

Form C-122  
Revised 2-1-65

|                                                                                                                           |             |                                        |                       |
|---------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------------------|-----------------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |             | Date<br>10-17-78                       |                       |
| Company<br>Southland Royalty Company                                                                                      |             | Connection<br>Southern Union Gathering |                       |
| Post<br>Undesignated                                                                                                      |             | Formation<br>Fruitland                 |                       |
| Completion Date<br>10-3-78                                                                                                |             | Total Depth<br>2952'                   | Play Back TD<br>2913' |
|                                                                                                                           |             | Elevation<br>5976' GR                  | Well No.<br>2         |
| Coq. Size<br>5.500                                                                                                        | WL<br>14.0# | d<br>5.012                             | Set At<br>2913'       |
| Trq. Size<br>1.660                                                                                                        | Wt.<br>2.7# | d<br>1.380                             | Set At<br>2479'       |
| Type Well - Single - Broadhead - G.G. or G.O. Multiple<br>G.G. Multiple                                                   |             | Packer Set At<br>2546'                 | County<br>San Juan    |
| Producing Thru<br>Tbg.                                                                                                    |             | Reservoir Temp. °F<br>@                | State<br>New Mexico   |
| L                                                                                                                         |             | H                                      | Gg                    |
|                                                                                                                           |             |                                        | .700                  |
|                                                                                                                           |             | % CO <sub>2</sub>                      | % N <sub>2</sub>      |
|                                                                                                                           |             | % H <sub>2</sub> S                     | Prover                |
|                                                                                                                           |             | Meter Run                              | Tcps                  |

  

| 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. |                  | Temp. °F |
| 1.        | 2"               | X | 3/4"         |                 |                      |             | 674             |             | 1027            |                  | 1 hr     |
| 2.        |                  |   |              |                 |                      |             | 44              |             | 306             |                  | 2 hrs    |
| 3.        |                  |   |              |                 |                      |             | 31              |             | 254             |                  | 3 hrs    |
| 4.        |                  |   |              |                 |                      |             | 28              |             | 235             |                  |          |
| 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. Factor, Fpv | Rate of Flow Q, Mcfd |
| 1                         | 12.365                |                  | 40.2                    | 1.0000               | .9258             | 1.0000             | 460                  |
| 2                         |                       |                  |                         |                      |                   |                    |                      |
| 3                         |                       |                  |                         |                      |                   |                    |                      |
| 4                         |                       |                  |                         |                      |                   |                    |                      |
| 5                         |                       |                  |                         |                      |                   |                    |                      |

  

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

  

|                       |                                       |                                            |                                                             |
|-----------------------|---------------------------------------|--------------------------------------------|-------------------------------------------------------------|
| P <sub>c</sub> 1039.2 | P <sub>c</sub> <sup>2</sup> 1,079,937 | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0600$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0508$ |
| 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                     | 247.2                                 | 61,108                                     | 1,018,829                                                   |
| 2                     |                                       |                                            |                                                             |
| 3                     |                                       |                                            |                                                             |
| 4                     |                                       |                                            |                                                             |
| 5                     |                                       |                                            |                                                             |

  

|                  |     |       |               |          |     |
|------------------|-----|-------|---------------|----------|-----|
| Actual Open Flow | 483 | Mcf/d | Rate of Slope | Slope, n | .85 |
|------------------|-----|-------|---------------|----------|-----|

  

|                        |                                   |                           |            |
|------------------------|-----------------------------------|---------------------------|------------|
| Approved By Commission | Conducted By<br>Bob Shindledecker | Checked By<br>James Smith | Checked By |
|------------------------|-----------------------------------|---------------------------|------------|