

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

Form G-122  
 Revised 9-1-65

|                                                                                                                        |                             |                     |                             |                                                           |                                                             |                              |                       |                |                 |                  |        |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------|-----------------------------|-----------------------------------------------------------|-------------------------------------------------------------|------------------------------|-----------------------|----------------|-----------------|------------------|--------|
| Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                             |                     |                             |                                                           |                                                             | Test Date<br>10-11-77        |                       |                |                 |                  |        |
| Company<br>Northwest Pipeline Corp.                                                                                    |                             |                     |                             | Connection<br>New Completion                              |                                                             |                              |                       |                |                 |                  |        |
| Pool<br>Blanco                                                                                                         |                             |                     |                             | Formation<br>Pictured Cliffs                              |                                                             | Unit<br>Cox Canyon           |                       |                |                 |                  |        |
| Completion Date<br>9-26-77                                                                                             |                             | Total Depth<br>3204 |                             | Plug Back TD<br>3182                                      |                                                             | Elevation<br>6372 GR         |                       |                |                 |                  |        |
| Csg. Size<br>2.875                                                                                                     |                             | Wt.<br>6.4          |                             | d<br>2.441                                                |                                                             | Set At<br>3200               |                       |                |                 |                  |        |
| Thg. Size<br>None                                                                                                      |                             | Wt.<br>None         |                             | d<br>None                                                 |                                                             | Set At<br>None               |                       |                |                 |                  |        |
| Type Well - Single - Brodenhoe - G.G. or G.O. Multiple<br>Gas - Tubingless Completion                                  |                             |                     |                             | Packer Set At<br>None                                     |                                                             | Well No.<br>Com. 519         |                       |                |                 |                  |        |
| Producing Thru<br>Casing                                                                                               |                             |                     |                             | Reservoir Temp. °F<br>8                                   |                                                             | Mean Annual Temp. °F<br>12.0 |                       |                |                 |                  |        |
| L    H    Gg    % CO <sub>2</sub> % N <sub>2</sub> % H <sub>2</sub> S                                                  |                             |                     |                             | Basis Press. - P <sub>a</sub><br>12.0                     |                                                             | County<br>San Juan           |                       |                |                 |                  |        |
| .665                                                                                                                   |                             |                     |                             | Prover<br>Positive Choke                                  |                                                             | State<br>New Mexico          |                       |                |                 |                  |        |
| 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         |        |
| 1                                                                                                                      | 11 Day SIP                  |                     |                             |                                                           |                                                             |                              |                       |                | 873             |                  | SIP    |
| 2                                                                                                                      | 2                           | X                   | .750                        | 85                                                        |                                                             | 62°                          |                       |                | 85              |                  | 3 hrs. |
| 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 Fg                                           | Super Compress. Factor, Fpv  | Rate of Flow Q, Mcf/d |                |                 |                  |        |
| 1                                                                                                                      | 9.402                       |                     | 97                          | .998                                                      | 1.226                                                       | 1.009                        | 1126                  |                |                 |                  |        |
| 2                                                                                                                      |                             |                     |                             |                                                           |                                                             |                              |                       |                |                 |                  |        |
| 3                                                                                                                      |                             |                     |                             |                                                           |                                                             |                              |                       |                |                 |                  |        |
| 4                                                                                                                      |                             |                     |                             |                                                           |                                                             |                              |                       |                |                 |                  |        |
| 5                                                                                                                      |                             |                     |                             |                                                           |                                                             |                              |                       |                |                 |                  |        |
| NO.                                                                                                                    | P <sub>r</sub>              | Temp. °R            | T <sub>r</sub>              | Z                                                         | Gas Liquid Hydrocarbon Ratio _____ M. G. L. H.              |                              |                       |                |                 |                  |        |
| 1                                                                                                                      |                             |                     |                             |                                                           | A.P.L. 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> 885    P <sub>c</sub> <sup>2</sup> 783225                                                               |                             |                     |                             |                                                           |                                                             |                              |                       |                |                 |                  |        |
| 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) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0194$                  |                              |                       |                |                 |                  |        |
| 1                                                                                                                      |                             | 122                 | 14884                       | 768341                                                    | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0164$ |                              |                       |                |                 |                  |        |
| 2                                                                                                                      |                             |                     |                             |                                                           |                                                             |                              |                       |                |                 |                  |        |
| 3                                                                                                                      |                             |                     |                             |                                                           |                                                             |                              |                       |                |                 |                  |        |
| 4                                                                                                                      |                             |                     |                             |                                                           |                                                             |                              |                       |                |                 |                  |        |
| 5                                                                                                                      |                             |                     |                             |                                                           |                                                             |                              |                       |                |                 |                  |        |
| AOF = Q $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1145$                                                          |                             |                     |                             |                                                           |                                                             |                              |                       |                |                 |                  |        |
| Absolute Open Flow 1145    Mcf/d @ 15.025    Angle of Slope 0    Slope, n .85                                          |                             |                     |                             |                                                           |                                                             |                              |                       |                |                 |                  |        |
| Remarks: Well produced light mist of water with a trace of condensate.                                                 |                             |                     |                             |                                                           |                                                             |                              |                       |                |                 |                  |        |
| GL    1-e-s    FcQ <sup>2</sup> R <sup>2</sup> Pt <sup>2</sup> Pt + R <sup>2</sup> Calc. PW                            |                             |                     |                             |                                                           |                                                             |                              |                       |                |                 |                  |        |
| 2042    138    39068    5391    9409    14800    122                                                                   |                             |                     |                             |                                                           |                                                             |                              |                       |                |                 |                  |        |
| Approved By Commission:                                                                                                |                             |                     |                             | Conducted By:                                             |                                                             |                              |                       | Calculated By: |                 |                  |        |
| Wilfred Charley                                                                                                        |                             |                     |                             | B.J. Broughton                                            |                                                             |                              |                       | Checked By:    |                 |                  |        |