

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

Form C-122  
Revised 9-1-65

RECEIVED

|                                                                                                                           |                 |                                  |                          |                                      |                     |                               |                         |                                      |             |
|---------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|--------------------------|--------------------------------------|---------------------|-------------------------------|-------------------------|--------------------------------------|-------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                 |                                  |                          |                                      | Test Date<br>5-7-80 |                               | JUN 26 1980             |                                      |             |
| Company<br>Threshold Development                                                                                          |                 |                                  |                          | Connection<br>El Paso Natural Gas    |                     |                               | O. C. D.                |                                      |             |
| Pool<br>Turkey Track Morrow                                                                                               |                 |                                  |                          | Formation<br>Morrow                  |                     |                               | Unit<br>ARTESIA, OFFICE |                                      |             |
| Completion Date<br>3-28-80                                                                                                |                 | Total Depth<br>11610             |                          | Plug Back TD<br>11223                |                     | Elevation<br>G.L. 3378.5      |                         | Farm or Lease Name<br>Conoco 7 State |             |
| Csg. Size<br>5-1/2                                                                                                        | Wt.<br>17 lbs.  | d<br>4.892                       | Set At<br>11264          | Perforations:<br>From 11036 To 11050 |                     |                               | Well No.<br>1           |                                      |             |
| Tbg. Size<br>2-3/8                                                                                                        | Wt.<br>4.7 lbs. | d<br>1.995                       | Set At<br>10942          | Perforations:<br>From To             |                     |                               | Unit<br>N               | Sec.<br>7                            | Twp.<br>19S |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single                                                         |                 |                                  |                          | Packer Set At<br>10942               |                     | County<br>Eddy                |                         |                                      |             |
| Producing Thru<br>10/64                                                                                                   |                 | Reservoir Temp. °F<br>170° 11043 |                          | Mean Annual Temp. °F<br>60           |                     | Baro. Press. - P <sub>a</sub> |                         | State<br>New Mexico                  |             |
| L<br>11043                                                                                                                | H<br>11043      | Gg<br>.648                       | % CO <sub>2</sub><br>.27 | % N <sub>2</sub><br>.47              | % H <sub>2</sub> S  | Prover                        | Meter Run<br>4.1        | Taps<br>Flange                       |             |

  

| 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        |                  |   |              |                 |                      |             |                 |             | 4535            | 170              | 19       |
| 1.        | 4.026 x 1.000    |   |              | 120             | 12                   | 58          |                 |             | 4466            | 170              | 1        |
| 2.        | 4.026 x 1.000    |   |              | 150             | 37                   | 42          |                 |             | 4409            | 170              | 1        |
| 3.        | 4.026 x 1.000    |   |              | 300             | 45                   | 38          |                 |             | 4333            | 170              | 1        |
| 4.        | 4.026 x 1.750    |   |              | 150             | 24                   | 36          |                 |             | 4189            | 170              | 1        |
| 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                         | 4.75                  | 39.98            | 133.2                   | 1.0019                | 1.2420            | 1.0133                      | 240                  |
| 2                         | 4.75                  | 77.71            | 163.2                   | 1.0178                | 1.2420            | 1.0185                      | 475                  |
| 3                         | 4.75                  | 118.72           | 313.2                   | 1.0218                | 1.2420            | 1.0374                      | 743                  |
| 4                         | 14.93                 | 62.58            | 163.2                   | 1.0239                | 1.2420            | 1.0192                      | 1211                 |
| 5.                        |                       |                  |                         |                       |                   |                             |                      |

  

| NO. | R   | 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.  | .20 | 518      | 1.39           | .974 | 0                            | 0                                     | .648                           | X X X X X X X X                | 670               | 372                  |
| 2.  | .24 | 502      | 1.35           | .964 |                              |                                       |                                | X X X X X                      |                   |                      |
| 3.  | .47 | 498      | 1.34           | .929 |                              |                                       |                                |                                |                   |                      |
| 4.  | .24 | 496      | 1.33           | .963 |                              |                                       |                                |                                |                   |                      |
| 5.  |     |          |                |      |                              |                                       |                                |                                |                   |                      |

  

| P <sub>c</sub> 3473.4    P <sub>c</sub> <sup>2</sup> 12064. x 10 <sup>3</sup> |                             |                |                             |                                                           |
|-------------------------------------------------------------------------------|-----------------------------|----------------|-----------------------------|-----------------------------------------------------------|
| NO.                                                                           | P <sub>i</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                                                                             | 20063                       | 3415           | 11663                       | 401                                                       |
| 2                                                                             | 19556                       | 3367           | 11337                       | 727                                                       |
| 3                                                                             | 18889                       | 3303           | 10913                       | 1151                                                      |
| 4                                                                             | 17658                       | 3184           | 10136                       | 1928                                                      |
| 5                                                                             |                             |                |                             |                                                           |

  

(1)  $\frac{P_c^2}{P_c^2 - P_w^2} = 6.2564$

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 7600$

(2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 6.2564$

*Posted book 10-6-80*

  

|                         |      |                      |                  |                |          |                         |  |
|-------------------------|------|----------------------|------------------|----------------|----------|-------------------------|--|
| Absolute Open Flow      | 7575 | Mcfd @ 15.025        | Angle of Slope θ | 45.            | Slope, n | 1.000                   |  |
| Remarks:                |      |                      |                  |                |          |                         |  |
| Approved By Commission: |      |                      |                  |                |          |                         |  |
| Conducted By:           |      | Wireline Service Co. |                  | Calculated By: |          | Wireline Service Co.    |  |
|                         |      |                      |                  | Checked By:    |          | BROCKMAN & ASSOC., INC. |  |