

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088  
SANTA FE, NEW MEXICO 87501Form C-122  
Revised 10-1-78

## 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>12-28-84              |                                                       |
| Company<br>Consolidated Oil & Gas, Inc.                                                                                   |                                  | Connection<br>NW                   |                                                       |
| Pool<br>BS Mesa Gallup                                                                                                    |                                  | Formation<br>Gallup                |                                                       |
| Completion Date<br>11-17-84                                                                                               |                                  | Total Depth<br>8320                | Plug Back TD<br>8271                                  |
|                                                                                                                           |                                  | Elevation<br>7064 GR               | Form or Lease Name<br>Champlin                        |
| Csq. Size<br>5 1/2"                                                                                                       | Wt.<br>15.5#                     | d<br>4.950                         | Set At<br>8289                                        |
| Perforations:<br>From 7216 To 7682                                                                                        |                                  | Well No.<br>1E                     |                                                       |
| Tbg. Size<br>2 1/16"                                                                                                      | Wt.<br>3.25#                     | d<br>1.751                         | Set At<br>7627                                        |
| Perforations:<br>From To                                                                                                  |                                  | Unit Sec. Twp. Rge.<br>J 35 27N 4W |                                                       |
| Type Well - Single - Dradhead - G.G. or G.O. Multiple<br>Dual gas                                                         |                                  | Packer Set At<br>7732              | County<br>Rio Arriba                                  |
| Producing Thru<br>Tbg                                                                                                     | Reservoir Temp. °F<br>182 # 7421 | Mean Annual Temp. °F               | Baro. Press. - P <sub>a</sub><br>12.0                 |
| State<br>New Mexico                                                                                                       |                                  |                                    |                                                       |
| L                                                                                                                         | H                                | C <sub>g</sub><br>.650 est         | % CO <sub>2</sub> % N <sub>2</sub> % H <sub>2</sub> S |
| Prover<br>2" critical flow prover                                                                                         |                                  | 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 |                  |
| SI        | 7 days           |   |              |                 |                      |          | 818             |          | 1481            |          |                  |
| 1.        | 2 X 3/4"         |   |              |                 |                      |          | 84              | 74       | 515             |          | 3 hours          |
| 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 F <sub>g</sub> | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mcfd |
| 1                         | 9.453                 |                  | 96                      | 0.9868                | 1.240                         | 1.000                                   | 1110.43              |
| 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 | Deq.     |
| 2.  |                |          |                |   | Specific Gravity Separator Gas        | XXXXXXX  |
| 3.  |                |          |                |   | Specific Gravity Flowing Fluid        | XXXXX    |
| 4.  |                |          |                |   | Critical Pressure                     | P.S.I.A. |
| 5.  |                |          |                |   | Critical Temperature                  | R        |

  

|                |                             |                             |                             |
|----------------|-----------------------------|-----------------------------|-----------------------------|
| P <sub>c</sub> | 1493                        | P <sub>c</sub> <sup>2</sup> | 2229049                     |
| NO.            | P <sub>r</sub> <sup>2</sup> | P <sub>w</sub>              | P <sub>w</sub> <sup>2</sup> |
| 1              |                             | 527                         | 277729                      |
| 2              |                             |                             |                             |
| 3              |                             |                             |                             |
| 4              |                             |                             |                             |
| 5              |                             |                             |                             |

  

|                                                               |                                        |     |                                                         |
|---------------------------------------------------------------|----------------------------------------|-----|---------------------------------------------------------|
| (1)                                                           | $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1423$ | (2) | $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1054$ |
| $AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1227$ |                                        |     |                                                         |

  

|                    |      |                |                  |        |          |     |
|--------------------|------|----------------|------------------|--------|----------|-----|
| Absolute Open Flow | 1227 | Mcf/d @ 15.025 | Angle of Slope @ | 53.13° | Slope, n | .75 |
|--------------------|------|----------------|------------------|--------|----------|-----|

  

|          |  |
|----------|--|
| Remarks: |  |
|----------|--|

  

|                      |               |                |             |
|----------------------|---------------|----------------|-------------|
| Approved by Division | Conducted by: | Calculated By: | Checked By: |
|----------------------|---------------|----------------|-------------|