

3 NMOCD 1 File  
OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

Form 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>6-21-85                                      |                                                                                                                                                                                                                                                                                  | <div style="border: 1px solid black; padding: 5px; display: inline-block;"> JUN 26 1985<br/>OIL CON. DIV.<br/>DIST. 3 </div> |                         |                                |                    |             |                        |
| Company<br>Dugan Production Corp.                                                                                         |                             |                             |                             | Connection                                                |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| Pool<br>Twin Mounds FR-PC                                                                                                 |                             |                             |                             | Formation<br>Pictured Cliffs                              |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| Completion Date<br>6-13-85                                                                                                |                             | Total Depth<br>1050'        |                             | Plug Back TD<br>1016'                                     |                                                                                                                                                                                                                                                                                  | Elevation<br>5479' GL                                                                                                        |                         | Farm or Lease Name<br>Bi Knobs |                    |             |                        |
| Csq. Size<br>2-7/8                                                                                                        | Wt.<br>6.4#                 | d                           | Set At<br>1046              | Perforations:<br>From 943 To 954                          |                                                                                                                                                                                                                                                                                  | Well No.<br>1                                                                                                                |                         |                                |                    |             |                        |
| Tbg. Size                                                                                                                 | Wt.                         | d                           | Set At                      | Perforations:<br>From To                                  |                                                                                                                                                                                                                                                                                  | Unit    Sec.    Twp.    Rge.<br>H    32    30N    14W                                                                        |                         |                                |                    |             |                        |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple                                                                   |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  | Packer Set At                                                                                                                |                         | County<br>San Juan             |                    |             |                        |
| Producing Thru                                                                                                            |                             | Reservoir Temp. °F          |                             | Mean Annual Temp. °F                                      |                                                                                                                                                                                                                                                                                  | Baro. Press. - P <sub>a</sub>                                                                                                |                         | State<br>New Mexico            |                    |             |                        |
| L                                                                                                                         | H                           | Gg                          | % CO <sub>2</sub>           | % N <sub>2</sub>                                          | % H <sub>2</sub> S                                                                                                                                                                                                                                                               | Prover                                                                                                                       |                         | Meter Run                      | Taps               |             |                        |
| .62 est                                                                                                                   |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| FLOW DATA                                                                                                                 |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              | TUBING DATA             |                                | CASING DATA        |             |                        |
| 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 | Duration<br>of<br>Flow |
| SI                                                                                                                        |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                | 170                |             | 7 days                 |
| 1.                                                                                                                        |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| 2.                                                                                                                        |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| 3.                                                                                                                        | 3" pos. choke               |                             |                             | 8                                                         |                                                                                                                                                                                                                                                                                  | 78°                                                                                                                          |                         |                                |                    |             | 3 hrs                  |
| 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                                                                                                                         |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| 2                                                                                                                         |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| 3                                                                                                                         | 5.4315                      |                             | 20                          | .9831                                                     | .9837                                                                                                                                                                                                                                                                            | 1.000                                                                                                                        | 105                     |                                |                    |             |                        |
| 4                                                                                                                         |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| 5                                                                                                                         |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| NO.                                                                                                                       | R <sub>t</sub>              | Temp. °R                    | T <sub>t</sub>              | Z                                                         | Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.<br>A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.<br>Specific Gravity Separator Gas _____<br>Specific Gravity Flowing Fluid _____<br>Critical Pressure _____ P.S.I.A.    _____ P.S.I.A.<br>Critical Temperature _____ R    _____ R |                                                                                                                              |                         |                                |                    |             |                        |
| 1                                                                                                                         |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| 2                                                                                                                         |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| 3                                                                                                                         |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| 4                                                                                                                         |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| 5                                                                                                                         |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| NO.                                                                                                                       | P <sub>t</sub> <sup>2</sup> | P <sub>w</sub> <sup>2</sup> | R <sub>w</sub> <sup>2</sup> | P <sub>c</sub> <sup>2</sup> - R <sub>w</sub> <sup>2</sup> | (1) $\frac{P_c^2}{R_c^2 - R_w^2} =$ _____    (2) $\left[ \frac{R_c^2}{R_c^2 - R_w^2} \right]^n =$ _____<br><br>AOF = Q $\left[ \frac{R_c^2}{R_c^2 - R_w^2} \right]^n = 105$                                                                                                      |                                                                                                                              |                         |                                |                    |             |                        |
| 1                                                                                                                         |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| 2                                                                                                                         |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| 3                                                                                                                         |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| 4                                                                                                                         |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| 5                                                                                                                         |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| Absolute Open Flow 105 Mcfd @ 15.025    Angle of Slope $\Theta$ _____    Slope, n _____                                   |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| Remarks: Q = AOF    Friction Negligible                                                                                   |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
|                                                                                                                           |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |
| Approved By Division                                                                                                      |                             |                             |                             | Conducted By:<br>Brown                                    |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         | Calculated By:<br>Jacobs       |                    |             |                        |
| Checked By:                                                                                                               |                             |                             |                             |                                                           |                                                                                                                                                                                                                                                                                  |                                                                                                                              |                         |                                |                    |             |                        |