

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

|                                                                                                                           |  |           |                     |                  |                         |                                    |                               |                  |                                   |                           |  |
|---------------------------------------------------------------------------------------------------------------------------|--|-----------|---------------------|------------------|-------------------------|------------------------------------|-------------------------------|------------------|-----------------------------------|---------------------------|--|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |  |           |                     |                  |                         |                                    |                               |                  |                                   | Test Date<br>4-11-86      |  |
| Company<br>TENNECO OIL CO.                                                                                                |  |           |                     |                  | Connection              |                                    |                               |                  |                                   |                           |  |
| Pool<br>BLANCO                                                                                                            |  |           |                     |                  | Formation<br>MESA VERDE |                                    |                               |                  |                                   | Unit                      |  |
| Completion Date                                                                                                           |  |           | Total Depth<br>5680 |                  | Plug Back TD            |                                    | Elevation                     |                  | Farm or Lease Name<br>BOLACK C LS |                           |  |
| Csg. Size 7" 4 1/2"                                                                                                       |  | Wt.       |                     | Set At 3350 5676 |                         | Perforations:<br>From 5212 To 5529 |                               | Well No.<br>16A  |                                   |                           |  |
| Tng. Size 2 3/8"                                                                                                          |  | Wt.       |                     | Set At 5347      |                         | Perforations:<br>From To           |                               | Unit<br>J        |                                   | Sec. Twp. Rye.<br>33 27 8 |  |
| Type Well - Single - Blindhead - G.C. or G.O. Multiple                                                                    |  |           |                     |                  |                         |                                    | Packer Set At                 |                  | County<br>SAN JUAN                |                           |  |
| Producing Thru                                                                                                            |  |           | Reservoir Temp. °F  |                  | Mean Annual Temp. °F    |                                    | Bore. Press. - P <sub>a</sub> |                  | State<br>NEW MEXICO               |                           |  |
| L                                                                                                                         |  | H         |                     | Cg .700          |                         | % CO <sub>2</sub>                  |                               | % 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. | Temp. °F |                  |
| 1.        | 2x6x.75          |   |              |                 |                      |          | 980             |          | 995             |          | 3 hours          |
| 2.        |                  |   |              |                 |                      |          | 42              |          | 412             | 54       |                  |
| 3.        |                  |   |              |                 |                      |          |                 |          |                 |          |                  |
| 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.                        | 11                    |                  | 54                      | 1.006                 | 1.195             | 1.0055                      | 718                  |
| 2.                        |                       |                  |                         |                       |                   |                             |                      |
| 3.                        |                       |                  |                         |                       |                   |                             |                      |
| 4.                        |                       |                  |                         |                       |                   |                             |                      |
| 5.                        |                       |                  |                         |                       |                   |                             |                      |

  

|     |                |          |                |      |                                      |           |
|-----|----------------|----------|----------------|------|--------------------------------------|-----------|
| NO. | P <sub>t</sub> | Temp. °R | T <sub>r</sub> | Z    | Gas Liquid Hydrocarbon Ratio         | Mcft/lbl. |
| 1.  | .08            | 514      | 1.33           | .989 | A.P.I. Gravity of Liquid Hydrocarbon | Deg.      |
| 2.  |                |          |                |      | Specific Gravity Separator Gas       | XXXXXX    |
| 3.  |                |          |                |      | Specific Gravity Flowing Fluid       | DIST x 3  |
| 4.  |                |          |                |      | Critical Pressure                    | P.S.I.A.  |
| 5.  |                |          |                |      | Critical Temperature                 | R         |

  

|                                                              |                             |                |                             |                                                           |                                            |                                                             |
|--------------------------------------------------------------|-----------------------------|----------------|-----------------------------|-----------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------|
| F <sub>c</sub> 1007      P <sub>c</sub> <sup>2</sup> 1014049 |                             |                |                             |                                                           | APR 17 1986                                |                                                             |
| 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) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2155$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1576$ |
| 1.                                                           |                             | 424            | 179776                      | 834273                                                    |                                            |                                                             |
| 2.                                                           |                             |                |                             |                                                           |                                            |                                                             |
| 3.                                                           |                             |                |                             |                                                           |                                            |                                                             |
| 4.                                                           |                             |                |                             |                                                           |                                            |                                                             |
| 5.                                                           |                             |                |                             |                                                           |                                            |                                                             |

  

|                        |  |  |               |               |  |                  |  |              |  |
|------------------------|--|--|---------------|---------------|--|------------------|--|--------------|--|
| Absolute Open Flow 831 |  |  |               | Mcfd @ 15.025 |  | Angle of Slope @ |  | Slope, n .75 |  |
| Remarks:               |  |  |               |               |  |                  |  |              |  |
| Approved by Division   |  |  | Conducted by: |               |  | Calculated by:   |  | Checked by:  |  |