

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

Form C-122  
Revised 9-1-65

|                                                                                                                        |                  |                             |                    |                                               |                         |                                                             |
|------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------|--------------------|-----------------------------------------------|-------------------------|-------------------------------------------------------------|
| Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                  |                             |                    |                                               | Test Date <b>4/3/68</b> |                                                             |
| Company <b>SOUTHERN UNION PRODUCTION CO.</b>                                                                           |                  |                             |                    | Connection <b>EL PASO NATURAL GAS COMPANY</b> |                         |                                                             |
| Pool <b>BASIN</b>                                                                                                      |                  |                             |                    | Formation <b>DAKOTA</b>                       |                         | Unit                                                        |
| Completion Date <b>3/22/68</b>                                                                                         |                  | Total Depth <b>6642</b>     |                    | Plug Back TD <b>6624</b>                      | Elevation <b>6258</b>   | Farm or Lease Name <b>NEWSOM</b>                            |
| Csg. Size <b>4.500</b>                                                                                                 | Wt. <b>10.50</b> | d <b>4.052</b>              | Set At <b>6640</b> | Perforations: From <b>6346</b> To <b>6590</b> |                         | Well No. <b>20</b>                                          |
| Tbg. Size <b>1.900</b>                                                                                                 | Wt. <b>2.90</b>  | d <b>1.610</b>              | Set At <b>6499</b> | Perforations: From <b>6491</b> To <b>6499</b> |                         | Unit <b>A</b> Sec. <b>19</b> Twp. <b>26N</b> Rge. <b>8W</b> |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple <b>SINGLE - GAS</b>                                            |                  |                             |                    |                                               | Packer Set At           | County <b>SAN JUAN</b>                                      |
| Producing Thru <b>TUBING</b>                                                                                           |                  | Reservoir Temp. °F <b>@</b> |                    | Mean Annual Temp. °F                          |                         | Baro. Press. - P <sub>a</sub> <b>12</b>                     |
| L                                                                                                                      | H                | G <sub>q</sub>              | % 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>2162</b>     |            | <b>2158</b>     |          | <b>9 DAYS</b>    |
| 1.        |                  |   |              |                 |                      |          | <b>440</b>      | <b>68°</b> | <b>1488</b>     |          | <b>3 HRS</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 F <sub>t</sub> | Gravity Factor F <sub>g</sub> | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mcfd |
| 1                         | <b>12,3650</b>        |                  | <b>452</b>              | <b>.9924</b>                     | <b>.9258</b>                  | <b>1.055</b>                            | <b>5,417</b>         |
| 2.                        |                       |                  |                         |                                  |                               |                                         |                      |
| 3.                        |                       |                  |                         |                                  |                               |                                         |                      |
| 4.                        |                       |                  |                         |                                  |                               |                                         |                      |
| 5.                        |                       |                  |                         |                                  |                               |                                         |                      |

  

| NO. | P <sub>t</sub> | Temp. °R | T <sub>t</sub> | Z | Gas Liquid Hydrocarbon Ratio | A.P.I. Gravity | Specific Gravity Separator Gas | Specific Gravity Air | Critical Pressure P.S.I.A. | Critical Temp. °R | Mcf/bbl. Deg.          |
|-----|----------------|----------|----------------|---|------------------------------|----------------|--------------------------------|----------------------|----------------------------|-------------------|------------------------|
| 1.  |                |          |                |   |                              |                |                                |                      |                            |                   | <b>X X X X X X X X</b> |
| 2.  |                |          |                |   |                              |                |                                |                      |                            |                   | <b>X X X X X</b>       |
| 3.  |                |          |                |   |                              |                |                                |                      |                            |                   |                        |
| 4.  |                |          |                |   |                              |                |                                |                      |                            |                   |                        |
| 5.  |                |          |                |   |                              |                |                                |                      |                            |                   |                        |

  

| NO. | P <sub>c</sub> | P <sub>w</sub> | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> | (1) $\frac{P_c^2}{P_c^2 - P_w^2}$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n$ |
|-----|----------------|----------------|-----------------------------------------------------------|-----------------------------------|----------------------------------------------------|
| 1   | <b>2174</b>    | <b>1500</b>    | <b>4,726,276</b>                                          | <b>1.9086</b>                     | <b>1.6238</b>                                      |
| 2   |                |                |                                                           |                                   |                                                    |
| 3   |                |                |                                                           |                                   |                                                    |
| 4   |                |                |                                                           |                                   |                                                    |
| 5   |                |                |                                                           |                                   |                                                    |

  

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \mathbf{8,796}$

  

|                                               |                         |                     |
|-----------------------------------------------|-------------------------|---------------------|
| Absolute Open Flow <b>8,796</b> Mcfd @ 15.025 | Angle of Slope $\theta$ | Slope, n <b>.75</b> |
|-----------------------------------------------|-------------------------|---------------------|

  

Remarks:

  

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