

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

Form C-112  
Revised 6-1-65

|                                                                                                                           |            |                         |                   |                                               |                    |                                                            |  |                                          |      |
|---------------------------------------------------------------------------------------------------------------------------|------------|-------------------------|-------------------|-----------------------------------------------|--------------------|------------------------------------------------------------|--|------------------------------------------|------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |            |                         |                   |                                               |                    | Test Date<br>04/28/83                                      |  |                                          |      |
| Company<br>Northwest Pipeline Corporation                                                                                 |            |                         |                   | Connection<br>New Completion                  |                    |                                                            |  |                                          |      |
| Pool<br>Basin                                                                                                             |            |                         |                   | Formation<br>Dakota                           |                    |                                                            |  | Unit<br>San Juan 30-5                    |      |
| Completion Date<br>04-15-83                                                                                               |            | Total Depth<br>7720'    |                   | Plug Back TD<br>7660'                         |                    | Elevation<br>6211' KB                                      |  | Farm or Lease Name<br>San Juan 30-5 Unit |      |
| Csg. Size<br>4.500                                                                                                        | WL<br>11.6 | d<br>4.052              | Set At<br>7720'   | Perforations:<br>From 7580' To 7600'          |                    | Well No.<br>#78                                            |  |                                          |      |
| Tng. Size<br>2.375                                                                                                        | WL<br>4.7  | d<br>1.995              | Set At<br>7565'   | Perforations:<br>From                      To |                    | Unit    Sec.    Twp.    Rge.<br>L       7       30       5 |  |                                          |      |
| Type Well - Single - Standhead - G.G. or G.O. Multiple<br>Gas - Single                                                    |            |                         |                   |                                               |                    | Packer Set At<br>None                                      |  | County<br>Rio Arriba                     |      |
| Producing Thru<br>Tubing                                                                                                  |            | Reservoir Temp. °F<br>@ |                   | Mean Annual Temp. °F                          |                    | Baro. Press. - P <sub>a</sub><br>12.0                      |  | State<br>New Mexico                      |      |
| L                                                                                                                         | H          | Gg est.<br>.590         | % CO <sub>2</sub> | % N <sub>2</sub>                              | % H <sub>2</sub> S | Positive<br>Choke                                          |  | 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. |                        |
| SI        | SIP                    |   |                 |                    |                         |             | 2627               |             | 2641               |                        |
| 1.        | 2"                     | X | 1/50"           | 154                |                         | 69°         | 154                | 69°         | 601                | 69°                    |
| 2.        |                        |   |                 |                    |                         |             |                    |             |                    |                        |
| 3.        |                        |   |                 |                    |                         |             |                    |             |                    |                        |
| 4.        |                        |   |                 |                    |                         |             |                    |             |                    |                        |
| 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>pv</sub> | Rate of Flow<br>Q, Mcfd |
| 1                         | 9.604                    |                  | 166                        | .992                                   | 1.302                               | 1.012                                         | 2,084                   |
| 2.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 3.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 4.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 5.                        |                          |                  |                            |                                        |                                     |                                               |                         |

  

| NO. | P <sub>t</sub> | Temp. °R | T <sub>t</sub> | Z | Gas Liquid Hydrocarbon Ratio | A.P.I. Gravity of Liquid Hydrocarbons | Specific Gravity Separator Gas | Specific Gravity Flowing Fluid | Critical Pressure | Critical Temperature |
|-----|----------------|----------|----------------|---|------------------------------|---------------------------------------|--------------------------------|--------------------------------|-------------------|----------------------|
| 1.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 2.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 3.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 4.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 5.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |

  

| NO. | P <sub>t</sub> <sup>2</sup> | P <sub>w</sub> | P <sub>w</sub> <sup>2</sup> | P <sub>t</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> |
|-----|-----------------------------|----------------|-----------------------------|-----------------------------------------------------------|
| 1   |                             | 113            | 375769                      | 6662640                                                   |
| 2   |                             |                |                             |                                                           |
| 3   |                             |                |                             |                                                           |
| 4   |                             |                |                             |                                                           |
| 5   |                             |                |                             |                                                           |

  

(1)  $\frac{P_t^2}{P_t^2 - P_w^2} = 1.0564$

ACF = Q  $\left[ \frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 2172$

(2)  $\left[ \frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 1.0420$

  

|                    |      |               |                  |          |     |
|--------------------|------|---------------|------------------|----------|-----|
| Absolute Open Flow | 2172 | Mcfd @ 15.025 | Angle of Slope @ | Slope, n | .75 |
|--------------------|------|---------------|------------------|----------|-----|

  

Remarks: Produced light mist throughout test. Vented 327 MCF.

  

|                         |                              |                                  |             |
|-------------------------|------------------------------|----------------------------------|-------------|
| Approved by Commission: | Conducted By:<br>Gip Aulbert | Calculated By:<br>M.J. Turnbaugh | Checked By: |
|-------------------------|------------------------------|----------------------------------|-------------|