

**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<br>1-6-75                         |                |
| Company<br>Southern Union Production                                                                                   |   |                                           |                   | Connection<br>Southern Union Gas Company |                    |                                             |                |
| Pool<br>Undesignated                                                                                                   |   |                                           |                   | Formation<br>Tocito                      |                    | Unit                                        |                |
| Completion Date<br>12-14-74                                                                                            |   | Total Depth<br>7620'                      |                   | Plug Back TD<br>7585'                    |                    | Elevation<br>7168 GR                        |                |
| G.C. Size<br>4 1/2"                                                                                                    |   | 20# & 23# <sup>d</sup><br>10.50# & 11.60# |                   | Perforations:<br>From 7560' To 7572'     |                    | Farm or Lease Name<br>Jicarilla "A"         |                |
| Tub. Size<br>1 1/2"                                                                                                    |   | Wt.<br>2.90#                              |                   | Set At<br>7512'                          |                    | Well No.<br>#17                             |                |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Multiple                                                    |   |                                           |                   | Packer Set At<br>7512'                   |                    | County<br>Rio Arriba                        |                |
| Producing Thru<br>Tubing                                                                                               |   | Reservoir Temp. °F<br>#                   |                   | Mean Annual Temp. °F                     |                    | Baro. Press. - P <sub>0</sub><br>New Mexico |                |
| L                                                                                                                      | H | G <sub>g</sub>                            | % 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        | 2"               |   | 3/4"         |                 |                      |             | 404             |             |                 |                  | 7 Days  |
| 1.        |                  |   |              |                 |                      |             | 32              |             |                 |                  | 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 F <sub>t</sub> | Gravity Factor F <sub>g</sub> | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mcfd |
| 1                         | 12.365                |                  | 32                      | 1.0000                           | .9258                         | 1.0000                                  | 366                  |
| 2.                        |                       |                  |                         |                                  |                               |                                         |                      |
| 3.                        |                       |                  |                         |                                  |                               |                                         |                      |
| 4.                        |                       |                  |                         |                                  |                               |                                         |                      |
| 5.                        |                       |                  |                         |                                  |                               |                                         |                      |

  

|     |                |          |                |   |                                                      |
|-----|----------------|----------|----------------|---|------------------------------------------------------|
| NO. | P <sub>t</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 _____ 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 <sub>c</sub> 404      P <sub>c</sub> <sup>2</sup> 163,216 |                             |                |                             | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0832$                | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0617$ |
| 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                                                           |                             | 112            | 12,544                      | 150,672                                                   |                                                             |
| 2                                                           |                             |                |                             |                                                           |                                                             |
| 3                                                           |                             |                |                             |                                                           |                                                             |
| 4                                                           |                             |                |                             |                                                           |                                                             |
| 5                                                           |                             |                |                             |                                                           |                                                             |

  

$ADP = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 388$

$ADP = Q$

  

|                    |     |                |                  |          |
|--------------------|-----|----------------|------------------|----------|
| Absolute Open Flow | 388 | Mcf/d @ 15.025 | Angle of Slope @ | Slope, n |
| Remarks:           |     |                |                  |          |

  

|                         |               |                |                                |
|-------------------------|---------------|----------------|--------------------------------|
| Approved By Commission: | Conducted By: | Calculated By: | Checked By: <i>[Signature]</i> |
|-------------------------|---------------|----------------|--------------------------------|