

**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>4-7-77                    |                                       |                       |                                     |                               |  |
| Company<br>Aztec Oil & Gas Company                                                                                        |             |                         |                      |                                    | Connection<br>Southern Union Gathering |                                       |                       |                                     |                               |  |
| Pool<br>Blanco                                                                                                            |             |                         |                      |                                    | Formation<br>Mesa Verde                |                                       |                       |                                     |                               |  |
| Completion Date<br>3-26-77                                                                                                |             |                         | Total Depth<br>5398' |                                    | Plug Back TD<br>5300'                  |                                       | Elevation<br>6199' GR |                                     | Farm or Lease Name<br>Grenier |  |
| Csg. Size<br>7.000                                                                                                        | Wt.<br>20#  | d<br>6.456              | Set At<br>3151       | Perforations:<br>From 5034 To 5292 |                                        |                                       |                       | Well No.<br>#3-A                    |                               |  |
| Tbg. Size<br>2.375                                                                                                        | Wt.<br>4.70 | d<br>1.995              | Set At<br>5268       | Perforations:<br>From --- To ---   |                                        |                                       |                       | Unit Sec. Twp. Rge.<br>G 13 31N 12W |                               |  |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single                                                         |             |                         |                      |                                    | Packer Set At<br>-----                 |                                       |                       | County<br>San Juan                  |                               |  |
| Producing Thru<br>Tbg                                                                                                     |             | Reservoir Temp. °F<br>@ |                      | Mean Annual Temp. °F<br>@          |                                        | Baro. Press. - P <sub>a</sub><br>12.2 |                       | State<br>New Mexico                 |                               |  |
| L                                                                                                                         | H           | Gg<br>.700              | % CO <sub>2</sub>    | % N <sub>2</sub>                   | % H <sub>2</sub> S                     | Prover                                | 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        |                  |   |              |                 |                      |          | 794             |          | 800             |          |                  |
| 1.        | 2"               | X | 3/4"         |                 |                      |          | 266             |          | 635             |          |                  |
| 2.        |                  |   |              |                 |                      |          | 245             |          | 599             |          |                  |
| 3.        |                  |   |              |                 |                      |          | 233             |          | 578             |          |                  |
| 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                         | 12.365                |                  | 245.2                   | 1.0000                | .9258                         | 1.0000                                  | 2,807                |
| 2.                        |                       |                  |                         |                       |                               |                                         |                      |
| 3.                        |                       |                  |                         |                       |                               |                                         |                      |
| 4.                        |                       |                  |                         |                       |                               |                                         |                      |
| 5.                        |                       |                  |                         |                       |                               |                                         |                      |

  

|     |                |          |                |   |                                                      |  |
|-----|----------------|----------|----------------|---|------------------------------------------------------|--|
| NO. | P <sub>t</sub> | Temp. °R | T <sub>f</sub> | Z | Gas Liquid Hydrocarbon Ratio _____ Mcf/Bbl.          |  |
| 1.  |                |          |                |   | A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.     |  |
| 2.  |                |          |                |   | Specific Gravity Separator Gas _____ X X X X X X X X |  |
| 3.  |                |          |                |   | Specific Gravity Flowing Fluid _____ X X X X X       |  |
| 4.  |                |          |                |   | Critical Pressure _____ P.S.I.A. _____ P.S.I.A.      |  |
| 5.  |                |          |                |   | Critical Temperature _____ R _____ R                 |  |

  

|                                 |                             |                |                             |                                                           |
|---------------------------------|-----------------------------|----------------|-----------------------------|-----------------------------------------------------------|
| $P_c = 812.2$ $P_c^2 = 659,669$ |                             |                |                             |                                                           |
| NO.                             | P <sub>t</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                               |                             | 590.2          | 348,336                     | 311,333                                                   |
| 2                               |                             |                |                             |                                                           |
| 3                               |                             |                |                             |                                                           |
| 4                               |                             |                |                             |                                                           |
| 5                               |                             |                |                             |                                                           |

  

(1)  $\frac{P_c^2}{P_c^2 - P_w^2} = 2.1189$

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4,930$

(2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.7562$

  

|                    |       |                |                         |          |     |
|--------------------|-------|----------------|-------------------------|----------|-----|
| Absolute Open Flow | 4,930 | Mcf/d @ 15.025 | Angle of Slope $\theta$ | Slope, n | .75 |
|--------------------|-------|----------------|-------------------------|----------|-----|

  

Remarks:

  

|                         |                                  |                                      |                                   |
|-------------------------|----------------------------------|--------------------------------------|-----------------------------------|
| Approved By Commission: | Conducted By:<br>Leroy Castleman | Calculated By:<br><i>James Smith</i> | Checked By:<br><i>[Signature]</i> |
|-------------------------|----------------------------------|--------------------------------------|-----------------------------------|