

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>1-22-85                  |                   | <div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; right: 0; transform: rotate(-15deg); font-weight: bold;">JAN 25 1985</div> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); font-weight: bold;">OIL CON. DIV.</div> <div style="position: absolute; bottom: 0; left: 0; transform: rotate(15deg); font-weight: bold;">DIST. 3</div> </div> |                    |
| Company<br>Consolidated Oil & Gas,                                                                                        |              | Connection<br>El Paso Natural Gas Co. |                   |                                                                                                                                                                                                                                                                                                                                                                                                                           |                    |
| Pool<br>Blanco Mesa Verde                                                                                                 |              | Formation<br>Mesa Verde               |                   | Unit                                                                                                                                                                                                                                                                                                                                                                                                                      |                    |
| Completion Date<br>12-18-84                                                                                               |              | Total Depth<br>6870'                  |                   | Plug Back TD<br>6837' FC                                                                                                                                                                                                                                                                                                                                                                                                  |                    |
| Elevation<br>5765' KB                                                                                                     |              | Farm or Lease Name<br>FREEMAN         |                   |                                                                                                                                                                                                                                                                                                                                                                                                                           |                    |
| Csg. Size<br>5-1/2"                                                                                                       | Wt.<br>15.5# | d<br>4.950                            | Set At<br>6868'   | Perforations:<br>From 4408' To 4682'                                                                                                                                                                                                                                                                                                                                                                                      |                    |
| Tbg. Size<br>1-1/2"                                                                                                       | Wt.<br>2.76# | d<br>1.610                            | Set At<br>4621'   | Perforations:<br>From To                                                                                                                                                                                                                                                                                                                                                                                                  |                    |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Dual Gas                                                       |              |                                       |                   | Packer Set At<br>4730'                                                                                                                                                                                                                                                                                                                                                                                                    |                    |
| Producing Thru<br>Tbg                                                                                                     |              | Reservoir Temp. °F<br>150 @ 4545'     |                   | Mean Annual Temp. °F                                                                                                                                                                                                                                                                                                                                                                                                      |                    |
| Baro. Press. - P <sub>a</sub>                                                                                             |              | State<br>New Mexico                   |                   |                                                                                                                                                                                                                                                                                                                                                                                                                           |                    |
| L                                                                                                                         | H            | Cg<br>.650 est                        | % CO <sub>2</sub> | % N <sub>2</sub>                                                                                                                                                                                                                                                                                                                                                                                                          | % H <sub>2</sub> S |
| Prover<br>2" pos ck                                                                                                       |              | Meter Run                             |                   | Taps                                                                                                                                                                                                                                                                                                                                                                                                                      |                    |

  

| FLOW DATA |                        |   |                 |                    |                         | TUBING DATA |                    | CASING DATA |                    | Duration<br>of<br>Flow |
|-----------|------------------------|---|-----------------|--------------------|-------------------------|-------------|--------------------|-------------|--------------------|------------------------|
| NO.       | Prover<br>Line<br>Size | X | Orifice<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 | Press.<br>p.s.i.g. |                        |
| SI        | 14 days                |   |                 |                    |                         |             | 920                | -           | 920                | -                      |
| 1.        | 2x3/4"                 |   |                 |                    |                         |             | 206                | 60          | 688                | 60                     |
| 2.        |                        |   |                 |                    |                         |             |                    |             |                    |                        |
| 3.        |                        |   |                 |                    |                         |             |                    |             |                    |                        |
| 4.        |                        |   |                 |                    |                         |             |                    |             |                    |                        |
| 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<br>F <sub>t</sub> | Gravity<br>Factor<br>F <sub>g</sub> | Super<br>Compress.<br>Factor, F <sub>pv</sub> | Rate of Flow<br>Q, Mcfd |
| 1                         | 11                       |                  | 218                        | 1.000                                  | 1.240                               | 1.022                                         | 3039                    |
| 2.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 3.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 4.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 5.                        |                          |                  |                            |                                        |                                     |                                               |                         |

  

|     |                |          |                |   |                                                      |
|-----|----------------|----------|----------------|---|------------------------------------------------------|
| NO. | P <sub>t</sub> | Temp. °R | T <sub>f</sub> | Z | Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.          |
| 1.  |                |          |                |   | A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.     |
| 2.  |                |          |                |   | Specific Gravity Separator Gas _____ X X X X X X X X |
| 3.  |                |          |                |   | Specific Gravity Flowing Fluid _____ X X X X X       |
| 4.  |                |          |                |   | Critical Pressure _____ P.S.I.A. _____ P.S.I.A.      |
| 5.  |                |          |                |   | Critical Temperature _____ R _____ R                 |

  

|                    |                                    |                                            |                                                                   |
|--------------------|------------------------------------|--------------------------------------------|-------------------------------------------------------------------|
| P <sub>c</sub> 932 | P <sub>c</sub> <sup>2</sup> 868624 | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.2942$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.8641$       |
| NO. 1              | P <sub>t</sub> <sup>2</sup> 700    | P <sub>w</sub> <sup>2</sup> 490.000        | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> 378,624 |
| 2.                 |                                    |                                            |                                                                   |
| 3.                 |                                    |                                            |                                                                   |
| 4.                 |                                    |                                            |                                                                   |
| 5.                 |                                    |                                            |                                                                   |

  

$ACF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5665$

Absolute Open Flow 5665 Mcfd @ 15.025

Angle of Slope  $\phi$  \_\_\_\_\_

Slope, n .75

  

Remarks: \_\_\_\_\_

  

|                      |                           |                             |                   |
|----------------------|---------------------------|-----------------------------|-------------------|
| Approved By Division | Conducted By:<br>R. Housh | Calculated By:<br>Tefteller | Checked By:<br>br |
|----------------------|---------------------------|-----------------------------|-------------------|