

## OIL CONSERVATION DIVISION

Form C-122  
Revised 10-1-78STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

## MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

|                                                                                                                           |                             |                            |                             |                                                           |                                                             |
|---------------------------------------------------------------------------------------------------------------------------|-----------------------------|----------------------------|-----------------------------|-----------------------------------------------------------|-------------------------------------------------------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                             |                            |                             | Test Date<br>11-3-82                                      |                                                             |
| Company<br>Southland Royalty Company                                                                                      |                             |                            |                             | Connection<br>Northwest Pipeline Corporation              |                                                             |
| Pool<br>Gobernador                                                                                                        |                             |                            |                             | Formation<br>Pictured Cliffs                              |                                                             |
| Completion Date<br>10-21-82                                                                                               |                             | Total Depth<br>6200'       |                             | Plug Back TD<br>6102'                                     |                                                             |
| Elevation<br>6773' GL                                                                                                     |                             | Farm Lease Name<br>La Jara |                             |                                                           |                                                             |
| Gas. Size<br>7.000                                                                                                        | Wt.<br>23#                  | d<br>6.366                 | Set At<br>3950'             | Perforations:<br>From To                                  |                                                             |
| 4.500                                                                                                                     | 10.5#                       | 4.052                      | 3727-6134'                  | Well No.<br>1R                                            |                                                             |
| Thq. Size<br>1.900                                                                                                        | Wt.<br>2.76#                | d<br>1.610                 | Set At<br>3710'             | Perforations:<br>From 3609' To 3732'                      |                                                             |
| Type Well - Single - Dradhead - G.G. or G.O. Multiple<br>G.G. - Multiple                                                  |                             |                            |                             | Packer Set At<br>3819'                                    |                                                             |
| Producing Thru<br>Tubing                                                                                                  |                             | Reservoir Temp. °F<br>#    |                             | Baro. Press. - P <sub>a</sub><br>12.2                     |                                                             |
| County<br>Rio Arriba                                                                                                      |                             | State<br>New Mexico        |                             |                                                           |                                                             |
| L                                                                                                                         | H                           | G <sub>g</sub>             | % CO <sub>2</sub>           | % N <sub>2</sub>                                          | % H <sub>2</sub> S                                          |
|                                                                                                                           |                             | .700                       |                             |                                                           |                                                             |
| FLOW DATA                                                                                                                 |                             |                            | TUBING DATA                 |                                                           | CASING DATA                                                 |
| NO.                                                                                                                       | Prover Line Size            | X                          | Orifice Size                | Press. p.s.i.g.                                           | Diff. h <sub>w</sub>                                        |
| SI                                                                                                                        |                             |                            |                             |                                                           |                                                             |
| 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>                               |
| 1                                                                                                                         | 12.365                      |                            | 205.2                       | 1.0000                                                    | .9258                                                       |
| 2.                                                                                                                        |                             |                            |                             |                                                           |                                                             |
| 3.                                                                                                                        |                             |                            |                             |                                                           |                                                             |
| 4.                                                                                                                        |                             |                            |                             |                                                           |                                                             |
| 5.                                                                                                                        |                             |                            |                             |                                                           |                                                             |
| NO.                                                                                                                       | P <sub>r</sub>              | Temp. °R                   | T <sub>r</sub>              | Z                                                         | Gas Liquid Hydrocarbon Ratio                                |
| 1.                                                                                                                        |                             |                            |                             |                                                           | Mcf/bbl.                                                    |
| 2.                                                                                                                        |                             |                            |                             |                                                           | A.P.I. Gravity of Liquid Hydrocarbons                       |
| 3.                                                                                                                        |                             |                            |                             |                                                           | Specific Gravity Separator Gas                              |
| 4.                                                                                                                        |                             |                            |                             |                                                           | Specific Gravity Flowing Fluid                              |
| 5.                                                                                                                        |                             |                            |                             |                                                           | Critical Pressure                                           |
|                                                                                                                           |                             |                            |                             |                                                           | Critical Temperature                                        |
| $P_c = 1114.2$ $P_c^2 = 1241441.6$                                                                                        |                             |                            |                             |                                                           |                                                             |
| NO.                                                                                                                       | P <sub>r</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) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.4975$                  |
| 1                                                                                                                         |                             | 642.2                      | 412420.8                    | 829020.8                                                  | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4095$ |
| 2                                                                                                                         |                             |                            |                             |                                                           |                                                             |
| 3                                                                                                                         |                             |                            |                             |                                                           |                                                             |
| 4                                                                                                                         |                             |                            |                             |                                                           |                                                             |
| 5                                                                                                                         |                             |                            |                             |                                                           |                                                             |
| $AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3311$                                                             |                             |                            |                             |                                                           |                                                             |
| Absolute Open Flow                                                                                                        |                             |                            |                             | Mcf @ 15.025                                              |                                                             |
| Angle of Slope                                                                                                            |                             |                            |                             | Slope, n .85                                              |                                                             |
| Remarks: Dry                                                                                                              |                             |                            |                             |                                                           |                                                             |
| Approved By Division                                                                                                      |                             | Conducted By:              |                             | Calculated By:                                            |                                                             |
|                                                                                                                           |                             | Steve McCament             |                             | James Smith                                               |                                                             |
|                                                                                                                           |                             |                            |                             | Checked By:                                               |                                                             |
|                                                                                                                           |                             |                            |                             | R. E. Fielder                                             |                                                             |