

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><b>10/13/75</b>                      |                    |                                           |                |
| Company<br><b>Southern Union Production Co.</b>                                                                           |                     |                                |                       | Connection<br><b>Southern Union Gathering Co.</b> |                    |                                           |                |
| Pool<br><b>Blanco</b>                                                                                                     |                     |                                |                       | Formation<br><b>Mesaverde</b>                     |                    | Unit                                      |                |
| Completion Date<br><b>10/4/75</b>                                                                                         |                     | Total Depth<br><b>5875</b>     |                       | Plug Back TD<br><b>5800</b>                       |                    | Elevation<br><b>6449 Gr.</b>              |                |
| Farm or Lease Name<br><b>Nordhaus</b>                                                                                     |                     | Well No.<br><b>1-A</b>         |                       |                                                   |                    |                                           |                |
| Geg. Size<br><b>7.000</b>                                                                                                 | Wt.<br><b>23.00</b> | d<br><b>6.366</b>              | Set At<br><b>3490</b> | Perforations:<br>From <b>5171</b> To <b>5762</b>  |                    |                                           |                |
| Tbg. Size<br><b>2.375</b>                                                                                                 | Wt.<br><b>4.70</b>  | d<br><b>1.995</b>              | Set At<br><b>5599</b> | Perforations:<br>From <b>5593</b> To <b>5599</b>  |                    | Unit Sec. Twp. Rge.<br><b>F 13 31N 9W</b> |                |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br><b>Single</b>                                                  |                     |                                |                       | Packer Set At<br><b>----</b>                      |                    | County<br><b>San Juan</b>                 |                |
| Producing Thru<br><b>Tubing</b>                                                                                           |                     | Reservoir Temp. °F<br><b>@</b> |                       | Mean Annual Temp. °F<br><b>12</b>                 |                    | State<br><b>New Mexico</b>                |                |
| L<br><b>5591</b>                                                                                                          | H                   | Gg<br><b>0.700</b>             | % 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. | Temp. °F    | Press. p.s.i.g. |                  | Temp. °F       |
| SI        | <b>2"</b>        |   | <b>3/4"</b>  |                 |                      |             | <b>623</b>      |             | <b>623</b>      |                  | <b>7 Days</b>  |
| 1.        |                  |   |              |                 |                      |             | <b>479</b>      | <b>62°</b>  | <b>138</b>      |                  | <b>3 Hours</b> |
| 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 Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd |
| 1                         | <b>12.3650</b>        |                  | <b>150</b>              | <b>0.9981</b>         | <b>0.9258</b>     | <b>1.016</b>                | <b>1741</b>          |
| 2.                        |                       |                  |                         |                       |                   |                             |                      |
| 3.                        |                       |                  |                         |                       |                   |                             |                      |
| 4.                        |                       |                  |                         |                       |                   |                             |                      |
| 5.                        |                       |                  |                         |                       |                   |                             |                      |

  

|     |                |          |                |   |                                       |                   |
|-----|----------------|----------|----------------|---|---------------------------------------|-------------------|
| NO. | P <sub>t</sub> | Temp. °R | T <sub>f</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 X       |
| 4.  |                |          |                |   | Critical Pressure                     | P.S.I.A. P.S.I.A. |
| 5.  |                |          |                |   | Critical Temperature                  | R R               |

  

|                           |                                            |                |
|---------------------------|--------------------------------------------|----------------|
| P <sub>c</sub> <b>635</b> | P <sub>c</sub> <sup>2</sup> <b>403,225</b> |                |
| NO.                       | P <sub>t</sub> <sup>2</sup>                | P <sub>w</sub> |
| 1                         |                                            | <b>491</b>     |
| 2                         |                                            |                |
| 3                         |                                            |                |
| 4                         |                                            |                |
| 5                         |                                            |                |

  

|                                                               |  |                                                             |  |
|---------------------------------------------------------------|--|-------------------------------------------------------------|--|
| $(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.4868$                    |  | $(2) \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.9802$ |  |
| $AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3448$ |  |                                                             |  |

  

|                    |             |                |                  |                      |
|--------------------|-------------|----------------|------------------|----------------------|
| Absolute Open Flow | <b>3448</b> | Mcf/d @ 15.025 | Angle of Slope ° | Slope, n <b>0.75</b> |
| Remarks:           |             |                |                  |                      |

  

|                         |                                          |                                           |             |
|-------------------------|------------------------------------------|-------------------------------------------|-------------|
| Approved By Commission: | Conducted By:<br><b>Kenneth E. Roddy</b> | Calculated By:<br><b>Kenneth E. Roddy</b> | Checked By: |
|-------------------------|------------------------------------------|-------------------------------------------|-------------|