

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>4-11-77  |                               |                                                     |                              |
| Company<br><i>Stephen M. Thompson</i><br>Leland Petroleum Production                                                      |              |                         |                   |                                    | Connection            |                               |                                                     |                              |
| Pool<br>Ballard                                                                                                           |              |                         |                   | Formation<br>Pictured Cliff Ext.   |                       |                               | Unit                                                |                              |
| Completion Date<br>4-2-77                                                                                                 |              | Total Depth<br>2455     |                   | Plug Back TD<br>2387               |                       | Elevation<br>6375 GL          |                                                     | Farm or Lease Name<br>Harvey |
| Csg. Size<br>4 1/2                                                                                                        | Wt.<br>10.5# | d                       | Set At<br>2431    | Perforations:<br>From 2316 To 2336 |                       |                               | Well No.<br>#1                                      |                              |
| Tbg. Size<br>2 3/8                                                                                                        | Wt.<br>4.7#  | d                       | Set At<br>2344    | Perforations:<br>From - To -       |                       |                               | Unit    Sec.    Twp.    Rge.<br>N    2    25N    7W |                              |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single                                                         |              |                         |                   |                                    | Packer Set At<br>None |                               | County<br>Rio Arriba                                |                              |
| Producing Thru<br>tubing                                                                                                  |              | Reservoir Temp. °F<br>@ |                   | Mean Annual Temp. °F               |                       | Baro. Press. - P <sub>a</sub> |                                                     | State<br>New Mexico          |
| L                                                                                                                         | H            | Gg<br>.62               | % CO <sub>2</sub> | % N <sub>2</sub>                   | % H <sub>2</sub> S    | Prover                        | Meter Run                                           | Taps                         |

  

| FLOW DATA |                        |   |                 |                    |                         |             | TUBING DATA        |             | CASING DATA        |             | Duration<br>of<br>Flow |
|-----------|------------------------|---|-----------------|--------------------|-------------------------|-------------|--------------------|-------------|--------------------|-------------|------------------------|
| NO.       | Prover<br>Line<br>Size | X | Orifice<br>Size | Press.<br>p.s.i.g. | Diff.<br>h <sub>w</sub> | Temp.<br>°F | Press.<br>p.s.i.g. | Temp.<br>°F | Press.<br>p.s.i.g. | Temp.<br>°F |                        |
| SI        |                        |   |                 |                    |                         |             | 745                |             | 750                |             |                        |
| 1.        | 2X6X.75                |   |                 | 5                  |                         | 60          | 5                  | 60          | 17                 |             | 3Hrs.                  |
| 2.        |                        |   |                 |                    |                         |             |                    |             |                    |             |                        |
| 3.        |                        |   |                 |                    |                         |             |                    |             |                    |             |                        |
| 4.        |                        |   |                 |                    |                         |             |                    |             |                    |             |                        |
| 5.        |                        |   |                 |                    |                         |             |                    |             |                    |             |                        |

  

| RATE OF FLOW CALCULATIONS |                          |                  |                            |                                        |                                     |                                               |                         |
|---------------------------|--------------------------|------------------|----------------------------|----------------------------------------|-------------------------------------|-----------------------------------------------|-------------------------|
| NO.                       | Coefficient<br>(24 Hour) | $\sqrt{h_w P_m}$ | Pressure<br>P <sub>m</sub> | Flow Temp.<br>Factor<br>F <sub>t</sub> | Gravity<br>Factor<br>F <sub>g</sub> | Super<br>Compress.<br>Factor, F <sub>pv</sub> | Rate of Flow<br>Q, Mcfd |
| 1                         | 11                       |                  | 17                         | 1.000                                  | 1.270                               | 1.016                                         | 241                     |
| 2.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 3.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 4.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 5.                        |                          |                  |                            |                                        |                                     |                                               |                         |

  

|     |                |          |                |      |                                                      |
|-----|----------------|----------|----------------|------|------------------------------------------------------|
| NO. | P <sub>f</sub> | Temp. °R | T <sub>f</sub> | Z    | Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.          |
| 1.  | .025           | 520      | 1.42           | .968 | 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 <sub>c</sub> 762 | P <sub>c</sub> <sup>2</sup> 580644 | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0015$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0012$ |                                                           |
| NO.                | P <sub>t</sub> <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                  |                                    | 29                                         | 841                                                         | 579803                                                    |
| 2                  |                                    |                                            |                                                             |                                                           |
| 3                  |                                    |                                            |                                                             |                                                           |
| 4                  |                                    |                                            |                                                             |                                                           |
| 5                  |                                    |                                            |                                                             |                                                           |

  

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 241$

OIL CONSERVATION COMMISSION

APPROVED

  

|                    |     |               |                  |              |
|--------------------|-----|---------------|------------------|--------------|
| Absolute Open Flow | 241 | Mcfd @ 15.025 | Angle of Slope @ | Slope, n .85 |
| Remarks:           |     |               |                  |              |

  

|                         |               |                              |             |
|-------------------------|---------------|------------------------------|-------------|
| Approved By Commission: | Conducted By: | Calculated By:<br>K. Jenkins | Checked By: |
|-------------------------|---------------|------------------------------|-------------|