

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-122  
Revised 10-1-78

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

|                                                                                                                                      |   |                                       |                   |                                   |                    |
|--------------------------------------------------------------------------------------------------------------------------------------|---|---------------------------------------|-------------------|-----------------------------------|--------------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input checked="" type="checkbox"/> Special |   | Test Date<br>2/5/85                   |                   | RECEIVED                          |                    |
| Company<br>Amoco Production Company                                                                                                  |   | Connection<br>El Paso Natural Gas Co. |                   |                                   |                    |
| Pool<br>Basin                                                                                                                        |   | Formation<br>Dakota                   |                   | FEB 14 1985<br>OIL CON. DIV.      |                    |
| Completion Date<br>1/16/85                                                                                                           |   | Total Depth<br>6291                   |                   | Plug Back TD<br>6233              |                    |
|                                                                                                                                      |   |                                       |                   | Elevation<br>5903 GR              |                    |
| Csg. Size<br>4.500                                                                                                                   |   | Wt.<br>10.5                           |                   | d<br>4.052                        |                    |
| Set At<br>6291                                                                                                                       |   | Perforations:<br>From 5990 To 6080    |                   | Well No.<br>2E                    |                    |
| Thg. Size<br>2.375                                                                                                                   |   | Wt.<br>4.7                            |                   | d<br>1.995                        |                    |
| Set At<br>6077                                                                                                                       |   | Perforations:<br>From open To ended   |                   | Unit Sec. Twp. Rge.<br>N 23 27 12 |                    |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single                                                                    |   |                                       |                   | Packer Set At<br>None             |                    |
| Producing Thru tubing                                                                                                                |   |                                       |                   | County<br>San Juan                |                    |
| Reservoir Temp. °F<br>#                                                                                                              |   |                                       |                   | State<br>New Mexico               |                    |
| Mean Annual Temp. °F                                                                                                                 |   | Baro. Press. - P <sub>g</sub>         |                   |                                   |                    |
| 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. |                  |
| SI        | 12 days          |   |              |                 |                      |             | 1330            |             | 1390            |                  |
| 1.        | 2.875            |   | .750         |                 |                      |             | 326             |             | 742             |                  |
| 2.        |                  |   |              |                 |                      |             |                 |             |                 |                  |
| 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                         | 12.365                |                  | 338                     | 1.000                 | .9258                         | 1.042                                   | 4032                 |
| 2.                        |                       |                  |                         |                       |                               |                                         |                      |
| 3.                        |                       |                  |                         |                       |                               |                                         |                      |
| 4.                        |                       |                  |                         |                       |                               |                                         |                      |
| 5.                        |                       |                  |                         |                       |                               |                                         |                      |

  

|     |                |          |                |   |                                                      |
|-----|----------------|----------|----------------|---|------------------------------------------------------|
| NO. | P <sub>t</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 _____ 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 <sub>c</sub> 1402 | P <sub>c</sub> <sup>2</sup> 1965604 |                |
| NO.                 | P <sub>t</sub> <sup>2</sup>         | P <sub>w</sub> |
| 1                   |                                     | 754            |
| 2                   |                                     | 568516         |
| 3                   |                                     | 1397088        |
| 4                   |                                     |                |
| 5                   |                                     |                |

  

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.4069$$

$$AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5209$$

$$(2) \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2918$$

  

|                         |               |                        |              |
|-------------------------|---------------|------------------------|--------------|
| Absolute Open Flow 5209 | Mcfd @ 15.025 | Angle of Slope @ _____ | Slope, n .75 |
|-------------------------|---------------|------------------------|--------------|

  

Remarks: flared, med oil, med H<sub>2</sub>O

  

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