

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088  
SANTA FE, NEW MEXICO 87501Form O-177  
Revised 10-1-78

## 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>3-17-80          |            |                     |                                    |
| Company<br>El Paso Natural Gas Company                                                                                    |             |                         |                     |                                    |                      | Connection                    |            |                     |                                    |
| Pool<br>Blanco                                                                                                            |             |                         |                     |                                    |                      | Formation<br>Mesa Verde       |            | Unit                |                                    |
| Completion Date<br>3-6-80                                                                                                 |             |                         | Total Depth<br>4797 |                                    | Flow Back TD<br>4779 |                               | Elevation  |                     | Form or Lease Name<br>Standard Oil |
| Csg. Size<br>4.500                                                                                                        | Wt.<br>10.5 | d<br>4.052              | Set At<br>4797      | Perforations:<br>From 3653 To 4707 |                      | Well No.<br>Com #1A           |            |                     |                                    |
| Wg. Size<br>2.375                                                                                                         | Wt.<br>4.7  | d<br>1.995              | Set At<br>4707      | Perforations:<br>From To           |                      | Unit<br>E                     | Sec.<br>36 | Twp.<br>29          | Rge.<br>9                          |
| Type Well - Single - Broadhead - G.G. or G.O. Multiple<br>Single                                                          |             |                         |                     |                                    |                      | Packer Set At                 |            | County<br>San Juan  |                                    |
| Producing Thru                                                                                                            |             | Reservoir Temp. °F<br>p |                     | Mean Annual Temp. °F               |                      | Baro. Press. - P <sub>a</sub> |            | State<br>New Mexico |                                    |
| L                                                                                                                         | H           | Gg                      | % 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        |                  |   |              |                 |                      |          | 520             |          | 580             |          | 11 Days          |
| 1.        |                  |   |              |                 |                      |          |                 |          |                 |          |                  |
| 2.        |                  |   |              |                 |                      |          |                 |          |                 |          |                  |
| 3.        |                  |   |              |                 |                      |          |                 |          |                 |          |                  |
| 4.        |                  |   |              |                 |                      |          |                 |          |                 |          |                  |
| 5.        |                  |   |              |                 |                      |          |                 |          |                 |          |                  |

  

| RATE OF FLOW CALCULATIONS |                       |                     |                         |                                  |                               |                                         |                       |
|---------------------------|-----------------------|---------------------|-------------------------|----------------------------------|-------------------------------|-----------------------------------------|-----------------------|
| NO.                       | Coefficient (24 Hour) | $\sqrt{h_w P_{in}}$ | 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, Mcf/d |
| 1.                        |                       |                     |                         |                                  |                               |                                         |                       |
| 2.                        |                       |                     |                         |                                  |                               |                                         |                       |
| 3.                        |                       |                     |                         |                                  |                               |                                         |                       |
| 4.                        |                       |                     |                         |                                  |                               |                                         |                       |
| 5.                        |                       |                     |                         |                                  |                               |                                         |                       |

  

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

  

| NO. | P <sub>r</sub> | P <sub>w</sub> | P <sub>c</sub> | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> |
|-----|----------------|----------------|----------------|-----------------------------------------------------------|
| 1.  |                |                |                |                                                           |
| 2.  |                |                |                |                                                           |
| 3.  |                |                |                |                                                           |
| 4.  |                |                |                |                                                           |
| 5.  |                |                |                |                                                           |

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \text{_____}$$

$$(2) \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \text{_____}$$

$$AQH = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \text{_____}$$

Absolute Open F

Remarks:

|                      |                            |                          |             |
|----------------------|----------------------------|--------------------------|-------------|
| Approved by Division | Conducted by: T. McAndrews | Calculated by: R. Wagner | Checked by: |
|----------------------|----------------------------|--------------------------|-------------|