

NEW MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122  
Revised 9-1-

|                                                                                                                           |              |                                        |                   |                                    |                    |
|---------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------|-------------------|------------------------------------|--------------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |              |                                        |                   | Test Date<br>5-19-81               |                    |
| Company<br>Dakota Resources, Inc.                                                                                         |              |                                        |                   | Connection<br>None                 |                    |
| Pool<br>Wildcat                                                                                                           |              |                                        |                   | Formation<br>Dakota                |                    |
| Completion Date                                                                                                           |              | Total Depth<br>3707'                   |                   | Plug Back TD                       |                    |
| Elevation<br>7014 GL                                                                                                      |              | Farm or Lease Name<br>Santa Fe Pacific |                   |                                    |                    |
| Csg. Size<br>5 1/2                                                                                                        | Wt.<br>15.50 | d                                      | Set At<br>3707    | Perforations:<br>From To           |                    |
| Thq. Size<br>2 3/8                                                                                                        | Wt.          | d                                      | Set At            | Perforations:<br>From 2331 To 2333 |                    |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple                                                                   |              |                                        |                   | Packer Set At<br>2239              |                    |
| Producing Thru<br>Tubing                                                                                                  |              | Reservoir Temp. °F                     |                   | Mean Annual Temp. °F               |                    |
| Baro. Press. - P <sub>a</sub>                                                                                             |              | County<br>McKinley                     |                   |                                    |                    |
| State<br>New Mexico                                                                                                       |              |                                        |                   |                                    |                    |
| L                                                                                                                         | H            | Gg                                     | % 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        | 7 Days           |   |              |                 |                      |             | 792             |             | Pkr.            |                  |
| 1.        | 2 x 3/4          |   |              |                 |                      |             | 76              | 60          | "               |                  |
| 2.        |                  |   |              |                 |                      |             |                 |             |                 |                  |
| 3.        |                  |   |              |                 |                      |             |                 |             |                 |                  |
| 4.        |                  |   |              |                 |                      |             |                 |             |                 |                  |
| 5.        |                  |   |              |                 |                      |             |                 |             |                 |                  |

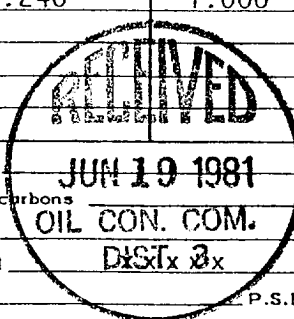
  

| RATE OF FLOW CALCULATIONS |                       |                  |                         |                      |                   |                             |                      |
|---------------------------|-----------------------|------------------|-------------------------|----------------------|-------------------|-----------------------------|----------------------|
| NO.                       | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure P <sub>m</sub> | Flow Temp. Factor Ft | Gravity Factor Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd |
| 1                         | 11.00                 |                  | 88                      | 1.000                | 1.240             | 1.000                       | 1.200                |
| 2.                        |                       |                  |                         |                      |                   |                             |                      |
| 3.                        |                       |                  |                         |                      |                   |                             |                      |
| 4.                        |                       |                  |                         |                      |                   |                             |                      |
| 5.                        |                       |                  |                         |                      |                   |                             |                      |

| NO. | P <sub>f</sub> | Temp. °R | T <sub>f</sub> | Z | Gas Liquid Hydrocarbon Ratio | A.P.I. Gravity of Liquid Hydrocarbons | Specific Gravity Separator Gas | Specific Gravity Flowing Fluid | Critical Pressure | Critical Temperature | Mcf/bbl. | Deq. |
|-----|----------------|----------|----------------|---|------------------------------|---------------------------------------|--------------------------------|--------------------------------|-------------------|----------------------|----------|------|
| 1.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |          |      |
| 2.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |          |      |
| 3.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |          |      |
| 4.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |          |      |
| 5.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |          |      |



| NO. | P <sub>c</sub> | P <sub>c</sub> <sup>2</sup> | 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   | 804            | 646.4                       |                |                             |                                                           |
| 2   |                |                             |                |                             |                                                           |
| 3   |                |                             |                |                             |                                                           |
| 4   |                |                             |                |                             |                                                           |
| 5   |                |                             |                |                             |                                                           |

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0334$$

$$(2) \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0249$$

$$AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1230$$

|                    |      |                |                  |          |    |
|--------------------|------|----------------|------------------|----------|----|
| Absolute Open Flow | 1230 | Mcf/d @ 15.025 | Angle of Slope θ | Slope, n | 75 |
| Remarks:           |      |                |                  |          |    |

|                         |                            |                                |             |
|-------------------------|----------------------------|--------------------------------|-------------|
| Approved By Commission: | Conducted By:<br>V. Nelson | Calculated By:<br>N. Tefteller | Checked By: |
|-------------------------|----------------------------|--------------------------------|-------------|