

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

Copy 25F  
 C-122  
 well file  
 Form C-122  
 Revised 9-1-65

**RECEIVED**

|                                                                                                                           |                    |                                          |                                 |                                                     |                                |                                                         |                       |                                           |  |
|---------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------------------|---------------------------------|-----------------------------------------------------|--------------------------------|---------------------------------------------------------|-----------------------|-------------------------------------------|--|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                    |                                          |                                 |                                                     | Test Date<br><b>11-4-72</b>    |                                                         | <b>NOV 8 1972</b>     |                                           |  |
| Company<br><b>Monsanto Company</b>                                                                                        |                    |                                          |                                 | Connection<br><b>Not Contracted</b>                 |                                |                                                         |                       | <b>O. C. C.</b><br><b>ARTESIA. OFFICE</b> |  |
| Pool<br><b>Undesignated</b>                                                                                               |                    |                                          |                                 | Formation<br><b>Morrow</b>                          |                                |                                                         |                       | Unit<br><b>Lot 15</b>                     |  |
| Completion Date<br><b>Nov. 4, 1972</b>                                                                                    |                    | Total Depth<br><b>11,700'</b>            |                                 | Plug Back TD<br><b>11,641</b>                       |                                | Elevation<br><b>3196</b>                                |                       | Farm or Lease Name<br><b>Burton Flat</b>  |  |
| Csg. Size<br><b>5 1/2</b>                                                                                                 | Wt.<br><b>17#</b>  | d<br><b>4.892</b>                        | Set At<br><b>11,699</b>         | Perforations:<br>From <b>11308</b> To <b>11,458</b> |                                | Well No.<br><b>1</b>                                    |                       |                                           |  |
| Thg. Size<br><b>2 7/8</b>                                                                                                 | Wt.<br><b>6.5#</b> | d<br><b>2.441</b>                        | Set At<br><b>11,030</b>         | Perforations:<br>From <b>Open</b> To <b>Ended</b>   |                                | Unit    Sec.    Twp.    Rge.<br><b>Lot 15 3 21S 27E</b> |                       |                                           |  |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br><b>Single</b>                                                  |                    |                                          |                                 |                                                     | Packer Set At<br><b>11,025</b> |                                                         | County<br><b>Eddy</b> |                                           |  |
| Producing Thru<br><b>Tubing</b>                                                                                           |                    | Reservoir Temp. °F<br><b>168 @ 11030</b> |                                 | Mean Annual Temp. °F<br><b>60</b>                   |                                | Baro. Press. - P <sub>a</sub><br><b>13.2</b>            |                       | State<br><b>New Mexico</b>                |  |
| L<br><b>11,030</b>                                                                                                        | H<br><b>11,030</b> | Gg<br><b>0.586</b>                       | % CO <sub>2</sub><br><b>.93</b> | % N <sub>2</sub><br><b>Trace</b>                    | % H <sub>2</sub> S<br><b>0</b> | Prover<br>                                              | Meter Run<br><b>4</b> | Taps<br><b>Flange</b>                     |  |

  

| FLOW DATA |                  |   |              |                 |          |          | TUBING DATA     |          | CASING DATA     |          | Duration of Flow |
|-----------|------------------|---|--------------|-----------------|----------|----------|-----------------|----------|-----------------|----------|------------------|
| NO.       | Prover Line Size | X | Orifice Size | Press. p.s.i.g. | Diff. hw | Temp. °F | Press. p.s.i.g. | Temp. °F | Press. p.s.i.g. | Temp. °F |                  |
| SI        |                  |   |              |                 |          |          | 3683            |          | Pkr             |          |                  |
| 1.        | 4"               | X | 2.75         | 810             | 3        | 100      | 3651            | 75       |                 |          | 60 Min.          |
| 2.        | 4"               | X | 2.75         | 810             | 9        | 101      | 3523            | 75       |                 |          | 60 Min.          |
| 3.        | 4"               | X | 2.75         | 825             | 26       | 80       | 3315            | 75       |                 |          | 60 Min.          |
| 4.        | 4"               | X | 2.75         | 850             | 63       | 60       | 2840            | 75       |                 |          | 60 Min.          |
| 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, F <sub>pv</sub> * | Rate of Flow Q, Mcfd |
| 1                         | 41.10                 | 49.6             | 823.2                   | 0.9636                | 1.306             | 1.051                                     | 2696.3               |
| 2                         | 41.10                 | 86.0             | 823.2                   | 0.9628                | 1.306             | 1.051                                     | 4671.1               |
| 3                         | 41.10                 | 147.6            | 838.2                   | 0.9813                | 1.306             | 1.057                                     | 8217.7               |
| 4                         | 41.10                 | 233.2            | 863.2                   | 1.0000                | 1.306             | 1.073                                     | 13431.2              |
| 5                         |                       |                  |                         |                       |                   |                                           |                      |

  

|     |                |          |                |   |                                       |                |
|-----|----------------|----------|----------------|---|---------------------------------------|----------------|
| NO. | P <sub>t</sub> | Temp. °R | T <sub>r</sub> | Z | Gas Liquid Hydrocarbon Ratio          | 268.7 Mcf/bbl. |
| 1   |                |          |                |   | A.P.I. Gravity of Liquid Hydrocarbons | 51.0 Deg.      |
| 2   |                |          |                |   | Specific Gravity Separator Gas        | XXXXXXXXXX     |
| 3   |                |          |                |   | Specific Gravity Flowing Fluid        | XXXXXX         |
| 4   |                |          |                |   | Critical Pressure                     | 676 P.S.I.A.   |
| 5   |                |          |                |   | Critical Temperature                  | 352 R          |

  

|                     |                                   |                             |
|---------------------|-----------------------------------|-----------------------------|
| P <sub>f</sub> 4642 | P <sub>f</sub> <sup>2</sup> 21545 |                             |
| NO.                 | P <sub>t</sub> <sup>2</sup>       | P <sub>s</sub> <sup>2</sup> |
| 1                   | 4617.5                            | 21321                       |
| 2                   | 4564.6                            | 20836                       |
| 3                   | 4357.2                            | 18985                       |
| 4                   | 4052.2                            | 16420                       |
| 5                   |                                   |                             |

  

(1)  $\frac{P_c^2}{P_s^2 - P_w^2} =$  \_\_\_\_\_

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

(2)  $\left[ \frac{P_c^2}{P_s^2 - P_w^2} \right]^n =$  \_\_\_\_\_

  

|                    |                      |                  |         |          |         |
|--------------------|----------------------|------------------|---------|----------|---------|
| Absolute Open Flow | 37,500 Mcfd @ 15.025 | Angle of Slope @ | 54° 40' | Slope, n | 0.70919 |
|--------------------|----------------------|------------------|---------|----------|---------|

  

Remarks: **\* Simplified Supercompressibility Tables**

  

|                         |                                   |                                |             |
|-------------------------|-----------------------------------|--------------------------------|-------------|
| Approved By Commission: | Conducted By:<br>Teffteller, Inc. | Calculated By:<br>F. Tefteller | Checked By: |
|-------------------------|-----------------------------------|--------------------------------|-------------|