

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

**RECEIVED**  
**APR 15 1981**  
**OIL CON. COM.**  
**DIST. 3**

|                                                                                                                                      |  |                         |  |                                       |  |                                                                                 |  |
|--------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------|--|---------------------------------------|--|---------------------------------------------------------------------------------|--|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input checked="" type="checkbox"/> Special |  |                         |  | Test Date<br>3-31-81                  |  | <b>RECEIVED</b><br><b>APR 15 1981</b><br><b>OIL CON. COM.</b><br><b>DIST. 3</b> |  |
| Company<br>Amoco Production Co.                                                                                                      |  |                         |  | Connection<br>El Paso Natural Gas Co. |  |                                                                                 |  |
| Pool<br>Basin                                                                                                                        |  |                         |  | Formation<br>Dakota                   |  |                                                                                 |  |
| Completion Date<br>3-11-81                                                                                                           |  | Total Depth<br>6464     |  | Plug Back TD<br>6464                  |  | Elevation<br>5510                                                               |  |
| Csg. Size<br>5.500                                                                                                                   |  | Wt.<br>17               |  | Set At<br>4,892                       |  | Performance:<br>From 6380 To 6380                                               |  |
| Tbg. Size<br>2.063                                                                                                                   |  | Wt.<br>3.25             |  | Set At<br>1,751                       |  | Performance:<br>From 6370 To 6370                                               |  |
| Type Well - Single - Bradenhead - G.C. or G.O. Multiple<br>Dual                                                                      |  |                         |  | Packer Set At<br>3063                 |  | Farm or Lease Name<br>Cooper Gas Com                                            |  |
| Producing Thru<br>Tubing                                                                                                             |  | Reservoir Temp. °F<br>8 |  | Mean Annual Temp. °F                  |  | Well No.<br>1E                                                                  |  |
| L                                                                                                                                    |  | H                       |  | G <sub>g</sub>                        |  | Unit Sec. Twp. Rge.<br>J 15 29N 11W                                             |  |
| %                                                                                                                                    |  | %                       |  | %                                     |  | County<br>San Juan                                                              |  |
| %                                                                                                                                    |  | %                       |  | %                                     |  | State<br>New Mexico                                                             |  |
| %                                                                                                                                    |  | %                       |  | %                                     |  | 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 |                  |
| 1         | 12 days          |      |              |                 |                      |          |                 |          |                 |          | 3 hrs.           |
| 1.        | 2,375            | .750 |              |                 |                      |          |                 |          |                 |          |                  |
| 2.        |                  |      |              |                 |                      |          |                 |          |                 |          |                  |
| 3.        |                  |      |              |                 |                      |          |                 |          |                 |          |                  |
| 4.        |                  |      |              |                 |                      |          |                 |          |                 |          |                  |

  

| 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, Mcf/d |
| 1                         | 12,365                |                  | 232                     | 1.000                            | .9258                         | 1.027                                   | 2728                  |
| 2.                        |                       |                  |                         |                                  |                               |                                         |                       |
| 3.                        |                       |                  |                         |                                  |                               |                                         |                       |
| 4.                        |                       |                  |                         |                                  |                               |                                         |                       |
| 5.                        |                       |                  |                         |                                  |                               |                                         |                       |

  

| NO. | P <sub>c</sub> | Temp. °R | T <sub>r</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                 |  |

  

| NO. | P <sub>c</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> | $(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.6423$ $(2) \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4507$ $AQF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3958$ |
|-----|----------------|----------------|-----------------------------|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | 1017           | 636            | 404496                      | 629793                                                    |                                                                                                                                                                      |
| 2   |                |                |                             |                                                           |                                                                                                                                                                      |
| 3   |                |                |                             |                                                           |                                                                                                                                                                      |
| 4   |                |                |                             |                                                           |                                                                                                                                                                      |
| 5   |                |                |                             |                                                           |                                                                                                                                                                      |

  

|                                             |  |              |  |                        |  |                   |  |
|---------------------------------------------|--|--------------|--|------------------------|--|-------------------|--|
| Absolute Open Flow _____ 3958               |  | P-H = 15.025 |  | Angle of Slope θ _____ |  | Slope, n _____ 75 |  |
| Remarks: Med oil and H <sub>2</sub> O spray |  |              |  |                        |  |                   |  |

  

|                         |                      |                              |             |
|-------------------------|----------------------|------------------------------|-------------|
| Approved By Commission: | Conducted By:<br>JJB | Calculated By:<br>JJ Barnett | Checked By: |
|-------------------------|----------------------|------------------------------|-------------|