

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>9/25/81     |                                       |                                                      |                                   |
| Company<br>JACK A. COLE                                                                                                   |              |                                  |                         | Connection                                    |                          |                                       |                                                      |                                   |
| Pool<br>Ballard Pictured Cliffs                                                                                           |              |                                  |                         | Formation<br>Picture Cliffs                   |                          |                                       |                                                      | Unit                              |
| Completion Date<br>9/17/81                                                                                                |              | Total Depth<br>3208'             |                         | Plug Back TD<br>3112'                         |                          | Elevation<br>7386'GL                  |                                                      | Farm or Lease Name<br>Indian Bend |
| Csg. Size<br>4.500                                                                                                        | Wt.<br>10.50 | d<br>4.052                       | Set At<br>3148'         | Perforations:<br>From 3068' To 3086'          |                          |                                       | Well No.<br>1                                        |                                   |
| Tbg. Size<br>1.660                                                                                                        | Wt.<br>2.40  | d<br>1.380                       | Set At<br>3092'         | Perforations:<br>From                      To |                          |                                       | Unit    Sec.    Twp.    Rge.<br>D    25    23N    3W |                                   |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single - Gas                                                   |              |                                  |                         |                                               | Packer Set At<br>NONE    |                                       | County<br>Sandoval                                   |                                   |
| Producing Thru<br>Tubing                                                                                                  |              | Reservoir Temp. °F<br>100 @ 3208 |                         | Mean Annual Temp. °F<br>60                    |                          | Baro. Press. - P <sub>a</sub><br>12.0 |                                                      | State<br>New Mexico               |
| L<br>3092                                                                                                                 | H<br>3092    | Gg<br>0.6                        | % CO <sub>2</sub><br>-- | % N <sub>2</sub><br>--                        | % H <sub>2</sub> S<br>-- | Prover<br>--                          | Meter Run<br>--                                      | Taps<br>--                        |

  

| 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>h <sub>w</sub> | Temp.<br>°F | Press.<br>p.s.i.g. | Temp.<br>°F | Press.<br>p.s.i.g. |                        | Temp.<br>°F |
| SI        |                        |   |                 |                    |                         |             | 520                |             | 530                |                        | 8 days      |
| 1.        | 3/4"THC                |   |                 |                    |                         |             | 45                 |             | 275                |                        | 3 hrs.      |
| 2.        |                        |   |                 |                    |                         |             |                    |             |                    |                        |             |
| 3.        |                        |   |                 |                    |                         |             |                    |             |                    |                        |             |
| 4.        |                        |   |                 |                    |                         |             |                    |             |                    |                        |             |
| 5.        |                        |   |                 |                    |                         |             |                    |             |                    |                        |             |

  

| RATE OF FLOW CALCULATIONS |                          |                  |                            |                                        |                                     |                                               |                         |
|---------------------------|--------------------------|------------------|----------------------------|----------------------------------------|-------------------------------------|-----------------------------------------------|-------------------------|
| NO.                       | Coefficient<br>(24 Hour) | $\sqrt{h_w P_m}$ | Pressure<br>P <sub>m</sub> | Flow Temp.<br>Factor<br>F <sub>t</sub> | Gravity<br>Factor<br>F <sub>g</sub> | Super<br>Compress.<br>Factor, F <sub>pv</sub> | Rate of Flow<br>Q, Mcfd |
| 1                         | 12.3650                  |                  | 57                         | 1.0000                                 | 1.0000                              | 1.0000                                        | 705                     |
| 2.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 3.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 4.                        |                          |                  |                            |                                        |                                     |                                               |                         |
| 5.                        |                          |                  |                            |                                        |                                     |                                               |                         |

  

| NO. | P <sub>r</sub> | Temp. °R | T <sub>r</sub> | Z | Gas Liquid Hydrocarbon Ratio | A.P.I. Gravity of Liquid Hydrocarbons | Specific Gravity Separator Gas | Specific Gravity Flowing Fluid | Critical Pressure | Critical Temperature | Mcf/bbl. | Deg. |
|-----|----------------|----------|----------------|---|------------------------------|---------------------------------------|--------------------------------|--------------------------------|-------------------|----------------------|----------|------|
| 1.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |          |      |
| 2.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |          |      |
| 3.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |          |      |
| 4.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |          |      |
| 5.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |          |      |

  

|                    |                                     |                |                             |                                                           |
|--------------------|-------------------------------------|----------------|-----------------------------|-----------------------------------------------------------|
| P <sub>c</sub> 542 | P <sub>c</sub> <sup>2</sup> 293,764 |                |                             |                                                           |
| 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                  |                                     | 287            | 82,369                      | 211,395                                                   |
| 2                  |                                     |                |                             |                                                           |
| 3                  |                                     |                |                             |                                                           |
| 4                  |                                     |                |                             |                                                           |
| 5                  |                                     |                |                             |                                                           |

  

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.3896$$

$$ACF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 933$$

$$(2) \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.3227$$

  

|                    |     |  |                |                         |          |      |
|--------------------|-----|--|----------------|-------------------------|----------|------|
| Absolute Open Flow | 933 |  | Mcf/d @ 15.025 | Angle of Slope $\theta$ | Slope, n | 0.85 |
| Remarks:           |     |  |                |                         |          |      |

  

|                         |                                |                                  |             |
|-------------------------|--------------------------------|----------------------------------|-------------|
| Approved By Commission: | Conducted By:<br>Jerold Brooks | Calculated By:<br>Ewell N. Walsh | Checked By: |
|-------------------------|--------------------------------|----------------------------------|-------------|