

## OIL CONSERVATION DIVISION

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

## 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>8-27-81                   |                                                                                            |
| Company<br>Southland Royalty Company                                                                                      |                                         | Connection<br>Southern Union Gathering |                                                                                            |
| Pool<br>Undesignated                                                                                                      |                                         | Formation<br>Gallup                    |                                                                                            |
| Completion Date<br>8-7-81                                                                                                 |                                         | Total Depth<br>7126'                   | Plug Back TD<br>7071'                                                                      |
|                                                                                                                           |                                         | Elevation<br>5925' GR                  | Farm or Lease Name<br>Nye                                                                  |
| Cas. Size<br>7.625<br>5.500<br>2.375                                                                                      | Wt.<br>26.40#<br>17#<br>15.50#<br>4.70# | d<br>6.969<br>4.892<br>4.950<br>1.995  | Set At<br>4670'<br>4501-7117'<br>6257'                                                     |
| Perforations:<br>From To                                                                                                  |                                         | Perforations:<br>From To               |                                                                                            |
|                                                                                                                           |                                         | 6154' 6288'                            |                                                                                            |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single - G.G.                                                  |                                         | Packer Set At<br>-----                 | County<br>San Juan                                                                         |
| Producing Thru<br>Tubing                                                                                                  | Reservoir Temp. °F<br>P                 | Mean Annual Temp. °F                   | Baro. Press. - P <sub>a</sub><br>12.2                                                      |
| State<br>New Mexico                                                                                                       |                                         |                                        |                                                                                            |
| 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        |             | Duration<br>of<br>Flow |
|-----------|------------------------|---|-----------------|--------------------|-------------------------|-------------|--------------------|-------------|--------------------|-------------|------------------------|
| NO.       | Prover<br>Line<br>Size | X | Orifice<br>Size | Press.<br>p.s.i.g. | Diff.<br>h <sub>w</sub> | Temp.<br>°F | Press.<br>p.s.i.g. | Temp.<br>°F | Press.<br>p.s.i.g. | Temp.<br>°F |                        |
| 1.        | 2"                     | X | 3/8"            |                    |                         |             | 1159               |             | 1161               |             | 1 hr                   |
| 2.        |                        |   |                 |                    |                         |             | 398                |             | 577                |             | 2 hrs                  |
| 3.        |                        |   |                 |                    |                         |             | 226                |             | 383                |             | 3 hrs                  |
| 4.        |                        |   |                 |                    |                         |             | 167                |             | 296                |             |                        |
| 5.        |                        |   |                 |                    |                         |             |                    |             |                    |             |                        |

  

| RATE OF FLOW CALCULATIONS |                          |                  |                            |                                        |                                     |                                               |                         |
|---------------------------|--------------------------|------------------|----------------------------|----------------------------------------|-------------------------------------|-----------------------------------------------|-------------------------|
| NO.                       | Coefficient<br>(24 Hour) | $\sqrt{h_w P_m}$ | Pressure<br>P <sub>m</sub> | Flow Temp.<br>Factor<br>F <sub>t</sub> | Gravity<br>Factor<br>F <sub>g</sub> | Super<br>Compress.<br>Factor, F <sub>pr</sub> | Rate of Flow<br>Q, Mcfd |
| 1.                        | 3.03                     |                  | 179.2                      | 1.0000                                 | .9258                               | 1.0000                                        | 503                     |
| 2.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 3.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 4.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 5.                        |                          |                  |                            |                                        |                                     |                                               |                         |

  

| NO. | P <sub>r</sub> | Temp. °R | T <sub>r</sub> | Z | Gas Liquid Hydrocarbon Ratio _____ Mcf/Ubl.      |
|-----|----------------|----------|----------------|---|--------------------------------------------------|
| 1.  |                |          |                |   | A.P.I. Gravity of Liquid Hydrocarbons _____ Deg. |
| 2.  |                |          |                |   | Specific Gravity Separator Gas _____ XXXXX       |
| 3.  |                |          |                |   | Specific Gravity Flowing Fluid _____ XXX         |
| 4.  |                |          |                |   | Critical Pressure _____ P.S.I.A. _____ P.S.I.A.  |
| 5.  |                |          |                |   | Critical Temperature _____ R _____ R             |

  

| NO. | P <sub>i</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) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0741$ | $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0551$ |
|-----|-----------------------------|----------------|-----------------------------|-----------------------------------------------------------|--------------------------------------------|---------------------------------------------------------|
| 1.  |                             | 308.2          | 94987.2                     | 1281411.0                                                 |                                            |                                                         |
| 2.  |                             |                |                             |                                                           |                                            |                                                         |
| 3.  |                             |                |                             |                                                           |                                            |                                                         |
| 4.  |                             |                |                             |                                                           |                                            |                                                         |
| 5.  |                             |                |                             |                                                           |                                            |                                                         |

  

|                                                  |  |                                |  |                               |  |
|--------------------------------------------------|--|--------------------------------|--|-------------------------------|--|
| Absolute Open Flow _____ 531 _____ Mcfd @ 15.025 |  | Angle of Slope θ _____         |  | Slope, n _____ .75            |  |
| Remarks: _____                                   |  |                                |  |                               |  |
| Approved By Division                             |  | Conducted By:<br>Mike Cattaneo |  | Calculated By:<br>James Smith |  |
|                                                  |  |                                |  | Checked By:<br>L. O. Van Ryan |  |