

**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 checked="" type="checkbox"/> Special |            |                         |                   |                                               |                    | Test Date<br>11-21-81             |                |
| Company<br>Amoco Production Company                                                                                                  |            |                         |                   | Connection<br>Northwest Pipeline Corporation  |                    |                                   |                |
| Pool<br>Otero                                                                                                                        |            |                         |                   | Formation<br>Chacra                           |                    | Unit                              |                |
| Completion Date<br>10-5-81                                                                                                           |            | Total Depth<br>5407     |                   | Plug Back TD<br>5253                          |                    | Elevation<br>6608 GL              |                |
| Farm or Lease Name<br>Jicarilla Contract 146                                                                                         |            |                         |                   |                                               |                    |                                   |                |
| Csq. Size<br>5.500                                                                                                                   | Wt.<br>14  | d<br>5.012              | Set At<br>5407    | Perforations:<br>From 3782 To 3808            |                    | Well No.<br>39                    |                |
| Thq. Size<br>1. 1/4                                                                                                                  | Wt.<br>2.4 | d<br>1.660              | Set At<br>3781    | Perforations:<br>From orange peel To perf sub |                    | Unit Sec. Twp. Rge.<br>J 3 25N 5W |                |
| Type Well - Single - Bradenhead - G.C. or G.O. Multiple<br>Dual                                                                      |            |                         |                   | Packer Set At<br>3950                         |                    | County<br>Rio Arriba              |                |
| Producing Thru<br>Tubing                                                                                                             |            | Reservoir Temp. *F<br>@ |                   | Mean Annual Temp. *F                          |                    | State<br>New Mexico               |                |
| L                                                                                                                                    | H          | Gq                      | % 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. hw | Temp. *F    | Press. p.s.i.g. | Temp. *F    | Press. p.s.i.g. | Temp. *F         |       |
| 1         | 7 Days           |      |              |                 |          |             | 878             |             | 884             |                  |       |
| 2         | 2.375            | .750 |              |                 |          |             | 127             |             | 614             |                  | 3 hrs |
| 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 Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd |
| 1                         | 12.365                |                  | 139                     | 1.000                 | .9608             | 1.013                       | 1673                 |
| 2.                        |                       |                  |                         |                       |                   |                             |                      |
| 3.                        |                       |                  |                         |                       |                   |                             |                      |
| 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 Hydrocarbons _____ Deg. |
| 2.  |                |          |                |   | Specific Gravity Separator Gas _____             |
| 3.  |                |          |                |   | Specific Gravity Flowing Fluid _____             |
| 4.  |                |          |                |   | Critical Pressure _____ P.S.I.A.                 |
| 5.  |                |          |                |   | Critical Temperature _____ R                     |

  

|                    |                                    |                                            |                                                             |
|--------------------|------------------------------------|--------------------------------------------|-------------------------------------------------------------|
| P <sub>c</sub> 896 | P <sub>c</sub> <sup>2</sup> 802816 | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.9536$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.6524$ |
| NO.                | 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                  | 626                                | 391876                                     | 410940                                                      |
| 2                  |                                    |                                            |                                                             |
| 3                  |                                    |                                            |                                                             |
| 4                  |                                    |                                            |                                                             |
| 5                  |                                    |                                            |                                                             |

  

$AOI = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2765$

  

|                                                   |                        |                    |
|---------------------------------------------------|------------------------|--------------------|
| Absolute Open Flow _____ 2765 _____ Mcfd @ 15.025 | Angle of Slope @ _____ | Slope, n _____ .75 |
|---------------------------------------------------|------------------------|--------------------|

  

Remarks: Flowed heavy oil

  

|                        |                               |                                |                |
|------------------------|-------------------------------|--------------------------------|----------------|
| Approved By Commission | Conducted By<br>J. J. Barnett | Calculated By<br>J. J. Barnett | Checked By<br> |
|------------------------|-------------------------------|--------------------------------|----------------|