

## OIL CONSERVATION DIVISION

P. O. BOX 2086

Form O-177  
Revised 10-1-78STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

## 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>10-21-87              |  |
| Company<br>Amoco Production Company                                                                                                  |  |                         |  | Connection<br>El Paso              |  |
| Pool<br>Basin                                                                                                                        |  |                         |  | Formation<br>Dakota                |  |
| Completion Date<br>9-21-87                                                                                                           |  | Total Depth<br>7429     |  | Plug Back TD<br>7115'              |  |
|                                                                                                                                      |  |                         |  | Elevation<br>6008 GR               |  |
| Csg. Size<br>4.500                                                                                                                   |  | ID<br>4.000             |  | Perforations<br>From 6884 To 7090  |  |
| Tub. Size<br>2.375                                                                                                                   |  | ID<br>1.995             |  | Perforations<br>From Open To Ended |  |
| Type Well - Single - Packerhead - G.C. or C.O. Multiple<br>Single                                                                    |  |                         |  | Packer Set At<br>None              |  |
| Producing thru<br>Tubing                                                                                                             |  | Reservoir Temp. °F<br># |  | Mean Annual Temp. °F               |  |
|                                                                                                                                      |  |                         |  | Baro. Press. - P <sub>a</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        | 8 Day            |   |              |                 |                      |             | 1373            |             | 1463            |                  |
| 1.        | 2.375            |   | .750         |                 |                      |             | 238             |             | 840             | 3 hrs.           |
| 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 F <sub>L</sub> | Gravity Factor F <sub>g</sub> | Super Compress. Factor, F <sub>sp</sub> | Rate of Flow Q, Mhd |
| 1                         | 12.365                |                  | 250                     | 1.000                            | .9258                         | 1.031                                   | 2951                |
| 2.                        |                       |                  |                         |                                  |                               |                                         |                     |
| 3.                        |                       |                  |                         |                                  |                               |                                         |                     |
| 4.                        |                       |                  |                         |                                  |                               |                                         |                     |
| 5.                        |                       |                  |                         |                                  |                               |                                         |                     |

  

| NO. | P <sub>r</sub> | Temp. °R | T <sub>r</sub> | Z | Gas Liquid Hydrocarbon Ratio _____ Mcl/bbl.          |
|-----|----------------|----------|----------------|---|------------------------------------------------------|
| 1   |                |          |                |   | A.P.I. Gravity of Liquid Hydrocarbons _____ Deo.     |
| 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>r</sub> 1475      P <sub>r</sub> <sup>2</sup> 2175625 |                             |                |                             | (1) $\frac{P_r^2}{P_w^2 - P_r^2} = 1.5007$                |  | (2) $\left[ \frac{P_r^2}{P_w^2 - P_r^2} \right]^n = 1.3559$ |  |
| NO.                                                          | P <sub>w</sub> <sup>2</sup> | P <sub>w</sub> | P <sub>w</sub> <sup>2</sup> | P <sub>w</sub> <sup>2</sup> - P <sub>r</sub> <sup>2</sup> |  |                                                             |  |
| 1                                                            |                             | 852            | 725904                      | 1449721                                                   |  |                                                             |  |
| 2                                                            |                             |                |                             |                                                           |  |                                                             |  |
| 3                                                            |                             |                |                             |                                                           |  |                                                             |  |
| 4                                                            |                             |                |                             |                                                           |  |                                                             |  |
| 5                                                            |                             |                |                             |                                                           |  |                                                             |  |

  

|                                |  |  |              |              |  |                        |  |              |            |
|--------------------------------|--|--|--------------|--------------|--|------------------------|--|--------------|------------|
| Absolute Open Flow 4001        |  |  |              | Mhd @ 15.025 |  | Angle of Slope @ _____ |  | Slope, n .75 |            |
| Remarks: Lite H <sub>2</sub> O |  |  |              |              |  |                        |  |              |            |
|                                |  |  |              |              |  |                        |  |              |            |
| Approved by Division           |  |  | Conducted By |              |  | Calculated By          |  |              | Checked By |
|                                |  |  |              |              |  | T. J. Bennett          |  |              |            |