

NE MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GASWELL

Form C-122  
Revised 9-1-65

MAY 17 1982

dsf file

|                                                                                                                           |  |                                  |  |                            |  |                                       |  |                                  |  |                                    |  |
|---------------------------------------------------------------------------------------------------------------------------|--|----------------------------------|--|----------------------------|--|---------------------------------------|--|----------------------------------|--|------------------------------------|--|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |  |                                  |  |                            |  | Test Date<br>5-12-82 C. D.            |  |                                  |  |                                    |  |
| Company<br>Mesa Petroleum Co./                                                                                            |  |                                  |  |                            |  | Connection<br>Unconnected             |  |                                  |  |                                    |  |
| Pool<br>Pecos Slope ABO                                                                                                   |  |                                  |  |                            |  | Formation<br>ABO                      |  |                                  |  |                                    |  |
| Completion Date<br>5-12-82                                                                                                |  |                                  |  | Total Depth<br>4166'       |  | Plug Back TD<br>4105'                 |  | Elevation<br>3838'               |  | Farm or Lease Name<br>Ric          |  |
| Csg. Size<br>4 1/2                                                                                                        |  | Wt.<br>10.5#                     |  | Set At<br>4153'            |  | Perforations:<br>From 3515 To 3775    |  |                                  |  | Well No.<br>7                      |  |
| Thq. Size<br>2 3/8                                                                                                        |  | Wt.<br>4.7#                      |  | Set At<br>3422'            |  | Perforations:<br>From open ended To   |  |                                  |  | Unit Sec. Twp. Rye.<br>A 31 6S 25E |  |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single                                                         |  |                                  |  |                            |  | Packer Set At<br>None                 |  | County<br>Chaves                 |  |                                    |  |
| Producing Thru<br>Tubing                                                                                                  |  | Reservoir Temp. °F<br>94° @ 4166 |  | Mean Annual Temp. °F<br>60 |  | Baro. Press. - P <sub>a</sub><br>13.2 |  | State<br>New Mexico              |  |                                    |  |
| L                                                                                                                         |  | H                                |  | G <sub>g</sub><br>.65      |  | % CO <sub>2</sub><br>1                |  | % N <sub>2</sub><br>1            |  | % H <sub>2</sub> S                 |  |
|                                                                                                                           |  |                                  |  |                            |  |                                       |  | Prover<br>2" orifice well tester |  | Meter Run<br>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         | Duration of Flow |
| SI        |                  |       |              |                 |                      |             | 745             |             | 745             |                  | 56 hr. SI        |
| 1.        | 2" orifice       | 1 1/4 |              | 6               |                      | 72          | 195             | 79          | 235             |                  | 1 hr.            |
| 2.        | well             |       |              |                 |                      |             |                 |             |                 |                  |                  |
| 3.        | tester           |       |              |                 |                      |             |                 |             |                 |                  |                  |
| 4.        |                  |       |              |                 |                      |             |                 |             |                 |                  |                  |
| 5.        |                  |       |              |                 |                      |             |                 |             |                 |                  |                  |

  

| RATE OF FLOW CALCULATIONS |                       |                  |                         |                                  |                               |                                         |                      |
|---------------------------|-----------------------|------------------|-------------------------|----------------------------------|-------------------------------|-----------------------------------------|----------------------|
| NO.                       | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | 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, Mcfd |
| 1                         | 561                   | 2" Orifice well  |                         | .9887                            | .9608                         |                                         | 533                  |
| 2.                        |                       | tester           |                         |                                  |                               |                                         |                      |
| 3.                        |                       |                  |                         |                                  |                               |                                         |                      |
| 4.                        |                       |                  |                         |                                  |                               |                                         |                      |
| 5.                        |                       |                  |                         |                                  |                               |                                         |                      |

  

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

  

|                                 |                                 |                                            |                                                             |
|---------------------------------|---------------------------------|--------------------------------------------|-------------------------------------------------------------|
| P <sub>c</sub> 758              | P <sub>c</sub> <sup>2</sup> 575 | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1100$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1100$ |
| 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                               | 238                             | 57                                         | 518                                                         |
| 2                               |                                 |                                            |                                                             |
| 3                               |                                 |                                            |                                                             |
| 4                               |                                 |                                            |                                                             |
| 5                               |                                 |                                            |                                                             |

  

|                        |  |                |  |                      |  |            |  |
|------------------------|--|----------------|--|----------------------|--|------------|--|
| Absolute Open Flow 600 |  | Mcf/d @ 15.025 |  | Angle of Slope @ 45° |  | Slope, n 1 |  |
|------------------------|--|----------------|--|----------------------|--|------------|--|

  

Remarks: Unable to run four flow rates due to low delivery of well. Assumed N=1 and based calculations on one point test.

  

|                         |                              |                                      |             |
|-------------------------|------------------------------|--------------------------------------|-------------|
| Approved By Commission: | Conducted By:<br>James Craig | Calculated By:<br>E.L. Buttross, Jr. | Checked By: |
|-------------------------|------------------------------|--------------------------------------|-------------|

Mesa Petroleum Co.  
 Ric No. 7  
 Chaves Co., NM.  
 5-12-82

