

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>11/15/76</b>                  |                   |                                            |                   |
| Company<br><b>Southern Union Production Co.</b>                                                                        |                    |                                |                       | Connection<br><b>Gas Company of New Mexico</b>   |                    |                                            |                   |                                            |                   |
| Pool<br><b>Tapacito</b>                                                                                                |                    |                                |                       | Formation<br><b>Pictured Cliffs</b>              |                    |                                            |                   | Unit                                       |                   |
| Completion Date<br><b>11/2/76</b>                                                                                      |                    | Total Depth<br><b>3775</b>     |                       | Plug Back TD<br><b>3750</b>                      |                    | Elevation                                  |                   | Farm or Lease Name<br><b>Jicarilla "C"</b> |                   |
| Csg. Size<br><b>3.500</b>                                                                                              | Wt.<br><b>9.30</b> | d<br><b>2.992</b>              | Set At<br><b>3775</b> | Perforations:<br>From <b>3672</b> To <b>3729</b> |                    | Well No.<br><b>4</b>                       |                   |                                            |                   |
| Thq. Size<br><b>1.900</b>                                                                                              | Wt.<br><b>2.75</b> | d<br><b>1.610</b>              | Set At<br><b>3651</b> | Perforations:<br>From <b>3647</b> To <b>3651</b> |                    | Unit<br><b>D</b>                           | Sec.<br><b>12</b> | Twp.<br><b>26N</b>                         | Rge.<br><b>4W</b> |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br><b>Single - Gas</b>                                         |                    |                                |                       |                                                  |                    | Packer Set At                              |                   | County<br><b>Rio Arriba</b>                |                   |
| Producing Thru<br><b>Tubing</b>                                                                                        |                    | Reservoir Temp. °F<br><b>8</b> |                       | Mean Annual Temp. °F                             |                    | Baro. Press. - P <sub>a</sub><br><b>12</b> |                   | State<br><b>New Mexico</b>                 |                   |
| L<br><b>3635</b>                                                                                                       | H                  | G <sub>g</sub><br><b>0.620</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>1036</b>     |            | <b>1036</b>     |          | <b>9 Days<br/>3 Hours</b> |
| 1.        |                  |   |              |                 |                      |          | <b>221</b>      | <b>45°</b> | <b>735</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>233</b>              | <b>1.0147</b>         | <b>0.9837</b>     | <b>1.022</b>                | <b>2939</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 _____ <b>X X X X X X X X</b> |
| 3.  |                |          |                |   | Specific Gravity Flowing Fluid _____ <b>X X X X X</b>       |
| 4.  |                |          |                |   | Critical Pressure _____ P.S.I.A.                            |
| 5.  |                |          |                |   | Critical Temperature _____ R                                |

  

|                                            |                             |                |                             |                                                           |                                            |                                                             |
|--------------------------------------------|-----------------------------|----------------|-----------------------------|-----------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------|
| $P_c$ <b>1048</b> $P_c^2$ <b>1,098,304</b> |                             |                |                             |                                                           | $(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.0328$ | $(2) \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.8276$ |
| 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                                          |                             | <b>747</b>     | <b>558,009</b>              | <b>540,295</b>                                            |                                            |                                                             |
| 2                                          |                             |                |                             |                                                           |                                            |                                                             |
| 3                                          |                             |                |                             |                                                           |                                            |                                                             |
| 4                                          |                             |                |                             |                                                           |                                            |                                                             |
| 5                                          |                             |                |                             |                                                           |                                            |                                                             |

  

|                                                               |  |  |  |  |
|---------------------------------------------------------------|--|--|--|--|
| $AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5371$ |  |  |  |  |
|---------------------------------------------------------------|--|--|--|--|

  

|                                                    |                               |                      |
|----------------------------------------------------|-------------------------------|----------------------|
| Absolute Open Flow <b>5371</b> _____ Mcfd @ 15.025 | Angle of Slope $\theta$ _____ | Slope, n <b>0.85</b> |
| Remarks: _____                                     |                               |                      |

  

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