

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

Form C-122  
Revised 9-1-65

**RECEIVED**  
SEP 26 1985  
OIL CON. DIV.  
DIST. 3

|                                                                                                                           |             |                         |                   |                                    |                    |                                     |           |                                                                                                             |            |            |  |
|---------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------|-------------------|------------------------------------|--------------------|-------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------|------------|------------|--|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |             |                         |                   |                                    |                    | Test Date<br>9-24-85                |           | <div style="font-size: 2em; opacity: 0.5; transform: rotate(-15deg); display: inline-block;">RECEIVED</div> |            |            |  |
| Company<br>El Paso Natural Gas                                                                                            |             |                         |                   | Connection                         |                    |                                     |           |                                                                                                             |            |            |  |
| Pool<br>Basin                                                                                                             |             |                         |                   | Formation<br>Dakota                |                    |                                     |           | Unit                                                                                                        |            |            |  |
| Completion Date<br>9-24-85                                                                                                |             | Total Depth<br>7671     |                   | Plug Back TD<br>7659               |                    | Elevation<br>6476 GR                |           | Farm or Lease Name<br>S.J. 28-7 Unit                                                                        |            |            |  |
| Csg. Size<br>4.500                                                                                                        | Wt.<br>10.5 | d<br>4.052              | Set At<br>7671    | Perforations:<br>From 7458 To 7656 |                    | Well No.<br>#136E                   |           |                                                                                                             |            |            |  |
| Trg. Size<br>1.900                                                                                                        | Wt.<br>2.9  | d<br>1.610              | Set At<br>7628    | Perforations:<br>From To           |                    | Unit<br>N                           |           | Sec.<br>14                                                                                                  | Twp.<br>28 | Age.<br>07 |  |
| Type Well - Single - Fractured - G.G. or G.O. Multiple<br>Single                                                          |             |                         |                   |                                    |                    | Packer Set At<br>None               |           | County<br>Rio Arriba                                                                                        |            |            |  |
| Producing Thru<br>Tbg                                                                                                     |             | Reservoir Temp. °F<br>a |                   | Mean Annual Temp. °F               |                    | Baro. Press. - P <sub>a</sub><br>12 |           | State<br>New Mexico                                                                                         |            |            |  |
| L                                                                                                                         | H           | Gg<br>.690              | % 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        |                  |      |              |                 |                      |             | 2330            |             | 2330            |                  | 7 Days   |
| 1.        |                  | .750 |              | 230             |                      | 58          | 230             |             | 1399            |                  | 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, Mcfd |
| 1                         | 12.365                |                  | 242                     | 1.0019                | .9325             | 1.025                       | 2866                 |
| 2.                        |                       |                  |                         |                       |                   |                             |                      |
| 3.                        |                       |                  |                         |                       |                   |                             |                      |
| 4.                        |                       |                  |                         |                       |                   |                             |                      |
| 5.                        |                       |                  |                         |                       |                   |                             |                      |

  

|     |                |          |                |   |                                                  |
|-----|----------------|----------|----------------|---|--------------------------------------------------|
| NO. | P <sub>r</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 _____ XXXXXXXXX   |
| 3   |                |          |                |   | Specific Gravity Flowing Fluid _____ XXXXX       |
| 4   |                |          |                |   | Critical Pressure _____ P.S.I.A. _____ P.S.I.A.  |
| 5   |                |          |                |   | Critical Temperature _____ R _____ R             |

  

|                     |                                     |                |                             |                                                           |
|---------------------|-------------------------------------|----------------|-----------------------------|-----------------------------------------------------------|
| P <sub>r</sub> 2342 | P <sub>r</sub> <sup>2</sup> 5484964 |                |                             |                                                           |
| NO.                 | P <sub>r</sub>                      | P <sub>w</sub> | P <sub>w</sub> <sup>2</sup> | P <sub>r</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> |
| 1                   |                                     | 1411           | 1990921                     | 3494043                                                   |
| 2                   |                                     |                |                             |                                                           |
| 3                   |                                     |                |                             |                                                           |
| 4                   |                                     |                |                             |                                                           |
| 5                   |                                     |                |                             |                                                           |

  

(1)  $\frac{P_r^2}{P_r^2 - P_w^2} = \frac{54848964}{3494043}$

ACF = Q  $\left[ \frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 4019$

(2)  $\left[ \frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.4024$

  

|                    |      |               |                         |          |     |
|--------------------|------|---------------|-------------------------|----------|-----|
| Absolute Open Flow | 4019 | Mcfd @ 15.025 | Angle of Slope $\theta$ | Slope, n | .75 |
|--------------------|------|---------------|-------------------------|----------|-----|

  

Remarks: Gas vented during test 418 MCF.

  

|                         |                              |                           |                    |
|-------------------------|------------------------------|---------------------------|--------------------|
| Approved by Commission: | Conducted By:<br>John Easley | Calculated By:<br>Ed Mabe | Checked By:<br>kld |
|-------------------------|------------------------------|---------------------------|--------------------|