

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

Form C-122  
Revised 9-1-65

|                                                                                                                           |             |                         |                   |                                    |                    |                                     |           |                             |  |
|---------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------|-------------------|------------------------------------|--------------------|-------------------------------------|-----------|-----------------------------|--|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |             |                         |                   |                                    |                    | Test Date<br>7/26/78                |           |                             |  |
| Company<br>Mesa Petroleum Co.                                                                                             |             |                         |                   | Connection<br>El Paso Natural Gas  |                    |                                     |           |                             |  |
| Pool                                                                                                                      |             |                         |                   | Formation<br>Mesaverde             |                    |                                     |           | Unit                        |  |
| Completion Date<br>7/18/78                                                                                                |             | Total Depth<br>5693     |                   | Plug Back TD<br>5630               |                    | Elevation<br>6271 GR                |           | Farm or Lease Name<br>Suter |  |
| Csg. Size<br>4 1/2                                                                                                        | Wt.<br>10.5 | d                       | Set At<br>5692    | Perforations:<br>From 4586 To 5636 |                    | Well No.<br>1A                      |           |                             |  |
| Tbg. Size<br>2 3/8                                                                                                        | Wt.<br>4.7  | d                       | Set At<br>5443    | Perforations:<br>From To           |                    | Unit Sec. Twp. Rge.<br>C 13 32N 11W |           |                             |  |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Dual Gas                                                       |             |                         |                   |                                    |                    | Packer Set At<br>3133               |           | County<br>San Juan          |  |
| Producing Thru<br>Tbg.                                                                                                    |             | Reservoir Temp. °F<br>@ |                   | Mean Annual Temp. °F<br>74 degrees |                    | 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                        |  |
|                                                                                                                           |             |                         | .650              |                                    |                    |                                     |           |                             |  |

| 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         |        |
| 1.        | 2"               |   | .75"         | Pitot Tube      |          | 74 <sup>0</sup> | 932             |             | 731             |                  | 4 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 Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd |
| 1.                        | Based on NMOCC Manual for Pitot Tube Testing Procedures |                  |                         |                       |                   |                             |                      |
| 2.                        |                                                         |                  |                         |                       |                   |                             |                      |
| 3.                        |                                                         |                  |                         | .9868                 | .9608             | 1.034                       | 4461                 |
| 4.                        |                                                         |                  |                         |                       |                   |                             |                      |
| 5.                        |                                                         |                  |                         |                       |                   |                             |                      |

| NO. | P <sub>t</sub> | Temp. °R | T <sub>t</sub> | Z | Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.         |
|-----|----------------|----------|----------------|---|-----------------------------------------------------|
| 1.  |                |          |                |   | A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.    |
| 2.  |                |          |                |   | Specific Gravity Separator Gas .650 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                |

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

(1)  $\frac{P_c^2}{P_c^2 - P_w^2} = 2.7500$       (2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.1355$

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 9526$

|                    |      |                |                  |              |
|--------------------|------|----------------|------------------|--------------|
| Absolute Open Flow | 9526 | Mcf/d @ 15.025 | Angle of Slope @ | Slope, n .75 |
| Remarks:           |      |                |                  |              |
|                    |      |                |                  |              |

|                         |                    |                |                  |
|-------------------------|--------------------|----------------|------------------|
| Approved By Commission: | Conducted By:      | Calculated By: | Checked By:      |
|                         | Mesa Petroleum Co. | Bill Toller    | C.R. Wagner-EPNG |