

NEW MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122  
Revised 9-1-65

**RECEIVED**

|                                                                                                                           |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|------------------------------------------|-----------------------------|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|----------------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                                              |                                          |                             | Test Date<br><b>10/1/69</b>                               |                                                                                                                                                                                                                                                     | <b>OCT 3 1969</b><br><br>OIL CON. COM.<br>DIST. 3 |                      |
| Company<br><b>SOUTHERN UNION PRODUCTION CO.</b>                                                                           |                                              |                                          |                             | Connection<br><b>SOUTHERN UNION GAS COMPANY</b>           |                                                                                                                                                                                                                                                     |                                                   |                      |
| Pool<br><b>BASIN</b>                                                                                                      |                                              |                                          |                             | Formation<br><b>DAKOTA</b>                                |                                                                                                                                                                                                                                                     | Unit                                              |                      |
| Completion Date<br><b>9/9/69</b>                                                                                          |                                              | Total Depth<br><b>7835</b>               |                             | Plug Back TD<br><b>7813</b>                               |                                                                                                                                                                                                                                                     | Elevation<br><b>6699</b>                          |                      |
| Farm or Lease Name<br><b>JICARILLA "G"</b>                                                                                |                                              | Well No.<br><b>6</b>                     |                             | Perforations:<br>From <b>7624</b> To <b>7808</b>          |                                                                                                                                                                                                                                                     |                                                   |                      |
| CP<br><b>7.625</b>                                                                                                        | Wt.<br><b>26.40</b>                          | d<br><b>6.969</b>                        | Set At<br><b>3597</b>       | Perforations:<br>From <b>7700</b> To <b>7708</b>          |                                                                                                                                                                                                                                                     | Unit Sec. Twp. Rge.<br><b>L 2 26N 5W</b>          |                      |
| Tbg. Size<br><b>1.900</b>                                                                                                 | Wt.<br><b>2.75</b>                           | d<br><b>1.610</b>                        | Set At<br><b>7708</b>       |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br><b>DUAL - GAS-GAS</b>                                          |                                              |                                          |                             | Packer Set At<br><b>7532</b>                              |                                                                                                                                                                                                                                                     | County<br><b>RIO ARriba</b>                       |                      |
| Producing Thru<br><b>TUBING</b>                                                                                           |                                              | Reservoir Temp. °F<br><b>@</b>           |                             | Mean Annual Temp. °F<br><b>@</b>                          |                                                                                                                                                                                                                                                     | Baro. Press. - P <sub>a</sub><br><b>12</b>        |                      |
| State<br><b>NEW MEXICO</b>                                                                                                |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
| L<br><b>7688</b>                                                                                                          | H                                            | Gg<br><b>.700</b>                        | % CO <sub>2</sub>           | % N <sub>2</sub>                                          | % H <sub>2</sub> S                                                                                                                                                                                                                                  | Prover                                            | Meter Run Taps       |
| FLOW DATA                                                                                                                 |                                              |                                          |                             | TUBING DATA                                               |                                                                                                                                                                                                                                                     | CASING DATA                                       |                      |
| NO.                                                                                                                       | Prover Line Size                             | X                                        | Orifice Size                | Press. p.s.i.g.                                           | Diff. h <sub>w</sub>                                                                                                                                                                                                                                | Temp. °F                                          | Duration of Flow     |
| SI                                                                                                                        | <b>2"</b>                                    |                                          | <b>3/4"</b>                 |                                                           |                                                                                                                                                                                                                                                     |                                                   | <b>17 DAYS</b>       |
| 1.                                                                                                                        |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     | <b>2362</b>                                       | <b>3 HOURS</b>       |
| 2.                                                                                                                        |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     | <b>145</b>                                        |                      |
| 3.                                                                                                                        |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     | <b>580</b>                                        |                      |
| 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 Fg                                                                                                                                                                                                                                   | Super Compress. Factor, Fpv                       | Rate of Flow Q, Mcfd |
| 1                                                                                                                         | <b>12.3650</b>                               |                                          | <b>157</b>                  | <b>1.0019</b>                                             | <b>0.9258</b>                                                                                                                                                                                                                                       | <b>1.018</b>                                      | <b>1,833</b>         |
| 2.                                                                                                                        |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
| 3.                                                                                                                        |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
| 4.                                                                                                                        |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
| 5.                                                                                                                        |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
| NO.                                                                                                                       | P <sub>t</sub>                               | Temp. °R                                 | T <sub>f</sub>              | Z                                                         | Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.<br>A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.<br>Specific Gravity Separator Gas _____<br>Specific Gravity Flowing Fluid _____<br>Critical Pressure _____ P.S.I.A.<br>Critical Temperature _____ R |                                                   |                      |
| 1.                                                                                                                        |                                              |                                          |                             |                                                           | X X X X X X X X                                                                                                                                                                                                                                     |                                                   |                      |
| 2.                                                                                                                        |                                              |                                          |                             |                                                           | X X X X X                                                                                                                                                                                                                                           |                                                   |                      |
| 3.                                                                                                                        |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
| 4.                                                                                                                        |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
| 5.                                                                                                                        |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
| P <sub>c</sub> <b>2374</b>                                                                                                | P <sub>c</sub> <sup>2</sup> <b>5,635,876</b> |                                          |                             |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
| 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) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0601$ (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0447$                                                                                                                                              |                                                   |                      |
| 1                                                                                                                         | <b>24,649</b>                                |                                          | <b>319,583</b>              | <b>5,316,293</b>                                          |                                                                                                                                                                                                                                                     |                                                   |                      |
| 2                                                                                                                         |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
| 3                                                                                                                         |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
| 4                                                                                                                         |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
| 5                                                                                                                         |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
| AOF = Q $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,915$                                                            |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
| Absolute Open Flow <b>1,915</b> Mcfd @ 15.025                                                                             |                                              |                                          |                             |                                                           | Angle of Slope $\theta$ _____                                                                                                                                                                                                                       |                                                   | Slope, n <b>0.75</b> |
| Remarks: _____                                                                                                            |                                              |                                          |                             |                                                           |                                                                                                                                                                                                                                                     |                                                   |                      |
| Approved By Commission:                                                                                                   |                                              | Conducted By:<br><b>KENNETH E. RODDY</b> |                             | Calculated By:<br><b>KENNETH E. RODDY</b>                 |                                                                                                                                                                                                                                                     | Checked By:<br><b>KENNETH E. RODDY</b>            |                      |