

**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>10-14-77                   |                                     |
| Company<br>Northwest Pipeline Corp.                                                                                       |                             |                         |                             | Connection<br>New Completion                              |                                                                                                        |                                         |                                     |
| Pool<br>Los Pinos                                                                                                         |                             |                         |                             | Formation<br>Fruitland                                    |                                                                                                        | Unit<br>San Juan 32-8                   |                                     |
| Completion Date<br>10-2-77                                                                                                |                             | Total Depth<br>3830     |                             | Plug Back TD<br>3670                                      |                                                                                                        | Elevation<br>6804 GR                    |                                     |
| Csg. Size<br>2.875                                                                                                        | Wt.<br>6.4                  | d<br>2.441              | Set At<br>3824              | Perforations:<br>From 3591 To 3642                        |                                                                                                        | Well No.<br>#37 (WO)                    |                                     |
| Tbg. Size<br>None                                                                                                         | Wt.                         | d                       | Set At                      | Perforations:<br>From To                                  |                                                                                                        | Unit Sec. Twp. Rge.<br>I 23 32 8        |                                     |
| Type Well - Single - Brodenhead - G.G. or G.O. Multiple<br>Gas - Tubingless Completion                                    |                             |                         |                             | Packer Set At<br>None                                     |                                                                                                        | County<br>San Juan                      |                                     |
| Producing Thru<br>Casing                                                                                                  |                             | Reservoir Temp. °F<br>@ |                             | Mean Annual Temp. °F<br>12.0                              |                                                                                                        | State<br>New Mexico                     |                                     |
| L                                                                                                                         | H                           | Gg                      | % CO <sub>2</sub>           | % N <sub>2</sub>                                          | % H <sub>2</sub> S                                                                                     | Prover<br>Positive Choke                | Meter Run<br>Taps                   |
| FLOW DATA                                                                                                                 |                             |                         |                             |                                                           |                                                                                                        | TUBING DATA                             |                                     |
| NO.                                                                                                                       | Prover Line Size            | X                       | Orifice Size                | Press. p.s.i.g.                                           | Diff. h <sub>w</sub>                                                                                   | Temp. °F                                | Duration of Flow                    |
| 1.                                                                                                                        | 10 day SIP                  |                         |                             |                                                           |                                                                                                        |                                         |                                     |
| 2.                                                                                                                        | 2                           | X                       | .750                        | 58                                                        |                                                                                                        | 63°                                     | 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, F <sub>pv</sub> | Rate of Flow Q, Mcf/d               |
| 1.                                                                                                                        | 9.402                       |                         | 70                          | .997                                                      | 1.291                                                                                                  | 1.007                                   | 3                                   |
| 2.                                                                                                                        |                             |                         |                             |                                                           |                                                                                                        |                                         |                                     |
| 3.                                                                                                                        |                             |                         |                             |                                                           |                                                                                                        |                                         |                                     |
| 4.                                                                                                                        |                             |                         |                             |                                                           |                                                                                                        |                                         |                                     |
| 5.                                                                                                                        |                             |                         |                             |                                                           |                                                                                                        |                                         |                                     |
| NO.                                                                                                                       | P <sub>t</sub>              | Temp. °R                | T <sub>t</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 <sub>c</sub> 1436    P <sub>c</sub> <sup>2</sup> 2062096                                                                |                             |                         |                             |                                                           | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0039$ (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0034$ |                                         |                                     |
| 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.                                                                                                                        |                             | 90                      | 8100                        | 2053996                                                   |                                                                                                        |                                         |                                     |
| 2.                                                                                                                        |                             |                         |                             |                                                           |                                                                                                        |                                         |                                     |
| 3.                                                                                                                        |                             |                         |                             |                                                           |                                                                                                        |                                         |                                     |
| 4.                                                                                                                        |                             |                         |                             |                                                           |                                                                                                        |                                         |                                     |
| 5.                                                                                                                        |                             |                         |                             |                                                           |                                                                                                        |                                         |                                     |
| AOF = Q $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 856$                                                              |                             |                         |                             |                                                           |                                                                                                        |                                         |                                     |
| Absolute Open Flow 856                                                                                                    |                             |                         |                             |                                                           | Mcf @ 15.025                                                                                           |                                         | Angle of Slope @ _____ Slope, n .85 |
| Remarks: Well produced medium mist of water throughout test.                                                              |                             |                         |                             |                                                           |                                                                                                        |                                         |                                     |
| G1                                                                                                                        |                             | 1-c-s                   |                             | FcQ <sup>2</sup>                                          | R <sup>2</sup>                                                                                         | Pt <sup>2</sup>                         | Pt <sup>2</sup> + R <sup>2</sup>    |
| 2155                                                                                                                      |                             | 145                     |                             | 22420                                                     | 3251                                                                                                   | 4900                                    | 8151                                |
| Approved By Commission:                                                                                                   |                             | Conducted By:           |                             | Calculated By:                                            |                                                                                                        | Checked By:                             |                                     |
|                                                                                                                           |                             | Wilfred Charley         |                             | B.J.. Broughton                                           |                                                                                                        |                                         |                                     |