

## OIL CONSERVATION DIVISION

P. O. BOX 2036

Form C-122  
Revised 10-1-78STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

## MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

|                                                                                                                           |  |                                                                |  |                            |  |
|---------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------|--|----------------------------|--|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |  |                                                                |  | Test Date<br>10-27-82      |  |
| Company<br>Southern Union Exploration                                                                                     |  |                                                                |  | Connection                 |  |
| Pool<br>Basin Dakota                                                                                                      |  |                                                                |  | Formation<br>Dakota        |  |
| Completion Date<br>6-14-79                                                                                                |  | Total Depth<br>8276      3818-                                 |  | Plug Back TD<br>8265       |  |
| Elevation<br>7175                                                                                                         |  | Farm or Lease Name<br>Jicarrilla A                             |  |                            |  |
| Csg. Size 5 1/2<br>3 1/2                                                                                                  |  | Wt. 15.5<br>9.2                                                |  | Set At 8037<br>7888'-8275' |  |
| Perforations:<br>From 8044'      To 8214'                                                                                 |  | Well No.<br>422y                                               |  |                            |  |
| Tbg. Size 21/16                                                                                                           |  | Wt. 3.25                                                       |  | Set At 7740                |  |
| Perforations:<br>From      To                                                                                             |  | Unit      Sec.      Twp.      Rge.<br>K      24      26      4 |  |                            |  |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>G. G.                                                          |  |                                                                |  | Packer Set At<br>7740'     |  |
| Producing Thru<br>tbg                                                                                                     |  | Reservoir Temp. °F<br>#                                        |  | Mean Annual Temp. °F       |  |
| Baro. Press. - P <sub>a</sub>                                                                                             |  | State<br>N. M.                                                 |  |                            |  |
| L<br>5186                                                                                                                 |  | H                                                              |  | Gg                         |  |
| % CO <sub>2</sub>                                                                                                         |  | % N <sub>2</sub>                                               |  | % H <sub>2</sub> S         |  |
| 3/4 choke                                                                                                                 |  | 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. |                  |
| SI        |                  |   |              |                 |                      |             | 1544            |             |                 |                  |
| 1.        |                  |   | .750         | 168             |                      | 40          |                 |             |                 |                  |
| 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 F <sub>t</sub> | Gravity Factor F <sub>g</sub> | Super Compress. Factor F <sub>pv</sub> | Rate of Flow Q, Mcfd |
| 1                         | 12.365                |                  | 160                     | 1.020                            | .9463                         | 1.020                                  | 2191                 |
| 2.                        |                       |                  |                         |                                  |                               |                                        |                      |
| 3.                        |                       |                  |                         |                                  |                               |                                        |                      |
| 4.                        |                       |                  |                         |                                  |                               |                                        |                      |
| 5.                        |                       |                  |                         |                                  |                               |                                        |                      |

  

| NO. | P <sub>r</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 .670      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>i</sub> <sup>2</sup> | P <sub>w</sub> | P <sub>w</sub> <sup>2</sup> | P <sub>i</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> | (1) $\frac{P_i^2}{P_i^2 - P_w^2} = 1.1390$ | (2) $\left[ \frac{P_i^2}{P_i^2 - P_w^2} \right]^n = 1.1031$ |
|-----|-----------------------------|----------------|-----------------------------|-----------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------|
| 1   |                             | 545            | 297025                      | 212411                                                    |                                            |                                                             |
| 2   |                             |                |                             |                                                           |                                            |                                                             |
| 3   |                             |                |                             |                                                           |                                            |                                                             |
| 4   |                             |                |                             |                                                           |                                            |                                                             |
| 5   |                             |                |                             |                                                           |                                            |                                                             |

  

AOF = Q  $\left[ \frac{P_i^2}{P_i^2 - P_w^2} \right]^n = 2417$

  

|                                       |  |                  |              |
|---------------------------------------|--|------------------|--------------|
| Absolute Open Flow 2417 Mcfd @ 15.025 |  | Angle of Slope @ | Slope, n .75 |
|---------------------------------------|--|------------------|--------------|

  

Remarks: very wet with oil throughout test.

  

|                      |                              |                               |             |
|----------------------|------------------------------|-------------------------------|-------------|
| Approved By Division | Conducted By:<br>C.R. Wagner | Calculated By:<br>C.R. Wagner | Checked By: |
|----------------------|------------------------------|-------------------------------|-------------|