

**NEW MEXICO OIL CONSERVATION COMMISSION  
MULTI-POINT BACK PRESSURE TEST FOR GAS WELL**

Form C-122

Revised 12-1-55

|                                            |                  |                            |                                          |                                                                     |                                                                |
|--------------------------------------------|------------------|----------------------------|------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------|
| Pool<br><b>DRAIN Dakota</b>                |                  | Formation<br><b>Dakota</b> |                                          | County<br><b>Hio Arriba</b>                                         |                                                                |
| Initial<br><b>XX</b>                       |                  | Annual                     |                                          | Date of Test<br><b>4-16-65</b>                                      |                                                                |
| Company<br><b>Northwest Production Co.</b> |                  | Lease<br><b>"1/4"</b>      |                                          | Well No.<br><b>2-7</b>                                              |                                                                |
| Unit<br><b>D</b>                           | Sec.<br><b>7</b> | Twp.<br><b>26N</b>         | Range<br><b>5E</b>                       | Purchaser                                                           |                                                                |
| Casing                                     | Wt.              | I.D.                       | Set at                                   | Perf.                                                               | To                                                             |
| Tubing<br><b>1 1/2"</b><br><b>2-3/8"</b>   | Wt.              | I.D.                       | Set at<br><b>1900</b><br><b>6500-735</b> | Perf.<br><b>315</b><br><b>4495</b>                                  | To                                                             |
| Gas Pay:                                   | From             | To                         | L<br><b>495</b><br><b>1900</b>           | G<br><b>650</b><br><b>650</b>                                       | GL<br><b>315</b><br><b>4495</b><br>Bar. Press.<br><b>121.0</b> |
| Producing Through:                         |                  | Casing                     | Tubing<br><b>XX</b>                      | Type Well - Single - Braden head - G.G. or G.O. Dual<br><b>Dual</b> |                                                                |
| Date of Completion<br><b>4-9-65</b>        |                  | Packer<br><b>2375</b>      |                                          | Reservoir Temp.                                                     |                                                                |

**OBSERVED DATA**

| Tested Through: Prover <input type="checkbox"/> Choke <input checked="" type="checkbox"/> Meter <input type="checkbox"/> |                      |                     |              |                      |           |              |           | Type of Taps |           |                      |
|--------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|--------------|----------------------|-----------|--------------|-----------|--------------|-----------|----------------------|
| FLOW DATA                                                                                                                |                      |                     |              |                      |           | TUBING DATA  |           | CASING DATA  |           | DURATION OF FLOW HR. |
| No.                                                                                                                      | (Prover) (Line) Size | (Choke) (Line) Size | Press. psig. | Diff. h <sub>w</sub> | Temp. °F. | Press. psig. | Temp. °F. | Press. psig. | Temp. °F. |                      |
| SI                                                                                                                       |                      |                     |              |                      |           |              |           | <b>2366</b>  |           | <b>7 days</b>        |
| 1.                                                                                                                       |                      | <b>1/2"</b>         |              |                      |           | <b>22.2</b>  | <b>51</b> |              |           | <b>3 Hrs.</b>        |
| 2.                                                                                                                       |                      |                     |              |                      |           |              |           |              |           |                      |
| 3.                                                                                                                       |                      |                     |              |                      |           |              |           |              |           |                      |
| 4.                                                                                                                       |                      |                     |              |                      |           |              |           |              |           |                      |
| 5.                                                                                                                       |                      |                     |              |                      |           |              |           |              |           |                      |

**FLOW CALCULATIONS**

| No. | Coefficient (24 Hour) | $\sqrt{h_w P_f}$ | Pressure psia | Flow Temp. Factor F <sub>t</sub> | Gravity Factor F <sub>g</sub> | Compress. Factor F <sub>pv</sub> | Rate of Flow Q-MCF P D @ 15.025 psia |
|-----|-----------------------|------------------|---------------|----------------------------------|-------------------------------|----------------------------------|--------------------------------------|
| 1.  | <b>12.3650</b>        |                  | <b>237</b>    | <b>.9341</b>                     | <b>.9609</b>                  | <b>1.023</b>                     | <b>28.4</b>                          |
| 2.  |                       |                  |               |                                  |                               |                                  |                                      |
| 3.  |                       |                  |               |                                  |                               |                                  |                                      |
| 4.  |                       |                  |               |                                  |                               |                                  |                                      |
| 5.  |                       |                  |               |                                  |                               |                                  |                                      |

**PRESSURE CALCULATIONS**

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.      Specific Gravity Separator Gas \_\_\_\_\_  
 Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.      Specific Gravity Flowing Fluid \_\_\_\_\_  
 F<sub>c</sub> \_\_\_\_\_ (1 - e<sup>-S</sup>) \_\_\_\_\_      P<sub>c</sub> **237?**      P<sub>c</sub><sup>2</sup> **564.16**

| No. | $\frac{P_w}{P_t}$ psia | P <sub>t</sub> <sup>2</sup> | F <sub>c</sub> Q | (F <sub>c</sub> Q) <sup>2</sup> | (F <sub>c</sub> Q) <sup>2</sup> (1 - e <sup>-S</sup> ) | P <sub>w</sub> <sup>2</sup> | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> | Cal P <sub>w</sub> | $\frac{P_w}{P_c}$ |
|-----|------------------------|-----------------------------|------------------|---------------------------------|--------------------------------------------------------|-----------------------------|-----------------------------------------------------------|--------------------|-------------------|
| 1.  | <b>2.37</b>            | <b>56.169</b>               | <b>70.512</b>    | <b>4971.944</b>                 | <b>1192.200</b>                                        | <b>1438.369</b>             | <b>4216.515</b>                                           | <b>12.00</b>       |                   |
| 2.  |                        |                             |                  |                                 |                                                        |                             |                                                           |                    |                   |
| 3.  |                        |                             |                  |                                 |                                                        |                             |                                                           |                    |                   |
| 4.  |                        |                             |                  |                                 |                                                        |                             |                                                           |                    |                   |
| 5.  |                        |                             |                  |                                 |                                                        |                             |                                                           |                    |                   |

**CAP**  
 APPROPRIATE POTENTIAL: **3569** MCFPD; n **.75**

COMPANY **Northwest Production Corp.** WITNESSED \_\_\_\_\_

ADDRESS **P.O. Box 1796, El Paso, Texas** COMPANY \_\_\_\_\_

AGENT AND TITLE **J. W. Newman, Mgr. Production**

