

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2080  
SANTA FE, NEW MEXICO 87501Form C-122  
Revised 10-1-78

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

|                                                                                                                                                                                                                                                                                       |                       |                                             |                         |                                 |                                |                                          |                                      |                   |                 |                     |                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------|-------------------------|---------------------------------|--------------------------------|------------------------------------------|--------------------------------------|-------------------|-----------------|---------------------|------------------|
| Type Test                                                                                                                                                                                                                                                                             |                       | <input checked="" type="checkbox"/> Initial |                         | <input type="checkbox"/> Annual |                                | <input type="checkbox"/> Special         |                                      | Test Date         |                 | 4-16-81             |                  |
| Company                                                                                                                                                                                                                                                                               |                       |                                             |                         |                                 |                                | Connection                               |                                      |                   |                 |                     |                  |
| El Paso Natural Gas Company                                                                                                                                                                                                                                                           |                       |                                             |                         |                                 |                                | Northwest Pipeline                       |                                      |                   |                 |                     |                  |
| Pool                                                                                                                                                                                                                                                                                  |                       |                                             |                         |                                 |                                | Formation                                |                                      |                   |                 |                     |                  |
| Tapacito                                                                                                                                                                                                                                                                              |                       |                                             |                         |                                 |                                | Pictured Cliffs                          |                                      |                   |                 |                     |                  |
| Completion Date                                                                                                                                                                                                                                                                       |                       |                                             |                         |                                 |                                | Total Depth                              |                                      | Plug Back TD      |                 | Elevation           |                  |
| 4-2-81                                                                                                                                                                                                                                                                                |                       |                                             |                         |                                 |                                | 5960                                     |                                      | 5943              |                 | 6527 GR             |                  |
| Form or Lease Name                                                                                                                                                                                                                                                                    |                       |                                             |                         |                                 |                                | Unit                                     |                                      |                   |                 |                     |                  |
| San Juan 28-5 Unit                                                                                                                                                                                                                                                                    |                       |                                             |                         |                                 |                                | San Juan 28-5 Unit                       |                                      |                   |                 |                     |                  |
| Csg. Size                                                                                                                                                                                                                                                                             |                       | In.                                         |                         | d                               |                                | Set At                                   |                                      | Perforations      |                 | Well No.            |                  |
| 7.000                                                                                                                                                                                                                                                                                 |                       | 20                                          |                         | 6.456                           |                                | 3692                                     |                                      | From To           |                 | #51A                |                  |
| Tub. Size                                                                                                                                                                                                                                                                             |                       | In.                                         |                         | d                               |                                | Set At                                   |                                      | Perforations      |                 | Unit Sec. Twp. Rge. |                  |
| 1.660                                                                                                                                                                                                                                                                                 |                       | 2.33                                        |                         | 1.380                           |                                | 3397                                     |                                      | From 3340 To 3402 |                 | C 31 28 5           |                  |
| Type Well - Single - Broadhead - G.G. or G.O. Multiple                                                                                                                                                                                                                                |                       |                                             |                         |                                 |                                |                                          |                                      | Packer Set At     |                 | County              |                  |
| G. G. Dual                                                                                                                                                                                                                                                                            |                       |                                             |                         |                                 |                                |                                          |                                      | 3546              |                 | Rio Arriba          |                  |
| Producing Thru Csg.                                                                                                                                                                                                                                                                   |                       | Reservoir Temp. °F                          |                         | Mean Annual Temp. °F            |                                | Baro. Press. - P <sub>a</sub>            |                                      | State             |                 |                     |                  |
|                                                                                                                                                                                                                                                                                       |                       | p                                           |                         |                                 |                                | 12                                       |                                      | New Mexico        |                 |                     |                  |
| L                                                                                                                                                                                                                                                                                     |                       | W                                           |                         | G <sub>g</sub>                  |                                | % 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                                                                                                                                                                                                                                                                                    |                       |                                             |                         |                                 |                                |                                          | 1052                                 |                   | 1050            |                     | 14 Days          |
| 1.                                                                                                                                                                                                                                                                                    | Choke                 |                                             | 0.750                   |                                 | 58                             | 59                                       | 62                                   |                   |                 |                     | 3 Hr.            |
| 2.                                                                                                                                                                                                                                                                                    |                       |                                             |                         |                                 |                                |                                          |                                      |                   |                 |                     |                  |
| 3.                                                                                                                                                                                                                                                                                    |                       |                                             |                         |                                 |                                |                                          |                                      |                   |                 |                     |                  |
| 4.                                                                                                                                                                                                                                                                                    |                       |                                             |                         |                                 |                                |                                          |                                      |                   |                 |                     |                  |
| 5.                                                                                                                                                                                                                                                                                    |                       |                                             |                         |                                 |                                |                                          |                                      |                   |                 |                     |                  |
| RATE OF FLOW CALCULATIONS                                                                                                                                                                                                                                                             |                       |                                             |                         |                                 |                                |                                          |                                      |                   |                 |                     |                  |
| NO.                                                                                                                                                                                                                                                                                   | Coefficient (24 Hour) | $\sqrt{h_w P_{in}}$                         | Pressure P <sub>m</sub> | Flow Temp. Factor Ft.           | Gravity Factor F <sub>g</sub>  | Super. Compres. Factor, F <sub>spv</sub> | Rate of Flow Q, Mscf/d               |                   |                 |                     |                  |
| 1                                                                                                                                                                                                                                                                                     | 12.365                |                                             | 70                      | 1.0010                          | .9759                          | 1.009                                    | 853                                  |                   |                 |                     |                  |
| 2.                                                                                                                                                                                                                                                                                    |                       |                                             |                         |                                 |                                |                                          |                                      |                   |                 |                     |                  |
| 3.                                                                                                                                                                                                                                                                                    |                       |                                             |                         |                                 |                                |                                          |                                      |                   |                 |                     |                  |
| 4.                                                                                                                                                                                                                                                                                    |                       |                                             |                         |                                 |                                |                                          |                                      |                   |                 |                     |                  |
| 5.                                                                                                                                                                                                                                                                                    |                       |                                             |                         |                                 |                                |                                          |                                      |                   |                 |                     |                  |
| NO.                                                                                                                                                                                                                                                                                   | P <sub>1</sub>        | Temp. °R                                    | T <sub>1</sub>          | Z                               | Gas Liquid Hydrocarbon Ratio   |                                          | A.P.I. Gravity of Liquid Hydrocarbon |                   | Mcf, bbl.       |                     |                  |
| 1                                                                                                                                                                                                                                                                                     |                       |                                             |                         |                                 |                                |                                          |                                      |                   | Deg.            |                     |                  |
| 2.                                                                                                                                                                                                                                                                                    |                       |                                             |                         |                                 | Specific Gravity Separator Gas |                                          |                                      |                   | XXXX XXXXX      |                     |                  |
| 3.                                                                                                                                                                                                                                                                                    |                       |                                             |                         |                                 | Specific Gravity Flowing Fluid |                                          |                                      |                   |                 |                     |                  |
| 4.                                                                                                                                                                                                                                                                                    |                       |                                             |                         |                                 | Critical Pressure              |                                          | P.S.I.A.                             |                   | P.S.I.A.        |                     |                  |
| 5.                                                                                                                                                                                                                                                                                    |                       |                                             |                         |                                 | Critical Temperature           |                                          | °R                                   |                   | °R              |                     |                  |
| <p> <math>P_c = 1064</math>    <math>P_w = 1132096</math>    (1) <math>\frac{P_c^2}{P_w^2 - P_c^2} = 1.0047</math>    (2) <math>\left[ \frac{P_c^2}{P_w^2 - P_c^2} \right]^n = 1.0041</math> </p> <p> <math>Q_{OF} = Q \left[ \frac{P_c^2}{P_w^2 - P_c^2} \right]^n = 857</math> </p> |                       |                                             |                         |                                 |                                |                                          |                                      |                   |                 |                     |                  |
| <p>             Absolute Open Flow <u>857</u>    Mcf @ 15.025    Angle of Slope <math>\theta</math>    Slope, n <u>0.85</u> </p>                                                                                                                                                      |                       |                                             |                         |                                 |                                |                                          |                                      |                   |                 |                     |                  |
| Remarks: <u>Vented 154 MCF Gas During Test, Dry Gas</u>                                                                                                                                                                                                                               |                       |                                             |                         |                                 |                                |                                          |                                      |                   |                 |                     |                  |
| <p>             Approved by Division    Conducted by: <u>Don Norton</u>    Calculated by: <u>R. F. Headrick</u>    Checked by: </p>                                                                                                                                                   |                       |                                             |                         |                                 |                                |                                          |                                      |                   |                 |                     |                  |