

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

Form C-122  
 Revised 9-1-65

|                                                                                                                        |                |                            |                               |                                               |                                |                                               |                                           |                           |                         |                                       |  |
|------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------|-------------------------------|-----------------------------------------------|--------------------------------|-----------------------------------------------|-------------------------------------------|---------------------------|-------------------------|---------------------------------------|--|
| Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                |                            |                               |                                               |                                | Test Date <b>11-29-77</b>                     |                                           | SPUD DATE: <b>6-16-77</b> |                         |                                       |  |
| Company <b>Continental Oil Company</b>                                                                                 |                |                            |                               |                                               |                                | Connection <b>El Paso Natural Gas Company</b> |                                           |                           |                         |                                       |  |
| Well <b>Jalmet</b>                                                                                                     |                |                            |                               |                                               |                                | Formation <b>Yates Seven Rivers</b>           |                                           |                           |                         |                                       |  |
| Completion Date                                                                                                        |                |                            | Total Depth <b>3570</b>       |                                               |                                | Plug back TD <b>3053</b>                      |                                           | Elevation                 |                         | Form or Lease Name <b>Wells B - 1</b> |  |
| Csg. Size <b>5 1/2</b>                                                                                                 | Wt.            | d                          | Set At <b>3570</b>            | Perforations: From <b>2850</b> To <b>3043</b> |                                | Well No. <b>4</b>                             |                                           |                           |                         |                                       |  |
| Tbg. Size <b>2 3/8</b>                                                                                                 | Wt. <b>4.7</b> | d <b>1.995</b>             | Set At <b>3004</b>            | Perforations: From <b>open</b> To <b>end</b>  |                                | Unit <b>I</b>                                 |                                           | Sec. <b>01</b>            | Twp. <b>25</b>          | Rge. <b>36</b>                        |  |
| Type Well - Single - Fractured - G.G. or G.O. Multiple <b>Single</b>                                                   |                |                            |                               |                                               |                                | Packer Set At <b>2804</b>                     |                                           | County <b>Lea</b>         |                         |                                       |  |
| Producing Thru <b>Tbg.</b>                                                                                             |                |                            | Reservoir Temp. °F <b>104</b> |                                               | Mean Annual Temp. °F <b>60</b> |                                               | Baro. Press. - P <sub>a</sub> <b>13.2</b> |                           | State <b>New Mexico</b> |                                       |  |
| L <b>3004</b>                                                                                                          | H <b>3004</b>  | G <sub>g</sub> <b>.689</b> | % CO <sub>2</sub>             | % N <sub>2</sub>                              | % H <sub>2</sub> S             | Prover                                        | Meter Run <b>4"</b>                       | Tape <b>Flg.</b>          |                         |                                       |  |

  

| 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>130</b>      |          |                 |          | <b>48 hrs.</b>   |
| 1.        | 4                | x | 1.750        | 15              | 2.9                  | 50       | 79              |          |                 |          | 1 hr.            |
| 2.        | 4                | x | 1.750        | 19              | 9.0                  | 55       | 61              |          |                 |          | 1 hr.            |
| 3.        | 4                | x | 1.750        | 20              | 27.0                 | 58       | 50              |          |                 |          | 1 hr.            |
| 4.        | 4                | x | 1.750        | 24              | 37.2                 | 61       | 40              |          |                 |          | 1 hr.            |
| 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                         | 14.93                 | 9.04             | 28.2                    | 1.010                 | 1.205                         | Nil                                      | 164                  |
| 2                         | 14.93                 | 17.02            | 32.2                    | 1.005                 | 1.205                         | Nil                                      | 308                  |
| 3                         | 14.93                 | 29.94            | 33.2                    | 1.002                 | 1.205                         | Nil                                      | 539                  |
| 4                         | 14.93                 | 37.20            | 37.2                    | .9990                 | 1.205                         | Nil                                      | 669                  |
| 5.                        |                       |                  |                         |                       |                               |                                          |                      |

  

| NO. | P <sub>i</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 | Critical Temperature |
|-----|----------------|----------|----------------|-----|------------------------------|---------------------------------------|--------------------------------|--------------------------------|-------------------|----------------------|
| 1   | .04            | 510      | 1.32           | Nil |                              |                                       | .689                           |                                | 669               | 385                  |
| 2.  | .05            | 515      | 1.34           | Nil |                              |                                       |                                |                                |                   |                      |
| 3.  | .05            | 518      | 1.35           | Nil |                              |                                       |                                |                                |                   |                      |
| 4.  | .06            | 521      | 1.35           | Nil |                              |                                       |                                |                                |                   |                      |
| 5.  |                |          |                |     |                              |                                       |                                |                                |                   |                      |

  

| NO. | P <sub>i</sub> | P <sub>w</sub> | P <sub>w</sub> <sup>2</sup> | P <sub>i</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> |
|-----|----------------|----------------|-----------------------------|-----------------------------------------------------------|
| 1   | 143.2          | 92.2           | 8.5                         | 12.0                                                      |
| 2   |                | 74.2           | 5.5                         | 15.0                                                      |
| 3   |                | 63.2           | 3.9                         | 16.6                                                      |
| 4   |                | 53.2           | 2.8                         | 17.7                                                      |
| 5   |                |                |                             |                                                           |

  

$$(1) \frac{P_i^2}{P_i^2 - P_w^2} = 1.158$$

$$ADP = Q \left[ \frac{P_i^2}{P_i^2 - P_w^2} \right]^n = .775$$

$$(2) \left[ \frac{P_i^2}{P_i^2 - P_w^2} \right]^n = 1.158$$

  

|                               |               |                           |                       |
|-------------------------------|---------------|---------------------------|-----------------------|
| Absolute Open Flow <b>775</b> | Mcfd @ 14.025 | Angle of Slope <b>45°</b> | Slope, n <b>1.000</b> |
|-------------------------------|---------------|---------------------------|-----------------------|

Remarks: **Well made .5 bbls. water during test. Friction factors negligible point alignment too flat a slope of 45 was drawn through high rate of flow.**

  

|                                                        |                                |                |             |
|--------------------------------------------------------|--------------------------------|----------------|-------------|
| Approved (by Cooperator) <b>McMurrain &amp; Reston</b> | Conducted By: <b>McMurrain</b> | Calculated By: | Checked By: |
|--------------------------------------------------------|--------------------------------|----------------|-------------|

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APR 7 1977

OIL CONSERVATION COMM.  
HOBBS, N. M.