

NEW MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLForm 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>7-10-72         |                      |
| Company<br>Flag-Redfern Oil Co.                                                                                           |            | Connection                   |                      |
| Pool<br>Pinon                                                                                                             |            | Formation<br>Fruitland       |                      |
| Completion Date<br>7-3-72                                                                                                 |            | Total Depth<br>1360'         | Plug Back TD<br>1320 |
| Elevation<br>5486'                                                                                                        |            | Farm or Lease Name<br>Gentle |                      |
| Csg. Size<br>4 1/2                                                                                                        | Wt.<br>9.5 | d                            | Set At               |
| Perforations:<br>From 1290 To 1295                                                                                        |            | Well No.<br>4                |                      |
| Tub. Size<br>1 1/4                                                                                                        | Wt.<br>2.4 | d                            | Set At<br>1296       |
| Perforations:<br>From open end To                                                                                         |            | Unit<br>J                    | Sec.<br>9            |
| Twp.<br>28N                                                                                                               |            | Rge.<br>11W                  |                      |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single - Gas                                                   |            | Packer Set At                |                      |
| 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                           | % CO <sub>2</sub>    |
|                                                                                                                           |            | .62                          | % N <sub>2</sub>     |
|                                                                                                                           |            |                              | % H <sub>2</sub> S   |
|                                                                                                                           |            |                              | Prover               |
|                                                                                                                           |            |                              | Meter Run            |
|                                                                                                                           |            |                              | Taps                 |

  

| 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. |                  |
| SI        |                  |   |              |                 |                      |             | 350             |             | 455             |                  |
| 1.        |                  |   |              |                 |                      |             |                 |             |                 |                  |
| 2.        |                  |   |              |                 |                      |             |                 |             |                 |                  |
| 3.        |                  |   | 5/8          | 12              |                      | 58          |                 |             | 78              |                  |
| 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 Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd |
| 1                         |                       |                  |                         |                       |                   |                             |                      |
| 2                         |                       |                  |                         |                       |                   |                             |                      |
| 3                         | 8.5417                |                  | 24                      | 1.0019                | .9981             | 1.000                       | 205                  |
| 4                         |                       |                  |                         |                       |                   |                             |                      |
| 5                         |                       |                  |                         |                       |                   |                             |                      |

  

| NO. | P <sub>t</sub> | Temp. °R | 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   |                |          |   |                              |                                       |                                |                                |                   |                      |
| 2   |                |          |   |                              |                                       |                                |                                |                   |                      |
| 3   |                |          |   |                              |                                       |                                |                                |                   |                      |
| 4   |                |          |   |                              |                                       |                                |                                |                   |                      |
| 5   |                |          |   |                              |                                       |                                |                                |                   |                      |

  

| NO. | P <sub>c</sub> | P <sub>w</sub> | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> | P <sub>c</sub> <sup>2</sup> |
|-----|----------------|----------------|-----------------------------------------------------------|-----------------------------|
| 1   | 467            | 218089         |                                                           |                             |
| 2   |                | 90             | 8100                                                      | 209989                      |
| 3   |                |                |                                                           |                             |
| 4   |                |                |                                                           |                             |
| 5   |                |                |                                                           |                             |

  

| NO. | P <sub>c</sub> <sup>2</sup> | P <sub>w</sub> <sup>2</sup> | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> | (1) $\frac{P_c^2}{P_c^2 - P_w^2} =$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$ |
|-----|-----------------------------|-----------------------------|-----------------------------------------------------------|-------------------------------------|------------------------------------------------------|
| 1   |                             |                             |                                                           | 0.0386                              |                                                      |
| 2   |                             |                             |                                                           |                                     |                                                      |
| 3   |                             |                             |                                                           |                                     |                                                      |
| 4   |                             |                             |                                                           |                                     |                                                      |
| 5   |                             |                             |                                                           |                                     |                                                      |

  

| Absolute Open Flow |               | Angle of Slope |              |
|--------------------|---------------|----------------|--------------|
| 212                | Mcfd @ 15.025 |                | Slope, n .85 |

  

Remarks:

  

Original signed by T. A. Dugan

|                         |                              |                |             |
|-------------------------|------------------------------|----------------|-------------|
| Approved By Commission: | Conducted By:<br>T. A. Dugan | Calculated By: | Checked By: |
|-------------------------|------------------------------|----------------|-------------|