

**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 checked="" type="checkbox"/> Special |             |                         |                   |                                           | Test Date<br>9-28-81  |                               |                    |                                     |  |
| Company<br>Amoco Production Company                                                                                                  |             |                         |                   | Connection<br>Southern Union Gathering Co |                       |                               |                    |                                     |  |
| Pool<br>Basin                                                                                                                        |             |                         |                   | Formation<br>Dakota                       |                       |                               |                    | Unit                                |  |
| Completion Date<br>8-28-81                                                                                                           |             | Total Depth<br>6825     |                   | Plug Back TD<br>6785                      |                       | Elevation<br>6100             |                    | Farm or Lease Name<br>J. F. Day "D" |  |
| Csg. Size<br>5.500                                                                                                                   | Wt.<br>15.5 | d<br>4.950              | Set At<br>6825    | Perforations:<br>From 6560 To 6694        |                       |                               | Well No.<br>1E     |                                     |  |
| Tbg. Size<br>2.063                                                                                                                   | Wt.<br>3.25 | d<br>1.751              | Set At<br>6650    | Perforations:<br>From open To ended       |                       |                               | Unit<br>P          | Sec. Twp. R1/4<br>20 28N 10W        |  |
| Type Well - Single - Bradenhead - G.C. or G.O. Multiple<br>Dual                                                                      |             |                         |                   |                                           | Packer Set At<br>3409 |                               | County<br>San Juan |                                     |  |
| Producing Thru<br>Tubing                                                                                                             |             | Reservoir Temp. °F<br>@ |                   | Mean Annual Temp. °F                      |                       | Baro. Press. - P <sub>g</sub> |                    | State<br>New Mexico                 |  |
| L                                                                                                                                    | H           | Gg                      | % 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        | 7 Days           |   |              |                 |                      |          | 700             |          |                 |          |                  |
| 1.        | 2.375            |   | .750         |                 |                      |          | 66              |          |                 |          | 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 F <sub>g</sub> | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mcfd |
| 1                         | 12.365                |                  | 78                      | 1.000                 | .9258                         | 1.010                                   | 902                  |
| 2.                        |                       |                  |                         |                       |                               |                                         |                      |
| 3.                        |                       |                  |                         |                       |                               |                                         |                      |
| 4.                        |                       |                  |                         |                       |                               |                                         |                      |
| 5.                        |                       |                  |                         |                       |                               |                                         |                      |

  

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

  

|                    |                                    |                                            |                                                             |                                                           |
|--------------------|------------------------------------|--------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------|
| P <sub>c</sub> 712 | P <sub>c</sub> <sup>2</sup> 506944 | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1024$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0759$ |                                                           |
| NO.                | P <sub>t</sub>                     | 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                  |                                    | 217                                        | 47089                                                       | 459855                                                    |
| 2                  |                                    |                                            |                                                             |                                                           |
| 3                  |                                    |                                            |                                                             |                                                           |
| 4                  |                                    |                                            |                                                             |                                                           |
| 5                  |                                    |                                            |                                                             |                                                           |

  

$AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 970$

$AOF = 970$

  

|                    |     |                |                         |              |
|--------------------|-----|----------------|-------------------------|--------------|
| Absolute Open Flow | 970 | Mcf/d @ 15.025 | Angle of Slope $\theta$ | Slope, n .75 |
|--------------------|-----|----------------|-------------------------|--------------|

  

Remarks:

  

|                        |                               |                                |            |
|------------------------|-------------------------------|--------------------------------|------------|
| Approved By Commission | Conducted By<br>J. J. Barnett | Calculated By<br>J. J. Barnett | Checked By |
|------------------------|-------------------------------|--------------------------------|------------|