

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

**RECEIVED BY**  
**JAN 22 1986**

Form C-122  
Revised 9-1-65

|                                                                                                                           |             |                                      |                           |                                            |                             |
|---------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------------------|---------------------------|--------------------------------------------|-----------------------------|
| Type Test<br><input type="checkbox"/> Initial <input type="checkbox"/> Annual <input checked="" type="checkbox"/> Special |             | Test Date<br>1-3-86                  |                           | <b>O. C. O.</b><br><b>ARTERIAL SERVICE</b> |                             |
| Company<br>Hondo Oil and Gas Company                                                                                      |             |                                      | Connection<br>Conoco      |                                            |                             |
| Pool<br>Wildcat Cedar Lake morrow                                                                                         |             |                                      | Formation<br>Morrow       |                                            | Unit                        |
| Completion Date<br>5-5-85                                                                                                 |             | Total Depth<br>11,600                |                           | Plug Back<br>11,547                        | Elevation<br>3580.6         |
| Farm or Lease Name<br>State CE                                                                                            |             |                                      | Well No.<br>1             |                                            |                             |
| Casing Size<br>5 1/2"                                                                                                     | Wt. 17#     | d 4.892                              | Set At<br>11,700          | Perforations:<br>From 11,241 To 248        |                             |
| Tubg. Size<br>2.375                                                                                                       | Wt. 4.7     | d 1.995                              | Set At<br>11,165          | Perforations:<br>From 11,255 To 256        |                             |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single                                                         |             |                                      |                           | Packer Set At<br>11,165                    |                             |
| Producing Thru<br>Tbg                                                                                                     |             | Reservoir Temp. °F<br>164.5 @ 11,244 |                           | Mean Annual Temp. °F<br>60                 |                             |
| Baro. Press. - P <sub>a</sub><br>13.2                                                                                     |             | State<br>New Mexico                  |                           |                                            |                             |
| L<br>11,165                                                                                                               | H<br>11,165 | Gg<br>.774                           | % CO <sub>2</sub><br>.589 | % N <sub>2</sub><br>365                    | % H <sub>2</sub> S<br>Sweet |
| Prover<br>3.068                                                                                                           |             |                                      | Meter Run<br>FLG          |                                            |                             |

  

| 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        |                  |   |              |                 |                      |             | 2226            |             |                 |                  | SI 32 Hrs. |
| 1.        | 3 X 1.500        |   |              | 40.5            | 4"                   | 58          | 1918            | 62          | Pkr             |                  | 1 Hr       |
| 2.        | 3 X 1.500        |   |              | 42              | 8"                   | 59          | 1688            | 64          | Pkr             |                  | 1 Hr       |
| 3.        | 3 X 1.500        |   |              | 47              | 16"                  | 60          | 1300            | 65.5        | Pkr             |                  | 1 Hr       |
| 4.        | 3 X 1.500        |   |              | 54              | 25"                  | 68          | 1468            | 67          | Pkr             |                  | 1 Hr       |
| 5.        |                  |   |              |                 |                      |             |                 |             |                 |                  |            |

  

| RATE OF FLOW CALCULATIONS |                       |                  |                         |                                  |                               |                                         |                      |
|---------------------------|-----------------------|------------------|-------------------------|----------------------------------|-------------------------------|-----------------------------------------|----------------------|
| NO.                       | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure P <sub>m</sub> | Flow Temp. Factor F <sub>t</sub> | Gravity Factor F <sub>g</sub> | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mcfd |
| 1                         | 11.129                | 14.66            | 53.7                    | 1.0019                           | 1.1367                        | -0-                                     | 185.8                |
| 2                         | 11.129                | 21.01            | 55.2                    | 1.0010                           | 1.1367                        | -0-                                     | 266.0                |
| 3                         | 11.129                | 31.04            | 60.2                    | 1.0000                           | 1.1367                        | -0-                                     | 392.67               |
| 4                         | 11.129                | 40.99            | 67.2                    | .9924                            | 1.1367                        | -0-                                     | 514.6                |
| 5                         |                       |                  |                         |                                  |                               |                                         |                      |

  

|     |                |          |                |   |                                                     |
|-----|----------------|----------|----------------|---|-----------------------------------------------------|
| NO. | P <sub>r</sub> | Temp. °R | T <sub>r</sub> | Z | Gas Liquid Hydrocarbon Ratio 8.26 Mcf/bbl.          |
| 1   | Low Pressure   |          |                |   | A.P.I. Gravity of Liquid Hydrocarbons 56 @ 620 Deg. |
| 2.  |                |          |                |   | Specific Gravity Separator Gas .774 XXXXXXXXXX      |
| 3.  |                |          |                |   | Specific Gravity Flowing Fluid XXXXX                |
| 4.  |                |          |                |   | Critical Pressure _____ P.S.I.A. _____ P.S.I.A.     |
| 5.  |                |          |                |   | Critical Temperature _____ R _____ R                |

  

|     |                             |                |                             |                                                           |                                            |                                                            |
|-----|-----------------------------|----------------|-----------------------------|-----------------------------------------------------------|--------------------------------------------|------------------------------------------------------------|
| 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) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.6054$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.403$ |
| 1   | 3626.2                      | 13149.3        | 2692.7                      |                                                           |                                            |                                                            |
| 2   | 3393.2                      | 11513.8        | 4328.2                      |                                                           |                                            |                                                            |
| 3   | 2966.2                      | 8798.3         | 7043.7                      |                                                           |                                            |                                                            |
| 4   | 2444.2                      | 5974.1         | 9867.9                      |                                                           |                                            |                                                            |
| 5   |                             |                |                             |                                                           |                                            |                                                            |

  

|                                                                                |                           |                            |                        |
|--------------------------------------------------------------------------------|---------------------------|----------------------------|------------------------|
| Absolute Open Flow 722 Mcfd @ 15.025                                           |                           | Angle of Slope 54° 11'     | Slope, n .715          |
| Bottom Hole pressure 11,244' via bomb (mid perfs)                              |                           |                            |                        |
| Remarks: Fluid produced in 3rd and 4th rate 6.8 bbl cond. and 1.75 bbls. water |                           |                            |                        |
| Approved By Commission                                                         | Conducted By<br>L. Briley | Calculated By<br>L. Briley | Checked By<br>T. FRAGA |

