

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>7-14-78                                      |                                                      |                                                                                      |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Company<br>Odessa Natural Corp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                             |                                  |                             | Connection<br>Waiting on Pipeline                         |                                                      |                                                                                      |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Pool<br>Ballard P.C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                             |                                  |                             | Formation<br>Pictured Cliffs                              |                                                      | Unit                                                                                 |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Completion Date<br>6-27-78                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                             | Total Depth<br>3301'             |                             | Plug Back TD<br>3249'                                     |                                                      | Elevation<br>7261' KB                                                                |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Csg. Size<br>4.500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                             | Wt.<br>10.50                     |                             | Set At<br>3294'                                           |                                                      | Perforations:<br>From 3072 To 3112                                                   |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Thg. Size<br>1.660                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                             | Wt.<br>2.40                      |                             | Set At<br>3066'                                           |                                                      | Perforations:<br>From Open To Ended                                                  |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                             |                                  |                             | Packer Set At<br>None                                     |                                                      | County<br>Rio Arriba                                                                 |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Producing Thru<br>Tubing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                             | Reservoir Temp. °F<br>110 @ 3294 |                             | Mean Annual Temp. °F<br>60                                |                                                      | Baro. Press. - P <sub>a</sub><br>12.0                                                |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| L<br>3066                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                             | H<br>3066                        |                             | Gg<br>0.600                                               |                                                      | % CO <sub>2</sub> % N <sub>2</sub> % H <sub>2</sub> S    Prover    Meter Run    Taps |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| FLOW DATA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                             |                                  |                             | TUBING DATA                                               |                                                      | CASING DATA                                                                          |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Prover Line Size            | X                                | Orifice Size                | Press. p.s.i.g.                                           | Diff. h <sub>w</sub>                                 | Temp. °F                                                                             | Duration of Flow     |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3/4" T.H.C.                 |                                  |                             |                                                           |                                                      |                                                                                      | 8 hr.                |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                             |                                  |                             |                                                           |                                                      |                                                                                      | 3 hr.                |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 12.3650                     |                                  | 112                         | 1.0000                                                    | 1.0000                                               | 1.0000                                                                               | 1,385                |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                             |                                  |                             |                                                           |                                                      |                                                                                      |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                             |                                  |                             |                                                           |                                                      |                                                                                      |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                             |                                  |                             |                                                           |                                                      |                                                                                      |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                             |                                  |                             |                                                           |                                                      |                                                                                      |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | P <sub>r</sub>              | Temp. °F                         | 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 _____ 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                 |                                                                                      |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| $P_c = 962$ $P_c^2 = 925,444$<br><table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>NO.</td> <td>P<sub>r</sub><sup>2</sup></td> <td>P<sub>w</sub></td> <td>P<sub>w</sub><sup>2</sup></td> <td>P<sub>c</sub><sup>2</sup> - P<sub>w</sub><sup>2</sup></td> </tr> <tr> <td>1</td> <td></td> <td>562</td> <td>315,844</td> <td>609,600</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> |                             |                                  |                             |                                                           |                                                      |                                                                                      |                      | NO. | P <sub>r</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 |  | 562 | 315,844 | 609,600 | 2 |  |  |  |  | 3 |  |  |  |  | 4 |  |  |  |  | 5 |  |  |  |  |
| NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | P <sub>r</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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                             | 562                              | 315,844                     | 609,600                                                   |                                                      |                                                                                      |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                             |                                  |                             |                                                           |                                                      |                                                                                      |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                             |                                  |                             |                                                           |                                                      |                                                                                      |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                             |                                  |                             |                                                           |                                                      |                                                                                      |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                             |                                  |                             |                                                           |                                                      |                                                                                      |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| $(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.5181$ $(2) \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4259$<br>$AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,975$                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                             |                                  |                             |                                                           |                                                      |                                                                                      |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Absolute Open Flow                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                             |                                  |                             | 1,975                                                     |                                                      | Mcf/d @ 15.025                                                                       |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Angle of Slope                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                             |                                  |                             | 0                                                         |                                                      | Slope, n 0.85                                                                        |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Remarks:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                             |                                  |                             |                                                           |                                                      |                                                                                      |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                             |                                  |                             |                                                           |                                                      |                                                                                      |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
| Approved By Commission:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                             | Conducted By:                    |                             | Calculated By:                                            |                                                      | Checked By:                                                                          |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                             | Roger McCown                     |                             | Ewell N. Walsh                                            |                                                      |                                                                                      |                      |     |                             |                |                             |                                                           |   |  |     |         |         |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |   |  |  |  |  |