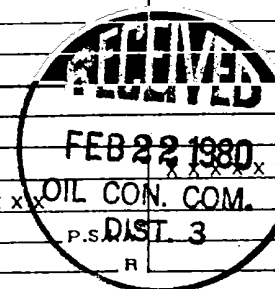


NEW MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

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>2-13-80                                  |                      |
| Company<br>Southland Royalty Company                                                                                      |                       |                               |                             | Connection<br>Southern Union Gathering                    |                                                                                                        |                                                       |                      |
| Pool<br>Basin                                                                                                             |                       |                               |                             | Formation<br>Dakota                                       |                                                                                                        | Unit                                                  |                      |
| Completion Date<br>2-6-80                                                                                                 |                       | Total Depth<br>7174'          |                             | Plug Back TD<br>7129'                                     |                                                                                                        | Elevation<br>6564' GR                                 |                      |
| Csg. Size<br>5.500                                                                                                        |                       | Wt.<br>15.5#                  |                             | Set At<br>4.892                                           |                                                                                                        | Perforations:<br>From 6894' To 7150'                  |                      |
| Tub. Size<br>2.875                                                                                                        |                       | Wt.<br>4.7#                   |                             | Set At<br>2.441                                           |                                                                                                        | Perforations:<br>From To                              |                      |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single                                                         |                       |                               |                             |                                                           |                                                                                                        | Packer Set At<br>--                                   |                      |
| Producing Thru<br>Tubing                                                                                                  |                       | Reservoir Temp. °F<br>θ       |                             | Mean Annual Temp. °F                                      |                                                                                                        | Baro. Press. - P <sub>a</sub><br>12.2                 |                      |
| L                                                                                                                         |                       | H                             |                             | Gg<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 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.      |
| 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>               | Rate of Flow Q, Mcfd |
| 1.                                                                                                                        | 12.365                |                               | 94.2                        | 1.0000                                                    | .9258                                                                                                  | 1.0000                                                | 1078                 |
| 2.                                                                                                                        |                       |                               |                             |                                                           |                                                                                                        |                                                       |                      |
| 3.                                                                                                                        |                       |                               |                             |                                                           |                                                                                                        |                                                       |                      |
| 4.                                                                                                                        |                       |                               |                             |                                                           |                                                                                                        |                                                       |                      |
| 5.                                                                                                                        |                       |                               |                             |                                                           |                                                                                                        |                                                       |                      |
| NO.                                                                                                                       | P <sub>r</sub>        | Temp. °R                      | T <sub>r</sub>              | Z                                                         | Gas Liquid Hydrocarbon Ratio                                                                           |                                                       |                      |
| 1.                                                                                                                        |                       |                               |                             |                                                           | A.P.I. Gravity of Liquid Hydrocarbons                                                                  |                                                       |                      |
| 2.                                                                                                                        |                       |                               |                             |                                                           | Specific Gravity Separator Gas                                                                         |                                                       |                      |
| 3.                                                                                                                        |                       |                               |                             |                                                           | Specific Gravity Flowing Fluid                                                                         |                                                       |                      |
| 4.                                                                                                                        |                       |                               |                             |                                                           | Critical Pressure                                                                                      |                                                       |                      |
| 5.                                                                                                                        |                       |                               |                             |                                                           | Critical Temperature                                                                                   |                                                       |                      |
| $P_c = 1359.2$ $P_w = 1847424.6$                                                                                          |                       |                               |                             |                                                           | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2247$ (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1642$ |                                                       |                      |
| NO.                                                                                                                       | P <sub>r</sub>        | 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> | AOF = Q $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1255$                                          |                                                       |                      |
| 1.                                                                                                                        |                       | 582.2                         | 338956.8                    | 1508467.7                                                 |                                                                                                        |                                                       |                      |
| 2.                                                                                                                        |                       |                               |                             |                                                           |                                                                                                        |                                                       |                      |
| 3.                                                                                                                        |                       |                               |                             |                                                           |                                                                                                        |                                                       |                      |
| 4.                                                                                                                        |                       |                               |                             |                                                           |                                                                                                        |                                                       |                      |
| 5.                                                                                                                        |                       |                               |                             |                                                           |                                                                                                        |                                                       |                      |
| Absolute Open Flow 1255 Mcfd @ 15.025                                                                                     |                       |                               |                             |                                                           | Angle of Slope θ                                                                                       |                                                       | Slope, n .75         |
| Remarks:                                                                                                                  |                       |                               |                             |                                                           |                                                                                                        |                                                       |                      |
| Approved By Commission:                                                                                                   |                       | Conducted By:<br>Odell Farley |                             | Calculated By:<br>James Smith                             |                                                                                                        | Checked By:                                           |                      |



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