

## OIL CONSERVATION DIVISION

Form C-122  
Revised 10-1-7STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088  
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 type="checkbox"/> Special |              |                         |                   |                                    | Test Date<br>5/9/81   |                                     |                    |                                  |  |
| Company<br>Supron Energy Corporation                                                                                      |              |                         |                   |                                    | Connection            |                                     |                    |                                  |  |
| Pool<br>Basin                                                                                                             |              |                         |                   |                                    | Formation<br>Dakota   |                                     | Unit               |                                  |  |
| Completion Date<br>4/30/81                                                                                                |              | Total Depth<br>7000     |                   | Plug Back TD                       |                       | Elevation<br>5978 G                 |                    | Farm or Lease Name<br>Taliaferro |  |
| Coq. Size<br>5.500                                                                                                        | Wt.<br>17.00 | d<br>4.892              | Set At<br>6995    | Perforations:<br>From 6784 To 6898 |                       | Well No.<br>5M                      |                    |                                  |  |
| Trq. Size<br>1.900                                                                                                        | Wt.<br>2.90  | d<br>1.610              | Set At<br>6778    | Perforations:<br>From To           |                       | Unit Sec. Twp. Rge.<br>I-30-31N-12W |                    |                                  |  |
| Type Well - Single - Broadhead - G.C. or G.O. Multiple<br>G - G Multiple                                                  |              |                         |                   |                                    | Packer Set At<br>6750 |                                     | County<br>San Juan |                                  |  |
| Producing Thru<br>Tubing                                                                                                  |              | Reservoir Temp. °F<br>p |                   | Mean Annual Temp. °F               |                       | Baro. Press. - P <sub>o</sub>       |                    | State<br>New Mexico              |  |
| L                                                                                                                         | H            | Gg<br>est. .650         | % 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 | Casing 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        |                  |   |             |                 |                      |          | 935             |          | 1016 (MV)       |          | 9 days           |
| 1.        |                  |   | .750        | 52              |                      | 53       | 52              | 53       | 1016 (MV)       |          | 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>t</sub> | Gravity Factor F <sub>g</sub> | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mcf/d |
| 1                         | 12,3650               |                  | 64                      | 1.0078                           | .9608                         | 1.0000                                  | 766                   |
| 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 | Deq.              |
| 2.  |                |          |                |   | Specific Gravity Separator Gas        | X X X X X X X X   |
| 3.  |                |          |                |   | Specific Gravity Flowing Fluid        | X X X X X 37.3    |
| 4.  |                |          |                |   | Critical Pressure                     | P.S.I.A. P.S.I.A. |
| 5.  |                |          |                |   | Critical Temperature                  | R R               |

  

| NO. | P <sub>r</sub> | P <sub>w</sub> | P <sub>w</sub> <sup>2</sup> | P <sub>r</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> |
|-----|----------------|----------------|-----------------------------|-----------------------------------------------------------|
| 1   | 4096           | 218            | 47654                       | 849155                                                    |
| 2   |                |                |                             |                                                           |
| 3   |                |                |                             |                                                           |
| 4   |                |                |                             |                                                           |
| 5   |                |                |                             |                                                           |

  

$$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 1.0561$$

$$AOF = Q \left[ \frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 798$$

$$(2) \left[ \frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.0418$$

  

|                                       |  |                         |              |
|---------------------------------------|--|-------------------------|--------------|
| Absolute Open Flow 798 Mcf/d @ 15.025 |  | Angle of Slope $\theta$ | Slope, n .75 |
|---------------------------------------|--|-------------------------|--------------|

  

Remarks: Flowed heavy fog of water throughout test.

  

|                      |                   |                          |             |
|----------------------|-------------------|--------------------------|-------------|
| Approved By Division | Conducted By: CRW | Calculated By: <i>AD</i> | Checked By: |
|----------------------|-------------------|--------------------------|-------------|