

**RECEIVED**  
**JAN 25 1995**  
**OIL CON. DIV.**  
**DIST. 3**

**OIL CONSERVATION DIVISION**  
**P.O. BOX 2088**  
**SANTA FE, NEW MEXICO 87501**

STATE OF NEW MEXICO  
ENERGY AND MINERAL DEPARTMENT

Form C-122  
Revised 4-1-91

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

|                                                                                                                                  |                    |                             |                        |                                             |              |                                                 |  |                               |  |                                                       |  |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------------------|------------------------|---------------------------------------------|--------------|-------------------------------------------------|--|-------------------------------|--|-------------------------------------------------------|--|
| <b>Operator</b><br>Meridian Oil, Inc.                                                                                            |                    |                             |                        |                                             |              | <b>Lease or Unit Name</b><br>San Juan 28-6 Unit |  |                               |  |                                                       |  |
| <b>Type Test</b><br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                    |                             |                        |                                             |              | <b>Test Date</b><br>01-20-95                    |  | <b>Well No.</b><br>203M       |  |                                                       |  |
| <b>Completion Date</b><br>01-12-95                                                                                               |                    | <b>Total Depth</b><br>7,685 |                        | <b>TVD</b><br>MD                            |              | <b>Plug Back TD</b><br>7,662                    |  | <b>Elevation</b><br>6,568     |  | <b>Unit Letter - Sec. - TWN - RNG</b><br>O-7-027N-06W |  |
| <b>Csg. Size</b><br>4.500                                                                                                        | <b>Wt.</b><br>11.6 | <b>d</b><br>4.000           | <b>Set At</b><br>7,685 | <b>Perforations:</b><br>From 4,850 To 5,757 |              |                                                 |  | <b>County</b><br>RIO ARRIBA   |  |                                                       |  |
| <b>Tbg. Size</b><br>2.375                                                                                                        | <b>Wt.</b><br>4.7  | <b>d</b><br>1.995           | <b>Set At</b><br>5,750 | <b>Perforations:</b><br>From To             |              |                                                 |  | <b>Pool</b><br>BLANCO         |  |                                                       |  |
| <b>Type Well - Single - Bradenhead - G.G. or G.O. Multiple</b><br>DUAL - DK/MV                                                   |                    |                             |                        | <b>Packer Set At</b><br>5782                |              |                                                 |  | <b>Formation</b><br>MESAVERDE |  |                                                       |  |
| <b>Prod Thru</b><br>Tubing                                                                                                       |                    | <b>Resv Temp °F</b>         |                        | <b>Mean Ann T °F</b>                        |              | <b>Baro. Press. Pd</b><br>12.20                 |  |                               |  | <b>Connection</b>                                     |  |
| <b>L</b>                                                                                                                         | <b>H</b>           | <b>Gg</b><br>0.700          | <b>% CO2</b><br>0.000  | <b>% N2</b><br>0.000                        | <b>% H2S</b> | <b>Prover</b>                                   |  | <b>Meter Run</b>              |  | <b>Taps</b>                                           |  |

  

| FLOW DATA |                  |   |              |                 |          | TUBING DATA |                 | CASING DATA |                 | Duration of Flow |          |
|-----------|------------------|---|--------------|-----------------|----------|-------------|-----------------|-------------|-----------------|------------------|----------|
| NO.       | Prover Line Size | X | Orifice Size | Press. p.s.i.g. | Diff. hw | Temp. F°    | Press. p.s.i.g. | Temp. F°    | Press. p.s.i.g. |                  | Temp. F° |
| SI        | 2                |   | 0.750        |                 |          |             | 554             |             | 556             |                  | S.I.     |
| 1.        |                  |   |              |                 |          |             | 136             | 63          | 476             |                  | 1 Hour   |
| 2.        |                  |   |              |                 |          |             | 128             | 63          | 428             |                  | 2 Hours  |
| 3.        |                  |   |              |                 |          |             | 111             | 63          | 416             |                  | 3 Hours  |
| 4.        |                  |   |              |                 |          |             |                 |             |                 |                  |          |
| 5.        |                  |   |              |                 |          |             |                 |             |                 |                  |          |

  

| RATE OF FLOW CALCULATIONS |                       |                  |             |                       |                   |                             |                      |
|---------------------------|-----------------------|------------------|-------------|-----------------------|-------------------|-----------------------------|----------------------|
| NO.                       | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure Pm | Flow Temp. Factor Ft. | Gravity Factor Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd |
| 1.                        | 11.000                |                  | 123.2       | 0.9971                | 1.1952            | 1.0000                      | 1,615.12             |
| 2.                        |                       |                  |             |                       |                   |                             |                      |
| 3.                        |                       |                  |             |                       |                   |                             |                      |
| 4.                        |                       |                  |             |                       |                   |                             |                      |
| 5.                        |                       |                  |             |                       |                   |                             |                      |

  

| NO. | Pr | Temp. °R | Tr | Z | Gas Liquid Hydrocarbon Ratio       | Mcf/bbl. Deg.        |
|-----|----|----------|----|---|------------------------------------|----------------------|
| 1.  |    |          |    |   | API Gravity of Liquid Hydrocarbons | XXXXXXXXXXXXXXXXXXXX |
| 2.  |    |          |    |   | Specific Gravity Separator Gas     | XXXXXXX              |
| 3.  |    |          |    |   | Specific Gravity Flowing Fluid     |                      |
| 4.  |    |          |    |   | Critical Pressure                  | P.S.I.A              |
| 5.  |    |          |    |   | Critical Temperature               | R                    |

  

|                  |                       |
|------------------|-----------------------|
| <b>Pc</b> 568.20 | <b>Pc2</b> 322,851.24 |
|------------------|-----------------------|

  

| NO. | Pt2 | Pw     | Pw2        | Pc2 - Pw2  |
|-----|-----|--------|------------|------------|
| 1.  |     | 428.20 | 183,355.24 | 139,496.00 |
| 2.  |     |        |            |            |
| 3.  |     |        |            |            |
| 4.  |     |        |            |            |
| 5.  |     |        |            |            |

  

$$(1) \frac{Pc2}{Pc2 - Pw2} = 2.3144$$

$$AOF = Q \left[ \frac{Pc2}{Pc2 - Pw2} \right]^n = 3,030.64$$

$$(2) \left[ \frac{Pc2}{Pc2 - Pw2} \right]^n = 1.8764$$

  

|                                               |                       |                      |
|-----------------------------------------------|-----------------------|----------------------|
| <b>Absolute Open Flow</b> 3,031 Mcfd @ 15.025 | <b>Angle of Slope</b> | <b>Slope, n</b> 0.75 |
|-----------------------------------------------|-----------------------|----------------------|

  

**Remarks:**

  

|                             |                                  |                                    |                               |
|-----------------------------|----------------------------------|------------------------------------|-------------------------------|
| <b>Approved By Division</b> | <b>Conducted By:</b> JOE GOLDING | <b>Calculated By:</b> TANYA ATCITY | <b>Checked By:</b> LARY BYARS |
|-----------------------------|----------------------------------|------------------------------------|-------------------------------|