

**MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL**

|                                                                                                                           |                             |                                          |                                   |                                                           |                                                                                                                                    |                                  |                                                       |
|---------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------------|-----------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------|
| Operator<br><b>DEVON ENERGY</b>                                                                                           |                             |                                          |                                   | Lease or Unit Name<br><b>FILAREE "18" FED</b>             |                                                                                                                                    |                                  |                                                       |
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                             |                                          |                                   |                                                           |                                                                                                                                    | Test Date<br><b>9/14/01</b>      | Well No.<br><b>1</b>                                  |
| Completion Date<br><b>9-13-2001</b>                                                                                       |                             | Total Depth<br><b>11815 MD</b>           |                                   | Plug Back TD<br><b>11772</b>                              |                                                                                                                                    | Elevation<br><b>GL 3428'</b>     | Unit Ltr - Sec - TWP - Rge<br><b>O - 18-T22S-R26E</b> |
| Csg. Size<br><b>5 1/2</b>                                                                                                 | Wt.<br><b>20</b>            | d<br><b>4.778</b>                        | Set At<br><b>11815</b>            | Perforations:<br>From: <b>11458</b> To: <b>11474</b>      |                                                                                                                                    | County<br><b>EDDY</b>            |                                                       |
| Tbg. Size<br><b>2 3/8</b>                                                                                                 | Wt.<br><b>4.7</b>           | d<br><b>1.995</b>                        | Set At<br><b>11337</b>            | Perforations:<br>From:                      To:           |                                                                                                                                    | Pool<br><b>Happy Valley</b>      |                                                       |
| Type Well-Single-Bradenhead-G.G. or G.O. Multiple<br><b>SINGLE</b>                                                        |                             |                                          |                                   | Packer Set At<br><b>11337</b>                             |                                                                                                                                    | Formation<br><b>Morrow</b>       |                                                       |
| Producing Thru<br><b>TUBING</b>                                                                                           |                             | Reservoir Temp. °F<br><b>187.4</b>       | Mean Annual Temp. °F<br><b>60</b> | Baro. Press. - P <sub>a</sub><br><b>13.2</b>              |                                                                                                                                    | Connection<br><b>AIR</b>         |                                                       |
| L<br><b>11337</b>                                                                                                         | H<br><b>11337</b>           | Gg<br><b>0.607</b>                       | %CO <sub>2</sub><br><b>0.97</b>   | %N <sub>2</sub><br><b>0.304</b>                           | %H <sub>2</sub> S<br><b>N/A</b>                                                                                                    | Prover<br><b>N/A</b>             | Meter Run<br><b>4.026</b>                             |
|                                                                                                                           |                             |                                          |                                   |                                                           |                                                                                                                                    | Taps<br><b>FLG</b>               |                                                       |
| FLOW DATA                                                                                                                 |                             |                                          |                                   | TUBING DATA                                               |                                                                                                                                    | CASING DATA                      |                                                       |
| No.                                                                                                                       | Prover<br>Line<br>Size      | Orifice<br>x<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                                           |
| SI                                                                                                                        |                             |                                          |                                   |                                                           |                                                                                                                                    |                                  |                                                       |
| 1                                                                                                                         | 4.026 X 1.250               |                                          | 300                               | 7                                                         | 78                                                                                                                                 | 2827                             |                                                       |
| 2                                                                                                                         | 4.026 X 1.250               |                                          | 310                               | 16                                                        | 80                                                                                                                                 | 2698                             |                                                       |
| 3                                                                                                                         | 4.026 X 1.250               |                                          | 310                               | 24                                                        | 77                                                                                                                                 | 2577                             |                                                       |
| 4                                                                                                                         | 4.026 X 1.250               |                                          | 330                               | 50                                                        | 81                                                                                                                                 | 2227                             |                                                       |
| 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 Ft.                                                                                                           | Gravity Factor<br>F <sub>g</sub> | Super Compress<br>Factor F <sub>pv</sub>              |
| 1                                                                                                                         | 7.469                       |                                          | 46.8                              | 313.2                                                     | 0.9831                                                                                                                             | 1.284                            | 1.037                                                 |
| 2                                                                                                                         | 7.469                       |                                          | 71.9                              | 323.2                                                     | 0.9813                                                                                                                             | 1.284                            | 1.036                                                 |
| 3                                                                                                                         | 7.469                       |                                          | 88                                | 323.2                                                     | 0.984                                                                                                                              | 1.284                            | 1.037                                                 |
| 4                                                                                                                         | 7.469                       |                                          | 130.9                             | 343.2                                                     | 0.984                                                                                                                              | 1.284                            | 1.036                                                 |
| 5                                                                                                                         |                             |                                          |                                   |                                                           |                                                                                                                                    |                                  |                                                       |
| No.                                                                                                                       | P <sub>r</sub>              | Temp. °R                                 | T <sub>r</sub>                    | Z                                                         | Gas Liquid Hydrocarbon Ratio<br><b>N/A</b> Mcf bbl.                                                                                |                                  |                                                       |
| 1                                                                                                                         | 0.79                        | 538                                      | 1.55                              | 0.93                                                      | A.P. I. Gravity of Liquid Hydrocarbons<br><b>N/A</b> Deg.                                                                          |                                  |                                                       |
| 2                                                                                                                         | 0.8                         | 540                                      | 1.56                              | 0.931                                                     | Specific Gravity Separator Gas<br><b>0.607</b> XXXXXXXX                                                                            |                                  |                                                       |
| 3                                                                                                                         | 0.79                        | 537                                      | 1.55                              | 0.93                                                      | Specific Gravity Flowing Fluid<br><b>XXXXXX</b>                                                                                    |                                  |                                                       |
| 4                                                                                                                         | 0.8                         | 541                                      | 1.56                              | 0.931                                                     | Critical Pressure<br><b>674</b> P.S.I.A. P.S.I.A.                                                                                  |                                  |                                                       |
| 5                                                                                                                         |                             |                                          |                                   |                                                           | Critical Temperature<br><b>346</b> R. R.                                                                                           |                                  |                                                       |
| P <sub>c</sub> <b>3075.2</b>                                                                                              |                             | P <sub>c2</sub> <b>9456.8</b>            |                                   |                                                           |                                                                                                                                    |                                  |                                                       |
| 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) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{2.15}{\quad} \quad (2) \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.96}{\quad}$ |                                  |                                                       |
| 1                                                                                                                         | 8066.7                      | 2841.5                                   | 8073.9                            | 1383                                                      |                                                                                                                                    |                                  |                                                       |
| 2                                                                                                                         | 7350.6                      | 2714.3                                   | 7376.3                            | 2089.6                                                    |                                                                                                                                    |                                  |                                                       |
| 3                                                                                                                         | 6709.1                      | 2595                                     | 6734.2                            | 2722.6                                                    |                                                                                                                                    |                                  |                                                       |
| 4                                                                                                                         | 5018.5                      | 2252.3                                   | 5072.9                            | 4384                                                      |                                                                                                                                    |                                  |                                                       |
| 5                                                                                                                         |                             |                                          |                                   |                                                           |                                                                                                                                    |                                  |                                                       |
| Absolute Open Flow<br><b>2500</b>                                                                                         |                             |                                          |                                   | Mcf @ 15.025                                              | Angle of Slope (°):<br><b>48.7</b>                                                                                                 | Slope n:<br><b>0.8761</b>        |                                                       |
| Remarks:<br><b>* NO LIQUID MADE DURING TEST.</b>                                                                          |                             |                                          |                                   |                                                           |                                                                                                                                    |                                  |                                                       |
| Approved By Division:                                                                                                     |                             | Conducted By:<br><b>PRO WELL TESTING</b> |                                   | Calculated By:<br><b>MERV BUECKER</b>                     |                                                                                                                                    | Checked By:<br><b>BM</b>         |                                                       |