

**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 type="checkbox"/> Special |  |                                |  |                                                  |  | Test Date<br><b>12-18-79</b>                       |  |
| Company<br><b>Amoco Production Company</b>                                                                                |  |                                |  | Connection<br><b>El Paso Natural Gas Company</b> |  |                                                    |  |
| Pool<br><b>Bloomfield</b>                                                                                                 |  |                                |  | Formation<br><b>Chacra</b>                       |  | Unit                                               |  |
| Completion Date<br><b>12-05-79</b>                                                                                        |  | Total Depth<br><b>2951</b>     |  | Plug Back TD<br><b>2890</b>                      |  | Elevation<br><b>5554 GL</b>                        |  |
| Csg. Size<br><b>4.500</b>                                                                                                 |  | WI.<br><b>10.5</b>             |  | d<br><b>2950</b>                                 |  | Set At<br><b>2827</b>                              |  |
| Perforations:<br>From <b>2827</b> To <b>2839</b>                                                                          |  | Well No.<br><b>"G" No. 1</b>   |  |                                                  |  |                                                    |  |
| Thq. Size<br><b>2.375</b>                                                                                                 |  | WI.<br><b>4.7</b>              |  | d<br><b>1.995</b>                                |  | Set At<br><b>2853</b>                              |  |
| Perforations:<br>From <b>open</b> To <b>ended</b>                                                                         |  | Unit<br><b>I</b>               |  | Sec.<br><b>27</b>                                |  | Twp.<br><b>29</b>                                  |  |
| Type Well - Single - Broadhead - G.C. or G.O. Multiple<br><b>SINGLE</b>                                                   |  | Packer Set At<br><b>NONE</b>   |  | County<br><b>San Juan</b>                        |  |                                                    |  |
| Producing Thru<br><b>TUBING</b>                                                                                           |  | Reservoir Temp. °F<br><b>8</b> |  | Mean Annual Temp. °F                             |  | Baro. Press. - P <sub>a</sub><br><b>New Mexico</b> |  |
| L                                                                                                                         |  | H                              |  | G <sub>g</sub>                                   |  | % CO <sub>2</sub>                                  |  |
|                                                                                                                           |  |                                |  |                                                  |  | % N <sub>2</sub>                                   |  |
|                                                                                                                           |  |                                |  |                                                  |  | % H <sub>2</sub> S                                 |  |
|                                                                                                                           |  |                                |  |                                                  |  | Prover                                             |  |
|                                                                                                                           |  |                                |  |                                                  |  | Meter Run                                          |  |
|                                                                                                                           |  |                                |  |                                                  |  | Tops                                               |  |

  

| 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        | <b>10 days</b>   |   |              |                 |                      |          | <b>980</b>      |          | <b>985</b>      |          | <b>3 hrs</b>     |
| 1.        | <b>2.375</b>     |   | <b>.750</b>  |                 |                      |          | <b>280</b>      |          | <b>580</b>      |          |                  |
| 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                         | <b>12.365</b>         |                  | <b>292</b>              | <b>1.000</b>          | <b>.9608</b>                  | <b>1.029</b>                            | <b>3570</b>          |
| 2.                        |                       |                  |                         |                       |                               |                                         |                      |
| 3.                        |                       |                  |                         |                       |                               |                                         |                      |
| 4.                        |                       |                  |                         |                       |                               |                                         |                      |
| 5.                        |                       |                  |                         |                       |                               |                                         |                      |

  

|     |                |          |                |   |                                                      |  |  |  |
|-----|----------------|----------|----------------|---|------------------------------------------------------|--|--|--|
| NO. | P <sub>f</sub> | Temp. °R | T <sub>f</sub> | Z | Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.          |  |  |  |
|     |                |          |                |   | A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.     |  |  |  |
|     |                |          |                |   | Specific Gravity Separator Gas _____ X X X X X X X X |  |  |  |
|     |                |          |                |   | Specific Gravity Flowing Fluid _____ X X X X X       |  |  |  |
|     |                |          |                |   | Critical Pressure _____ P.S.I.A. _____ P.S.I.A.      |  |  |  |
|     |                |          |                |   | Critical Temperature _____ R _____ R                 |  |  |  |

  

|                           |                                           |                             |                                                           |
|---------------------------|-------------------------------------------|-----------------------------|-----------------------------------------------------------|
| P <sub>c</sub> <b>997</b> | P <sub>c</sub> <sup>2</sup> <b>994009</b> |                             |                                                           |
| NO.                       | 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                         | <b>592</b>                                | <b>350464</b>               | <b>643545</b>                                             |
| 2                         |                                           |                             |                                                           |
| 3                         |                                           |                             |                                                           |
| 4                         |                                           |                             |                                                           |
| 5                         |                                           |                             |                                                           |

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.5446$$

$$(2) \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.3855$$

$$AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4946$$

  

|                                |               |                |                  |
|--------------------------------|---------------|----------------|------------------|
| Absolute Open Flow <b>4946</b> | Mcfd @ 15.025 | Angle of Slope | Slope, <b>75</b> |
|--------------------------------|---------------|----------------|------------------|

  

Remarks:

  

|                        |                            |                                       |                                     |
|------------------------|----------------------------|---------------------------------------|-------------------------------------|
| Approved By Commission | Conducted By<br><b>JJB</b> | Calculated By<br><b>J. J. BARNETT</b> | Checked By<br><b>B. E. FACKRELL</b> |
|------------------------|----------------------------|---------------------------------------|-------------------------------------|