

**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>2-1-81 |                                    |
| Company<br>SHERMAN F. WAGENSELLER                                                                                         |   |                                 |                   | Connection<br>EPNG                            |                     |                                    |
| Pool<br>SOUTH BLANCO                                                                                                      |   |                                 |                   | Formation<br>PC                               |                     | Unit                               |
| Completion Date<br>1-25-81                                                                                                |   | Total Depth<br>3175             |                   | Plug Back TD<br>3121                          |                     | Elevation<br>7231                  |
| Csg. Size<br>4'500                                                                                                        |   | Set At<br>10'5    4'052    3170 |                   | Perforations:<br>From 3085 To 3093            |                     | Farm or Lease Name<br>MOBIL APACHE |
| Trq. Size<br>2'375                                                                                                        |   | Set At<br>4'7    1'995    3065  |                   | Perforations:<br>From                      To |                     | Well No.<br>15                     |
| Type Well - Single - Irradiated - G.G. or G.O. Multiple<br>SINGLE                                                         |   |                                 |                   | Packer Set At                                 |                     | County<br>RIO ARriba COUNTY        |
| Producing Thru<br>TBG                                                                                                     |   | Reservoir Temp. °F<br>#         |                   | Mean Annual Temp. °F                          |                     | State<br>N. M.                     |
| L                                                                                                                         | H | Gg<br>0.615                     | % CO <sub>2</sub> | % N <sub>2</sub>                              | % H <sub>2</sub> S  | Prover<br>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        |                  |       |              |                 |                      |             | 755             |             | 757             |                  | 7 DAYS |
| 1.        | CHOKE            | 0.750 |              | 55              |                      | 57          |                 |             | 107             |                  | 3 HRS. |
| 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, Mcld |
| 1                         | 12.365                |                  | 69                      | 1.0029                | 0.9877            | 1.007                       | 851                  |
| 2.                        |                       |                  |                         |                       |                   |                             |                      |
| 3.                        |                       |                  |                         |                       |                   |                             |                      |
| 4.                        |                       |                  |                         |                       |                   |                             |                      |
| 5.                        |                       |                  |                         |                       |                   |                             |                      |

  

| NO. | P <sub>r</sub> | Temp. °R | T <sub>r</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>r</sub> <sup>2</sup> | P <sub>w</sub> <sup>2</sup> | P <sub>w</sub> <sup>2</sup> | P <sub>r</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> |
|-----|-----------------------------|-----------------------------|-----------------------------|-----------------------------------------------------------|
| 1   | 769                         | 591361                      | 119                         | 14161                                                     |
| 2.  |                             |                             |                             |                                                           |
| 3.  |                             |                             |                             |                                                           |
| 4.  |                             |                             |                             |                                                           |
| 5.  |                             |                             |                             |                                                           |

  

$$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 1.0245$$

$$AOF = Q \left[ \frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 869$$

$$(2) \left[ \frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.0208$$

  

|                    |     |               |                  |          |      |
|--------------------|-----|---------------|------------------|----------|------|
| Absolute Open Flow | 869 | Mcld @ 15.025 | Angle of Slope @ | Slope, n | 0.85 |
|--------------------|-----|---------------|------------------|----------|------|

  

Remarks: WELL BLEW DRY GAS

  

|                         |                                |                                 |             |
|-------------------------|--------------------------------|---------------------------------|-------------|
| Approved By Commission: | Conducted By:<br>H.E. McAnally | Calculated By:<br>H.E. McAnally | Checked By: |
|-------------------------|--------------------------------|---------------------------------|-------------|