

**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>5-17-79                                                                                   |                                         |
| Company<br>Southland Royalty Company                                                                                   |                             |                                |                             | Connection<br>Southern Union Gathering                    |                                                                                                        |                                         |
| Pool<br>Basin                                                                                                          |                             |                                |                             | Formation<br>Dakota                                       |                                                                                                        | Unit                                    |
| Completion Date<br>5-10-79                                                                                             |                             | Total Depth<br>6931'           |                             | Plug Back TD<br>6924'                                     |                                                                                                        | Elevation<br>5861' GR                   |
| Casing Size<br>4.500                                                                                                   |                             | Wt.<br>10.5#                   | d<br>4.052                  | Set At<br>4939'                                           | Perforations:<br>From 6750' To 6900'                                                                   |                                         |
| Casing Size<br>4.500                                                                                                   |                             | Wt.<br>11.6#                   | d<br>4.000                  | Set At<br>6931'                                           | Perforations:<br>From To                                                                               |                                         |
| Tubg. Size<br>2.375                                                                                                    |                             | Wt.<br>4.7#                    | d<br>1.995                  | Set At<br>6869'                                           | From To                                                                                                |                                         |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single                                                      |                             |                                |                             |                                                           | Packer Set At<br>-----                                                                                 |                                         |
| Producing Thru<br>Tbg.                                                                                                 |                             | Reservoir Temp. °F<br>@        |                             | Mean Annual Temp. °F                                      |                                                                                                        | Baro. Press. - P <sub>a</sub><br>12.2   |
| L                                                                                                                      |                             | H                              | G <sub>g</sub><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                             |
| NO.                                                                                                                    | Prover Line Size            | X                              | Orifice Size                | Press. p.s.i.g.                                           | Diff. h <sub>w</sub>                                                                                   | Temp. °F                                |
| 1.                                                                                                                     | 2"                          | X                              | 3/4"                        |                                                           |                                                                                                        |                                         |
| 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> |
| 1.                                                                                                                     | 12.365                      |                                | 102.2                       | 1.000                                                     | .9258                                                                                                  | 1.0000                                  |
| 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                                                                   |                                         |
| $P_c = 1920.2$ $P_c^2 = 3,687,168$ $P_w^2 = 502.2^2 = 252,205$ $P_c^2 - P_w^2 = 3,434,963$                             |                             |                                |                             |                                                           |                                                                                                        |                                         |
| 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> | $(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0734$ $(2) \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0546$ |                                         |
| 1.                                                                                                                     |                             | 502.2                          | 252,205                     | 3,434,963                                                 |                                                                                                        |                                         |
| 2.                                                                                                                     |                             |                                |                             |                                                           |                                                                                                        |                                         |
| 3.                                                                                                                     |                             |                                |                             |                                                           |                                                                                                        |                                         |
| 4.                                                                                                                     |                             |                                |                             |                                                           |                                                                                                        |                                         |
| 5.                                                                                                                     |                             |                                |                             |                                                           |                                                                                                        |                                         |
| Absolute Open Flow 1.234 Mcf/d @ 15.025                                                                                |                             |                                |                             |                                                           | Angle of Slope @ _____ Slope, n .75                                                                    |                                         |
| Remarks:                                                                                                               |                             |                                |                             |                                                           |                                                                                                        |                                         |
| Approved By Commission:                                                                                                |                             | Conducted By:<br>Mike Cattaneo |                             | Calculated By:<br>James Smith                             |                                                                                                        | Checked By:                             |