

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

P. O. BOX 2088

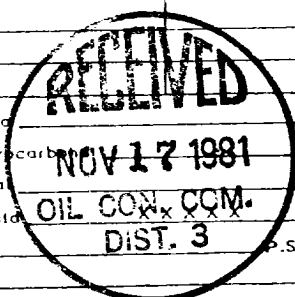
Form C-122

Revised 10-1-78

ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

## 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          |                 | 6-7-81           |                  |
| Company                                                                                                                       |                       |                                             |                         | Connection                                                |                                                               |                                         |                                                            |                    |                 |                  |                  |
| Pioneer Production Corp.                                                                                                      |                       |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| Pool                                                                                                                          |                       |                                             |                         | Formation                                                 |                                                               |                                         |                                                            | Unit               |                 |                  |                  |
| Undesignated Chacra                                                                                                           |                       |                                             |                         | Chacra                                                    |                                                               |                                         |                                                            |                    |                 |                  |                  |
| Completion Date                                                                                                               |                       | Total Depth                                 |                         | Plug Back TD                                              |                                                               | Elevation                               |                                                            | Farm or Lease Name |                 |                  |                  |
| 6-13-81                                                                                                                       |                       | 6152'                                       |                         | 6090'                                                     |                                                               | 5396' GL                                |                                                            | Hartman            |                 |                  |                  |
| Coq. Size                                                                                                                     | Wt.                   | d                                           | Set At                  | Perforations:                                             |                                                               | Well No.                                |                                                            |                    |                 |                  |                  |
| 4 1/2"                                                                                                                        | 11.6#                 | 4.000                                       | 6140'                   | From 2541 To 2548                                         |                                                               | 1E                                      |                                                            |                    |                 |                  |                  |
| Tbg. Size                                                                                                                     | Wt.                   | d                                           | Set At                  | Perforations:                                             |                                                               | Unit                                    |                                                            | Sec.               | Twp.            | Range            |                  |
| 1 1/2"                                                                                                                        | 2.3#                  | 1.380                                       | 2436'                   | From open end To                                          |                                                               | F                                       |                                                            | 31                 | 29N             | 11W              |                  |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple                                                                       |                       |                                             |                         | Packer Set At                                             |                                                               |                                         |                                                            | County             |                 |                  |                  |
| G/G Dual                                                                                                                      |                       |                                             |                         | 4200' RKB                                                 |                                                               |                                         |                                                            | San Juan           |                 |                  |                  |
| Producing Thru                                                                                                                |                       | Reservoir Temp. °F                          |                         | Mean Annual Temp. °F                                      |                                                               | Baro. Press. - P <sub>a</sub>           |                                                            | State              |                 |                  |                  |
| tbg.                                                                                                                          |                       | °                                           |                         |                                                           |                                                               |                                         |                                                            | NM                 |                 |                  |                  |
| L                                                                                                                             | H                     | 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         | Duration of Flow |
| SI                                                                                                                            |                       |                                             |                         |                                                           |                                                               |                                         | 180                                                        |                    | 760             |                  |                  |
| 1.                                                                                                                            |                       |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| 2.                                                                                                                            |                       |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| 3.                                                                                                                            |                       | 2"                                          |                         |                                                           |                                                               |                                         | 10                                                         |                    | 425             |                  | 24 hrs           |
| 4.                                                                                                                            |                       |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| 5.                                                                                                                            |                       |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| RATE OF FLOW CALCULATIONS                                                                                                     |                       |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| NO.                                                                                                                           | Coefficient (24 Hour) | $\sqrt{h_w P_m}$                            | Pressure P <sub>m</sub> | Flow Temp. Factor Ft.                                     | Gravity Factor F <sub>g</sub>                                 | Super Compress. Factor, F <sub>sp</sub> | Rate of Flow Q, Mscf                                       |                    |                 |                  |                  |
| 1                                                                                                                             |                       |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| 2                                                                                                                             |                       |                                             |                         |                                                           |                                                               |                                         | 1434                                                       |                    |                 |                  |                  |
| 3                                                                                                                             | Pitot tube            |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| 4                                                                                                                             |                       |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| 5                                                                                                                             |                       |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| NO.                                                                                                                           | P <sub>r</sub>        | Temp. °R                                    | T <sub>r</sub>          | Z                                                         | Gas Liquid Hydrocarbon Ratio                                  |                                         | Mcf/bbl.                                                   |                    |                 |                  |                  |
| 1                                                                                                                             |                       |                                             |                         |                                                           | A.P.I. Gravity of Liquid Hydrocarbon                          |                                         | Deg.                                                       |                    |                 |                  |                  |
| 2                                                                                                                             |                       |                                             |                         |                                                           | Specific Gravity Separator Gas                                |                                         | XXXXXXX                                                    |                    |                 |                  |                  |
| 3                                                                                                                             |                       |                                             |                         |                                                           | Specific Gravity Flowing Fluid                                |                                         | XXXXXXX                                                    |                    |                 |                  |                  |
| 4                                                                                                                             |                       |                                             |                         |                                                           | Critical Pressure                                             |                                         | P.S.I.A.                                                   |                    | P.S.I.A.        |                  |                  |
| 5                                                                                                                             |                       |                                             |                         |                                                           | Critical Temperature                                          |                                         | °R                                                         |                    | °R              |                  |                  |
| <div style="text-align: center;">  </div> |                       |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| P <sub>c</sub>                                                                                                                | 772                   | P <sub>c</sub> <sup>2</sup>                 | 595,984                 |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| NO.                                                                                                                           | P <sub>1</sub>        | P <sub>w</sub>                              | P <sub>2</sub>          | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> |                                                               |                                         |                                                            |                    |                 |                  |                  |
| 1                                                                                                                             |                       |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| 2                                                                                                                             |                       |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| 3                                                                                                                             |                       | 437                                         | 190,969                 | 405,015                                                   |                                                               |                                         |                                                            |                    |                 |                  |                  |
| 4                                                                                                                             |                       |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| 5                                                                                                                             |                       |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
|                                                                                                                               |                       |                                             |                         |                                                           | (1) $\frac{P_c^2}{P_1^2 - P_w^2} = 1.47$                      |                                         | (2) $\left[ \frac{P_c^2}{P_1^2 - P_w^2} \right]^n = 1.389$ |                    |                 |                  |                  |
|                                                                                                                               |                       |                                             |                         |                                                           | AOF = Q $\left[ \frac{P_c^2}{P_1^2 - P_w^2} \right]^n = 1991$ |                                         |                                                            |                    |                 |                  |                  |
| Absolute Open Flow                                                                                                            |                       |                                             |                         |                                                           | 1991                                                          |                                         | Mscf @ 15.025                                              |                    | Angle of Slope  |                  | .85              |
| Slope, n                                                                                                                      |                       |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| Remarks:                                                                                                                      |                       |                                             |                         |                                                           |                                                               |                                         |                                                            |                    |                 |                  |                  |
| Approved by Division                                                                                                          |                       |                                             |                         | Conducted by                                              |                                                               |                                         |                                                            | Calculated by      |                 |                  |                  |
|                                                                                                                               |                       |                                             |                         |                                                           |                                                               |                                         |                                                            | Dugan              |                 |                  |                  |
|                                                                                                                               |                       |                                             |                         |                                                           |                                                               |                                         |                                                            | Checked by         |                 |                  |                  |