

3-NMOCD 1-McHugh 1-NWP 1-File  
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>12-12-79 |                                    |                               |                                    |                                 |                    |  |
| Company<br>Jerome P. McHugh                                                                                               |  |              |                         | Connection          |                       |                                    |                               |                                    |                                 |                    |  |
| Pool<br>Basin Dakota                                                                                                      |  |              |                         | Formation<br>Dakota |                       |                                    |                               | Unit                               |                                 |                    |  |
| Completion Date<br>11-28-79                                                                                               |  |              | Total Depth<br>7780'    |                     | Plug Back TD<br>7730' |                                    | Elevation<br>6715'            |                                    | Farm or Lease Name<br>Jicarilla |                    |  |
| Csg. Size<br>4-1/2"                                                                                                       |  | Wt.<br>10.5# |                         | Set At<br>7785' RKB |                       | Perforations:<br>From 7570 To 7661 |                               | Well No.<br>#1E                    |                                 |                    |  |
| Tbg. Size<br>1-1/2"                                                                                                       |  | Wt.<br>2.9#  |                         | Set At<br>7625' RKB |                       | Perforations:<br>From Open To End  |                               | Unit Sec. Twp. Rge.<br>G 30 26N 4W |                                 |                    |  |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single - Gas                                                   |  |              |                         |                     |                       | Packer Set At                      |                               | County<br>Rio Arriba               |                                 |                    |  |
| Producing Thru<br>tbg                                                                                                     |  |              | Reservoir Temp. °F<br>@ |                     | Mean Annual Temp. °F  |                                    | Baro. Press. - P <sub>a</sub> |                                    | State<br>New Mexico             |                    |  |
| L                                                                                                                         |  | H            |                         | Gg<br>.65           |                       | % 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 |                  |
| SI        |                  |   |              |                 |                      |          | 1920            |          | 2160            |          | 7 days           |
| 1.        |                  |   |              |                 |                      |          |                 |          |                 |          |                  |
| 2.        |                  |   |              |                 |                      |          |                 |          |                 |          |                  |
| 3.        | 3/4" Pos Choke   |   |              |                 |                      |          | 74              | 500      | 577             |          | 3 hrs            |
| 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                         |                       |                  |                         |                       |                   |                             |                      |
| 2                         |                       |                  |                         |                       |                   |                             |                      |
| 3                         | 12.365                |                  | 86                      | 1.004                 | .9608             | 1.010                       | 1036                 |
| 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                 |  |

  

| NO. | P <sub>c</sub> | P <sub>w</sub> | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> | P <sub>c</sub> <sup>2</sup> | (1) $\frac{P_c^2}{P_c^2 - P_w^2} =$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$ |
|-----|----------------|----------------|-----------------------------------------------------------|-----------------------------|-------------------------------------|------------------------------------------------------|
| 1   | 2172           |                |                                                           | 4717584                     |                                     |                                                      |
| 2   |                |                |                                                           |                             |                                     |                                                      |
| 3   |                | 589            | 346921                                                    | 4370663                     | 1.0794                              | 1.0590                                               |
| 4   |                |                |                                                           |                             |                                     |                                                      |
| 5   |                |                |                                                           |                             |                                     |                                                      |

  

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1097$

  

|                                       |  |                               |  |              |  |
|---------------------------------------|--|-------------------------------|--|--------------|--|
| Absolute Open Flow 1097 Mcfd @ 15.025 |  | Angle of Slope $\theta$ _____ |  | Slope, n .75 |  |
|---------------------------------------|--|-------------------------------|--|--------------|--|

  

Remarks: \_\_\_\_\_

  

|                         |                       |                        |                       |
|-------------------------|-----------------------|------------------------|-----------------------|
| Approved By Commission: | Conducted By:<br>Hall | Calculated By:<br>Hall | Checked By:<br>Jacobs |
|-------------------------|-----------------------|------------------------|-----------------------|