

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

Form O-1  
Rev. 10-6-64

**RECEIVED**

**JUL 31 1967**

**OIL CON. COM  
DIST. 3**

|                                                                                                                           |   |                     |                                               |                      |                            |
|---------------------------------------------------------------------------------------------------------------------------|---|---------------------|-----------------------------------------------|----------------------|----------------------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |   |                     |                                               | Test Date<br>7-3-69  |                            |
| Company<br><i>Aztec Oil &amp; Gas Company</i>                                                                             |   |                     | Connection<br><i>Southern Union Gathering</i> |                      |                            |
| Pool<br><i>Pictured Cliffs</i>                                                                                            |   |                     | Unit                                          |                      |                            |
| Completion Date<br>6-26-69                                                                                                |   | Total Depth<br>2054 |                                               | Elevation<br>5764 CR |                            |
| Csg. Size<br>4-1/2                                                                                                        |   | Wt.<br>9.5#         |                                               | Set At<br>2020       |                            |
| Tag. Size<br>1"                                                                                                           |   | Wt.<br>1.2#         |                                               | Set At<br>1947       |                            |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br><i>Single</i>                                                  |   |                     | Perforations:<br>From 1934 To 1960            |                      | Well No.<br>5              |
| Producing Thru                                                                                                            |   |                     | Reservoir Temp. °F<br>@                       |                      | Mean Annual Temp. °F       |
| Baro. Press. - P <sub>a</sub>                                                                                             |   |                     | County<br><i>San Juan</i>                     |                      | State<br><i>New Mexico</i> |
| 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 |
| 1.        | 2                | X | 3/4"         |                 |                      |             | 356             |             | 356             |                  |          |
| 2.        |                  |   |              |                 |                      |             | 163             |             | 79              |                  |          |
| 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                         | 12.365                |                  | 97                      | 1.000                 | 9258              | 1.011                        | 1.053                |
| 2.                        |                       |                  |                         |                       |                   |                              |                      |
| 3.                        |                       |                  |                         |                       |                   |                              |                      |
| 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 _____ 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> 368 | P <sub>c</sub> <sup>2</sup> 135424 |                |                             |
| NO.                | P <sub>i</sub> <sup>2</sup>        | P <sub>w</sub> | P <sub>w</sub> <sup>2</sup> |
| 1                  | 8281                               |                | 8274                        |
| 2                  |                                    |                | 126710                      |
| 3                  |                                    |                |                             |
| 4                  |                                    |                |                             |
| 5                  |                                    |                |                             |

  

(1)  $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0687$

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1114$

(2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0580$

  

|                         |      |                |                  |             |
|-------------------------|------|----------------|------------------|-------------|
| Absolute Open Flow      | 1114 | Mcfd @ 15.025  | Angle of Slope θ | Slope, n    |
| Remarks:                |      |                |                  |             |
| Approved By Commission: |      |                |                  |             |
| Conducted By:           |      | Calculated By: |                  | Checked By: |