

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088  
SANTA FE, NEW MEXICO 87501Form C-122  
Revised 10-1-78

## MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

|                                                                                                                           |             |                         |                   |                                           |                       |                                     |                                  |                               |  |
|---------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------|-------------------|-------------------------------------------|-----------------------|-------------------------------------|----------------------------------|-------------------------------|--|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |             |                         |                   |                                           | Test Date<br>1-28-81  |                                     |                                  |                               |  |
| Company<br>El Paso Natural Gas Company                                                                                    |             |                         |                   | Connection<br>El Paso Natural Gas Company |                       |                                     |                                  |                               |  |
| Pool<br>Undes.                                                                                                            |             |                         |                   | Formation<br>Chacra                       |                       |                                     |                                  | Unit                          |  |
| Completion Date<br>1-15-81                                                                                                |             | Total Depth<br>3982     |                   | Plug Back TD<br>3965                      |                       | Elevation<br>6224 GR                |                                  | Farm or Lease Name<br>Russell |  |
| Csg. Size<br>5.500                                                                                                        | Wt.<br>15.5 | d<br>4.950              | Set At<br>3982    | Perforations:<br>From 3791 To 3927        |                       |                                     | Well No.<br>#12                  |                               |  |
| Tbg. Size<br>2.0625                                                                                                       | Wt.<br>3    | d<br>1.750              | Set At<br>3898    | Perforations:<br>From To                  |                       |                                     | Unit Sec. Twp. Rge.<br>H 24 28 8 |                               |  |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>G. G. Dual                                                     |             |                         |                   |                                           | Packer Set At<br>3600 |                                     | County<br>San Juan               |                               |  |
| Producing Thru<br>Tbg.                                                                                                    |             | Reservoir Temp. °F<br>8 |                   | Mean Annual Temp. °F                      |                       | Baro. Press. - P <sub>a</sub><br>12 |                                  | State<br>New Mexico           |  |
| L                                                                                                                         | H           | Gg<br>0.65              | % CO <sub>2</sub> | % N <sub>2</sub>                          | % H <sub>2</sub> S    | Prover                              | Meter Run                        | Taps                          |  |

  

| FLOW DATA |                        |       |                 |                    |                         | TUBING DATA |                    | CASING DATA |                    | Duration<br>of<br>Flow |             |
|-----------|------------------------|-------|-----------------|--------------------|-------------------------|-------------|--------------------|-------------|--------------------|------------------------|-------------|
| NO.       | Prover<br>Line<br>Size | X     | Orifice<br>Size | Press.<br>p.s.i.g. | Diff.<br>h <sub>w</sub> | Temp.<br>°F | Press.<br>p.s.i.g. | Temp.<br>°F | Press.<br>p.s.i.g. |                        | Temp.<br>°F |
| SI        |                        |       |                 |                    |                         |             | 816                |             |                    |                        | 13 Days     |
| 1.        | Choke                  | 0.750 |                 | 95                 |                         | 55          |                    |             |                    |                        | 3 Hours     |
| 2.        |                        |       |                 |                    |                         |             |                    |             |                    |                        |             |
| 3.        |                        |       |                 |                    |                         |             |                    |             |                    |                        |             |
| 4.        |                        |       |                 |                    |                         |             |                    |             |                    |                        |             |
| 5.        |                        |       |                 |                    |                         |             |                    |             |                    |                        |             |

  

| RATE OF FLOW CALCULATIONS |                          |                  |                            |                                        |                                     |                                               |                         |
|---------------------------|--------------------------|------------------|----------------------------|----------------------------------------|-------------------------------------|-----------------------------------------------|-------------------------|
| NO.                       | Coefficient<br>(24 Hour) | $\sqrt{h_w P_m}$ | Pressure<br>P <sub>m</sub> | Flow Temp.<br>Factor<br>F <sub>t</sub> | Gravity<br>Factor<br>F <sub>g</sub> | Super<br>Compress.<br>Factor, F <sub>pv</sub> | Rate of Flow<br>Q, Mcfd |
| 1                         | 12.365                   |                  | 107                        | 1.0048                                 | 0.9608                              | 1.009                                         | 1289                    |
| 2.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 3.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 4.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 5.                        |                          |                  |                            |                                        |                                     |                                               |                         |

  

| NO. | P <sub>t</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 | P.S.I.A. | Critical Temperature | R |
|-----|----------------|----------|----------------|---|------------------------------|---------------------------------------|--------------------------------|--------------------------------|-------------------|----------|----------------------|---|
| 1.  |                |          |                |   |                              |                                       |                                |                                |                   |          |                      |   |
| 2.  |                |          |                |   |                              |                                       |                                |                                |                   |          |                      |   |
| 3.  |                |          |                |   |                              |                                       |                                |                                |                   |          |                      |   |
| 4.  |                |          |                |   |                              |                                       |                                |                                |                   |          |                      |   |
| 5.  |                |          |                |   |                              |                                       |                                |                                |                   |          |                      |   |

  

|                    |                                    |                                            |                                                             |                                                           |
|--------------------|------------------------------------|--------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------|
| P <sub>c</sub> 828 | P <sub>c</sub> <sup>2</sup> 685584 | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0968$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0718$ |                                                           |
| 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                  | 11449                              | 246                                        | 60516                                                       | 625068                                                    |
| 2                  |                                    |                                            |                                                             |                                                           |
| 3                  |                                    |                                            |                                                             |                                                           |
| 4                  |                                    |                                            |                                                             |                                                           |
| 5                  |                                    |                                            |                                                             |                                                           |

  

|                                       |  |                  |               |
|---------------------------------------|--|------------------|---------------|
| Absolute Open Flow 1382 Mcfd @ 15.025 |  | Angle of Slope θ | Slope, n 0.75 |
|---------------------------------------|--|------------------|---------------|

  

Remarks: Gas Vented - 181 MCF. The Well Produced Dry Gas Throughout the Test.

  

|                      |                                  |                                  |             |
|----------------------|----------------------------------|----------------------------------|-------------|
| Approved by Division | Conducted By:<br>Norman Waggoner | Calculated By:<br>H. E. McAnally | Checked By: |
|----------------------|----------------------------------|----------------------------------|-------------|