

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

STATE OF NEW MEXICO  
ENERGY AND MINERALS 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>KLEIN |                                 |                           |                               |                                                        |
| <b>Type Test</b><br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                   |                             |                        |                                             | <b>Test Date</b><br>05-24-94       |                                 | <b>Well No.</b><br>28     |                               |                                                        |
| <b>Completion Date</b><br>05-13-94                                                                                               |                   | <b>Total Depth</b><br>7,549 |                        | <b>TVD</b><br>MD                            | <b>Plug Back TD</b><br>7,533       |                                 | <b>Elevation</b><br>6,743 |                               | <b>Unit Letter - Sec. - TWN - RNG</b><br>N-33-26N-006W |
| <b>Csg. Size</b><br>4.500                                                                                                        | <b>Wt.</b><br>11  | <b>d</b><br>4.052           | <b>Set At</b><br>7,549 | <b>Perforations:</b><br>From 5,115 To 5,224 |                                    |                                 |                           | <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>5,224 | <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>3178                |                                    |                                 |                           | <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<br>of<br>Flow |
|-----------|------------------------|---|-----------------|--------------------|-------------|-------------|--------------------|-------------|--------------------|-------------|------------------------|
| NO.       | Prover<br>Line<br>Size | X | Orifice<br>Size | Press.<br>p.s.i.g. | Diff.<br>hw | Temp.<br>F° | Press.<br>p.s.i.g. | Temp.<br>F° | Press.<br>p.s.i.g. | Temp.<br>F° |                        |
| SI        | 2                      |   | 0.750           |                    |             |             | 605                |             | 605                |             | S.I.                   |
| 1.        |                        |   |                 |                    |             |             | 115                | 60          | 115                |             | 1 Hour                 |
| 2.        |                        |   |                 |                    |             |             | 65                 | 63          | 65                 |             | 2 Hours                |
| 3.        |                        |   |                 |                    |             |             | 50                 | 63          | 50                 |             | 3 Hours                |
| 4.        |                        |   |                 |                    |             |             |                    |             |                    |             |                        |
| 5.        |                        |   |                 |                    |             |             |                    |             |                    |             |                        |

  

| RATE OF FLOW CALCULATIONS |                          |                 |                |                             |                         |                                   |                         |
|---------------------------|--------------------------|-----------------|----------------|-----------------------------|-------------------------|-----------------------------------|-------------------------|
| NO.                       | Coefficient<br>(24 Hour) | $\sqrt{hw P_m}$ | Pressure<br>Pm | Flow Temp.<br>Factor<br>Ft. | Gravity<br>Factor<br>Fg | Super<br>Compress.<br>Factor, Fpv | Rate of Flow<br>Q, Mcfd |
| 1.                        | 11.000                   |                 | 62.2           | 0.9971                      | 1.1952                  | 1.0000                            | 815.43                  |
| 2.                        |                          |                 |                |                             |                         |                                   |                         |
| 3.                        |                          |                 |                |                             |                         |                                   |                         |
| 4.                        |                          |                 |                |                             |                         |                                   |                         |
| 5.                        |                          |                 |                |                             |                         |                                   |                         |

  

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

  

|                  |                       |
|------------------|-----------------------|
| <b>Pc</b> 617.20 | <b>Pc2</b> 380.935.84 |
|------------------|-----------------------|

  

| NO. | Pt2 | Pw    | Pw2      | Pc2 - Pw2  |
|-----|-----|-------|----------|------------|
| 1.  |     | 62.20 | 3,868.84 | 377,067.00 |
| 2.  |     |       |          |            |
| 3.  |     |       |          |            |
| 4.  |     |       |          |            |
| 5.  |     |       |          |            |

  

$$(1) \frac{Pc2}{Pc2 - Pw2} = 1.0103$$

$$AOF = Q \left[ \frac{Pc2}{Pc2 - Pw2} \right]^n = 821.69$$

$$(2) \left[ \frac{Pc2}{Pc2 - Pw2} \right]^n = 1.0077$$

  

|                                             |                       |                      |
|---------------------------------------------|-----------------------|----------------------|
| <b>Absolute Open Flow</b> 822 Mcfd @ 15.025 | <b>Angle of Slope</b> | <b>Slope, n</b> 0.75 |
|---------------------------------------------|-----------------------|----------------------|

  

|                 |  |  |  |
|-----------------|--|--|--|
| <b>Remarks:</b> |  |  |  |
|                 |  |  |  |

  

|                             |                                     |                                        |                                   |
|-----------------------------|-------------------------------------|----------------------------------------|-----------------------------------|
| <b>Approved By Division</b> | <b>Conducted By:</b><br>JIM MOORING | <b>Calculated By:</b><br>TANYA ATCITTY | <b>Checked By:</b><br>LARRY BYARS |
|-----------------------------|-------------------------------------|----------------------------------------|-----------------------------------|