                       |                  |                         |                       |                               |                                         |                      |
| 4.                        |                       |                  |                         |                       |                               |                                         |                      |
| 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 _____ XXXXXXXXXX  |
| 3.  |                |          |                |   | Specific Gravity Flowing Fluid _____ XXXXXXXXXX  |
| 4.  |                |          |                |   | Critical Pressure _____ P.S.I.A.                 |
| 5.  |                |          |                |   | Critical Temperature _____ R                     |

  

|                                                              |                |                |                             |                                                           |
|--------------------------------------------------------------|----------------|----------------|-----------------------------|-----------------------------------------------------------|
| P <sub>c</sub> 1254.2    P <sub>c</sub> <sup>2</sup> 1573017 |                |                |                             |                                                           |
| 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                                                            | 33196.8        | 359.96         | 129572.2                    | 1443445                                                   |
| 2                                                            |                |                |                             |                                                           |
| 3                                                            |                |                |                             |                                                           |
| 4                                                            |                |                |                             |                                                           |
| 5                                                            |                |                |                             |                                                           |

  

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0897$$

$$(2) \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0665$$

  

$$AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2551.6$$

  

|                    |        |              |                  |              |
|--------------------|--------|--------------|------------------|--------------|
| Absolute Open Flow | 2551.6 | Mcf @ 15.025 | Angle of Slope θ | Slope, n .75 |
|--------------------|--------|--------------|------------------|--------------|

  

Remarks: Fc 9.402    G.L. 4062    I.C.<sup>2</sup> .256    P<sub>t</sub> 182.2

  

|                         |                         |                       |             |
|-------------------------|-------------------------|-----------------------|-------------|
| Approved by Commission: | Conducted By:<br>R.A.F. | Calculated By:<br>RAF | Checked By: |
|-------------------------|-------------------------|-----------------------|-------------|