

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

Form C-122  
Revised 9-1-65

**RECEIVED**  
**SEP 10 1985**  
**OIL CON. DIV.**  
**DIST. 3**

|                                                                                                                           |                         |                         |                                     |
|---------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------|-------------------------------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                         | Test Date<br>9-4-85     |                                     |
| Company<br>El Paso Natural Gas                                                                                            |                         | Connection              |                                     |
| Foot<br>Blanco                                                                                                            |                         | Formation<br>Mesa Verde |                                     |
| Completion Date<br>9-4-85                                                                                                 | Total Depth<br>5143     | Plug Back TD<br>5134    | Elevation<br>6165 GR                |
| Form or Lease Name<br>Hancock                                                                                             |                         | Well No.<br>#3A         |                                     |
| Csg. Size<br>7000                                                                                                         | wt.<br>20               | d<br>6.456              | Set At<br>5143                      |
| Perforations:<br>From *4617 To 5114                                                                                       |                         | Unit<br>F               |                                     |
| Csg. Size<br>2.375                                                                                                        | wt.<br>4.7              | d<br>1.995              | Set At<br>5072                      |
| Perforations:<br>From To                                                                                                  |                         | Sec.<br>22              | Twp.<br>28                          |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single                                                         |                         | Packer Set At<br>None   | County<br>San Juan                  |
| Producing Thru<br>Tbg.                                                                                                    | Reservoir Temp. °F<br>a | Mean Annual Temp. °F    | Baro. Press. - P <sub>a</sub><br>12 |
| State<br>New Mexico                                                                                                       |                         | Unit<br>F               |                                     |
| L                                                                                                                         | H                       | Gg<br>.690              | % 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 |
| SI        |                  |   |              |                 |                      |             | 967             |             | 989             |                  | 7 Days   |
| 1.        |                  |   | .750         | 319             |                      | 72          | 319             |             | 624             |                  | 3 Hrs.   |
| 2.        |                  |   |              |                 |                      |             |                 |             |                 |                  |          |
| 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 F <sub>g</sub> | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mcfd |
| 1                         | 12.365                |                  | 331                     | .9887                 | .9325                         | 1.034                                   | 3902                 |
| 2                         |                       |                  |                         |                       |                               |                                         |                      |
| 3                         |                       |                  |                         |                       |                               |                                         |                      |
| 4                         |                       |                  |                         |                       |                               |                                         |                      |
| 5                         |                       |                  |                         |                       |                               |                                         |                      |

  

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

  

|                     |                        |                |                                 |                                                            |                                                             |
|---------------------|------------------------|----------------|---------------------------------|------------------------------------------------------------|-------------------------------------------------------------|
| P <sub>c</sub> 1001 | P <sub>w</sub> 1002001 |                |                                 |                                                            |                                                             |
| NO.                 | P <sub>f</sub>         | P <sub>w</sub> | P <sub>f</sub> - P <sub>w</sub> | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{1002001}{608872}$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4530$ |
| 1                   | 627                    | 393129         | 608872                          |                                                            |                                                             |
| 2                   |                        |                |                                 |                                                            |                                                             |
| 3                   |                        |                |                                 |                                                            |                                                             |
| 4                   |                        |                |                                 |                                                            |                                                             |
| 5                   |                        |                |                                 |                                                            |                                                             |

  

|                                               |                             |                               |                    |
|-----------------------------------------------|-----------------------------|-------------------------------|--------------------|
| Absolute Open Flow 5669 Mcfd @ 15.025         |                             | Angle of Slope                | Slope, n .75       |
| Remarks: *4.500" liner from 2549' to 5143.    |                             |                               |                    |
| Unloaded slug of oil - then mist during test. |                             |                               |                    |
| Gas vented during test = 577 MCF.             |                             |                               |                    |
| Approved by Commission:                       | Conducted By:<br>Don Norton | Calculated By:<br>Cliff Brock | Checked By:<br>kld |