

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><b>10/11/71</b> |                                            |
| Company<br><b>Southern Union Production Co.</b>                                                                           |                     |                                |                       | Connection<br><b>Southern Union Gas Company</b>  |                              |                                            |
| Pool<br><b>South Blanco</b>                                                                                               |                     |                                |                       | Formation<br><b>Pictured Cliffs</b>              |                              | Unit<br><b>Oil. CON. COM. DIST. 3</b>      |
| Completion Date<br><b>9/24/71</b>                                                                                         |                     | Total Depth<br><b>7700</b>     |                       | Plug Back TD<br><b>7642</b>                      |                              | Elevation<br><b>6812</b>                   |
| Farm or Lease Name<br><b>Jicarilla "K"</b>                                                                                |                     |                                |                       |                                                  |                              | Well No.<br><b>15</b>                      |
| Csg. Size<br><b>5.500</b>                                                                                                 | Wt.<br><b>15.50</b> | d<br><b>4.950</b>              | Set At<br><b>7690</b> | Perforations:<br>From <b>3196</b> To <b>3206</b> |                              |                                            |
| Tbg. Size<br><b>1.900</b>                                                                                                 | Wt.<br><b>2.76</b>  | d<br><b>1.610</b>              | Set At<br><b>3188</b> | Perforations:<br>From <b>3180</b> To <b>3188</b> |                              |                                            |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br><b>Dual - Gas - Gas</b>                                        |                     |                                |                       | Packer Set At<br><b>7250</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>3169</b>                                                                                                          | H                   | Gg<br><b>0.620</b>             | % 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"         |                 |                      |          | 963             |          | 963             |          | 15 Days          |
| 1.        |                  |   |              |                 |                      |          | 99              | 59°      | 328             |          | 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                         | 12.3650               |                  | 111                     | 1.0010                           | 0.9837                        | 1.009                                   | 1364                 |
| 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 <sub>c</sub> <b>975</b> | P <sub>c</sub> <sup>2</sup> <b>950,625</b> | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1384$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1165$ |
| NO.                       | P <sub>t</sub> <sup>2</sup>                | P <sub>w</sub>                             | P <sub>w</sub> <sup>2</sup>                                 |
| 1                         |                                            | 340                                        | 115,600                                                     |
| 2                         |                                            |                                            |                                                             |
| 3                         |                                            |                                            |                                                             |
| 4                         |                                            |                                            |                                                             |
| 5                         |                                            |                                            |                                                             |

  

|                                              |  |                               |                      |
|----------------------------------------------|--|-------------------------------|----------------------|
| Absolute Open Flow <b>1523</b> Mcfd @ 15.025 |  | Angle of Slope $\theta$ _____ | Slope, n <b>0.85</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> |
|-------------------------|------------------------------------------|-------------------------------------------|----------------------------------------|