

**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>2-12-79                    |                      |
| Company<br>Palmer Oil & Gas Company                                                                                       |                       |                     |                             |                                                           |                                                              | Connection                              |                      |
| Pool<br>Basin                                                                                                             |                       |                     |                             | Formation<br>Dakota                                       |                                                              | Unit                                    |                      |
| Completion Date<br>2-2-79                                                                                                 |                       | Total Depth<br>6953 |                             | Plug Back TD<br>6868                                      |                                                              | Elevation                               |                      |
| F. Montoya 27                                                                                                             |                       |                     |                             |                                                           |                                                              | Farm or Lease Name                      |                      |
| 7.000                                                                                                                     |                       | Wt. 20#             |                             | d 6.456                                                   |                                                              | Set At 4898                             |                      |
| 4.500                                                                                                                     |                       | 11.6 10.5           |                             | 4" / 4.052                                                |                                                              | 6942                                    |                      |
| 2.063                                                                                                                     |                       | Wt. 3.25            |                             | d 1.751                                                   |                                                              | Set At 6798                             |                      |
| 2.375                                                                                                                     |                       | 4.7                 |                             | 1.995                                                     |                                                              | 5988                                    |                      |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple                                                                   |                       |                     |                             |                                                           |                                                              | Packer Set At                           |                      |
| G. G. Dual                                                                                                                |                       |                     |                             |                                                           |                                                              | 5980                                    |                      |
| Producing Thru<br>Tubing                                                                                                  |                       | Reservoir Temp. °F  |                             | Mean Annual Temp. °F                                      |                                                              | Baro. Press. - P <sub>a</sub>           |                      |
| L                                                                                                                         |                       | H                   |                             | G <sub>g</sub>                                            |                                                              | 12 psia (est.)                          |                      |
| %                                                                                                                         |                       | CO <sub>2</sub>     |                             | %                                                         |                                                              | N <sub>2</sub>                          |                      |
| %                                                                                                                         |                       | H <sub>2</sub> S    |                             | Prover                                                    |                                                              | Meter Run                               |                      |
| Taps                                                                                                                      |                       | San Juan            |                             | State                                                     |                                                              | New Mexico                              |                      |
| FLOW DATA                                                                                                                 |                       |                     |                             | TUBING DATA                                               |                                                              | CASING DATA                             |                      |
| NO.                                                                                                                       | Prover Line Size      | X                   | Orifice Size                | Press. p.s.i.g.                                           | Diff. h <sub>w</sub>                                         | Temp. °F                                | Press. p.s.i.g.      |
| 1.                                                                                                                        | 10 days               |                     |                             |                                                           |                                                              |                                         | 1649                 |
| 2.                                                                                                                        | 2 inch                | .750                | 191                         |                                                           |                                                              |                                         | 191                  |
| 3.                                                                                                                        |                       |                     |                             |                                                           |                                                              |                                         | 52°                  |
| 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.                                                                                                                        | 12.3650               |                     | 203                         | 1.0078                                                    | .9608                                                        | 1.021                                   | 2482                 |
| 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 _____ 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                         |                                         |                      |
| $P_c = 1661$ $P_c^2 = 2,758,921$                                                                                          |                       |                     |                             |                                                           |                                                              |                                         |                      |
| NO.                                                                                                                       | P <sub>r</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) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.08595$                  |                                         |                      |
| 1.                                                                                                                        | 41,209                | 467                 | 218,366                     | 2,540,555                                                 | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.06379$ |                                         |                      |
| 2.                                                                                                                        |                       |                     |                             |                                                           |                                                              |                                         |                      |
| 3.                                                                                                                        |                       |                     |                             |                                                           |                                                              |                                         |                      |
| 4.                                                                                                                        |                       |                     |                             |                                                           |                                                              |                                         |                      |
| 5.                                                                                                                        |                       |                     |                             |                                                           |                                                              |                                         |                      |
| Absolute Open Flow _____ Mcfd @ 15.025      Angle of Slope @ _____                                                        |                       |                     |                             |                                                           |                                                              |                                         |                      |
| Remarks: 4½ - 10.5 & 11.6 # liner set from 4791 to 6942                                                                   |                       |                     |                             |                                                           |                                                              |                                         |                      |
| Approved By Commission:                                                                                                   |                       | Conducted By:       |                             | Calculated By:                                            |                                                              | Checked By:                             |                      |
|                                                                                                                           |                       | Joe F. Elledge      |                             | Joe F. Elledge                                            |                                                              | Mr. Don Roberts                         |                      |

