

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

Form C-122  
Revised 9-1-65

C/SF  
C-122

RECEIVED

|                                                                                                                           |             |                           |                   |                                    |                    |                                         |           |                              |  |
|---------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------|-------------------|------------------------------------|--------------------|-----------------------------------------|-----------|------------------------------|--|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |             |                           |                   |                                    |                    | Test Date<br>3/8/82                     |           | APR 2 1982                   |  |
| Company<br>FRED POOL <i>Operating Co.</i>                                                                                 |             |                           |                   | Connection<br>Air                  |                    |                                         |           | O. C. D.                     |  |
| Pool<br><i>Pecos slope abs.</i>                                                                                           |             |                           |                   | Formation<br>Abo                   |                    |                                         |           | Unit<br>ARTESIA, OFFICE      |  |
| Completion Date<br>1/4/82                                                                                                 |             | Total Depth<br>4801       |                   | Plug Back TD<br>4742               |                    | Elevation<br>3715 GL                    |           | Farm or Lease Name<br>Wagner |  |
| Csg. Size<br>4 1/2                                                                                                        | Wt.<br>10.5 | d<br>4                    | Set At<br>4801    | Perforations:<br>From 4064 To 4382 |                    | Well No.<br>1                           |           |                              |  |
| Tub. Size<br>2 3/8                                                                                                        | Wt.<br>4.7  | d<br>1.995                | Set At<br>4001    | Perforations:<br>From To           |                    | Unit Sec. Twp. Range<br>N 10 - 7S - 26E |           |                              |  |
| Type Well - Single - Frodohead - G.G. or G.O. Multiple<br>Single                                                          |             |                           |                   |                                    |                    | Packer Set At<br>NA                     |           | County<br>Chaves             |  |
| Producing Thru<br>Tubing                                                                                                  |             | Reservoir Temp. °F<br>100 |                   | Mean Annual Temp. °F<br>60         |                    | Boro. Press. - P <sub>g</sub><br>13.6   |           | State<br>New Mexico          |  |
| L                                                                                                                         | H           | G <sub>g</sub><br>.62     | % CO <sub>2</sub> | % N <sub>2</sub>                   | % H <sub>2</sub> S | Provor<br>2"                            | Meter Run | Taps                         |  |

  

| FLOW DATA |                  |   |              |                 |                      | TUBING DATA |                 | CASING DATA |                 | Duration of Flow |         |
|-----------|------------------|---|--------------|-----------------|----------------------|-------------|-----------------|-------------|-----------------|------------------|---------|
| NO.       | Provor 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         | of Flow |
| SI        |                  |   |              |                 |                      |             | 985             | 53          |                 |                  |         |
| 1.        | 2                | X | 1.25         |                 | 3                    |             | 970             | 59          |                 |                  | 1 hr    |
| 2.        | 2                | X | 1.25         |                 | 14.5                 |             | 900             | 61          |                 |                  | "       |
| 3.        | 2                | X | 1.25         |                 | 41.5                 |             | 820             | 62          |                 |                  | "       |
| 4.        | 2                | X | 1.25         |                 | 51                   |             | 690             | 62          |                 |                  | "       |
| 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. Compens. Factor, F <sub>sp</sub> | Rate of Flow Q, Mhd |
| 1                         | 36.20                 |                  |                         | 1.001                 | 1.27                          | 1.094                                   | 302                 |
| 2                         | 36.20                 |                  |                         | .999                  | 1.27                          | 1.086                                   | 723                 |
| 3                         | 36.20                 |                  |                         | .998                  | 1.27                          | 1.077                                   | 2050                |
| 4                         | 36.20                 |                  |                         | .998                  | 1.27                          | 1.064                                   | 2489                |
| 5                         |                       |                  |                         |                       |                               |                                         |                     |

  

|     |                |          |                |      |                                                 |
|-----|----------------|----------|----------------|------|-------------------------------------------------|
| NO. | T <sub>f</sub> | Temp. °R | T <sub>g</sub> | Z    | Gas Liquid Hydrocarbon Ratio _____ Mcf/ubl.     |
| 1   | 1.63           | 560      | 1.54           | .862 | A.P.L. Gravity of Light Hydrocarbons _____ Deg. |
| 2   | 1.49           | 560      | 1.54           | .873 | Specific Gravity Separator Gas _____            |
| 3   | 1.37           | 560      | 1.54           | .882 | Specific Gravity Flowing Fluid _____ X X X X X  |
| 4   | 1.177          | 560      | 1.54           | .897 | Critical Pressure 671 P.S.I.A.                  |
| 5   |                |          |                |      | Critical Temperature 373 °R                     |

  

|                             |                |                |                             |                                                           |                                          |  |                                                           |  |
|-----------------------------|----------------|----------------|-----------------------------|-----------------------------------------------------------|------------------------------------------|--|-----------------------------------------------------------|--|
| $P_c = 1078$ $P_c^2 = 1162$ |                |                |                             |                                                           | $(1) \frac{P_c^2}{P_c^2 - I_w^2} = 2.28$ |  | $(2) \left[ \frac{P_c^2}{P_c^2 - I_w^2} \right]^n = 5.95$ |  |
| NO.                         | I <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                           | .              | 1063           | 1130                        | 32                                                        |                                          |  |                                                           |  |
| 2                           |                | 989            | 978                         | 184                                                       |                                          |  |                                                           |  |
| 3                           |                | 928            | 861                         | 300                                                       |                                          |  |                                                           |  |
| 4                           |                | 808            | 653                         | 508                                                       |                                          |  |                                                           |  |
| 5                           |                |                |                             |                                                           |                                          |  |                                                           |  |

  

|                                                                                                            |  |  |  |  |
|------------------------------------------------------------------------------------------------------------|--|--|--|--|
| $ADP = Q \left[ \frac{P_c^2}{P_c^2 - I_w^2} \right]^n = 4700$                                              |  |  |  |  |
| Absolute Open Flow 4700 Mhd @ 15.025 Angle of Slope 53.5 Slope, n 1.35                                     |  |  |  |  |
| Remarks:                                                                                                   |  |  |  |  |
| Approved By: _____ Conducted By: <b>Keltic Services</b> Calculated By: <b>Dike Kelly</b> Checked By: _____ |  |  |  |  |

FRED POOL Jr

Wagner #1

