

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

Form C-122  
Revised 9-1-65

|                                                                                                                           |  |                                    |  |                               |  |
|---------------------------------------------------------------------------------------------------------------------------|--|------------------------------------|--|-------------------------------|--|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |  |                                    |  | Test Date<br>7-13-77          |  |
| Company<br>Kirby Exploration Company                                                                                      |  |                                    |  | Connection                    |  |
| Pool<br>Nipp Pictured Cliff                                                                                               |  |                                    |  | Formation<br>Pictured Cliff   |  |
| Completion Date<br>6-10-77                                                                                                |  | Total Depth<br>1253                |  | Plug Back TD<br>1130          |  |
|                                                                                                                           |  |                                    |  | Elevation<br>59316            |  |
| Csg. Size<br>4½                                                                                                           |  | Wt.<br>10.5                        |  | Set At<br>1223                |  |
| Tbg. Size<br>2 3/8                                                                                                        |  | Wt.<br>4.7                         |  | Set At<br>989                 |  |
| Perforations:<br>From 1086 To 1092                                                                                        |  | Perforations:<br>From 1098 To 1105 |  | Well No.<br>2                 |  |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single                                                         |  | Packer Set At<br>none              |  | County<br>San Juan            |  |
| Producing Thru<br>tubing                                                                                                  |  | Reservoir Temp. °F<br>80 @ 1250    |  | Mean Annual Temp. °F          |  |
|                                                                                                                           |  |                                    |  | Baro. Press. - P <sub>a</sub> |  |
| L                                                                                                                         |  | H                                  |  | G <sub>g</sub><br>0.620       |  |
|                                                                                                                           |  |                                    |  | % 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. |                  | Temp. °F |
| 1.        | 2x6x0.75         |   |              | 11              | -                    | -           | 11              | 73          | 17              | -                | 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 Ft. | Gravity Factor F <sub>g</sub> | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mcfd |
| 1.                        | 11                    | -                | 22                      | 0.9877                | 01.270                        | 1.020                                   | 310                  |
| 2.                        |                       |                  |                         |                       |                               |                                         |                      |
| 3.                        |                       |                  |                         |                       |                               |                                         |                      |
| 4.                        |                       |                  |                         |                       |                               |                                         |                      |
| 5.                        |                       |                  |                         |                       |                               |                                         |                      |

  

|     |                |          |                |       |                                                  |
|-----|----------------|----------|----------------|-------|--------------------------------------------------|
| NO. | P <sub>r</sub> | Temp. °R | T <sub>r</sub> | Z     | Gas Liquid Hydrocarbon Ratio <u>NA</u> Mcf/bbl.  |
| 1.  | .021           | 533      | 1.47           | 0.992 | A.P.I. Gravity of Liquid Hydrocarbons _____ Deg. |
| 2.  |                |          |                |       | Specific Gravity Separator Gas _____ XXXXXXXXXX  |
| 3.  |                |          |                |       | Specific Gravity Flowing Fluid _____ XXXXXX      |
| 4.  |                |          |                |       | Critical Pressure _____ P.S.I.A. _____ P.S.I.A.  |
| 5.  |                |          |                |       | Critical Temperature _____ R _____ R             |

  

|                    |                                   |                                            |                                                             |
|--------------------|-----------------------------------|--------------------------------------------|-------------------------------------------------------------|
| P <sub>c</sub> 229 | P <sub>c</sub> <sup>2</sup> 52441 | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0055$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0047$ |
| NO.                | P <sub>t</sub> <sup>2</sup>       | P <sub>w</sub>                             | P <sub>w</sub> <sup>2</sup>                                 |
| 1.                 |                                   | 17                                         | 289                                                         |
| 2.                 |                                   |                                            |                                                             |
| 3.                 |                                   |                                            |                                                             |
| 4.                 |                                   |                                            |                                                             |
| 5.                 |                                   |                                            |                                                             |

  

|                                             |  |                            |
|---------------------------------------------|--|----------------------------|
| Absolute Open Flow <u>311</u> Mcfd @ 15.025 |  | Angle of Slope <u>0.85</u> |
| Remarks:                                    |  |                            |

  

|                         |                                  |                               |                                 |
|-------------------------|----------------------------------|-------------------------------|---------------------------------|
| Approved By Commission: | Conducted By:<br>Wendell Durrett | Calculated By:<br>J. D. Hicks | Checked By:<br>William T. Jones |
|-------------------------|----------------------------------|-------------------------------|---------------------------------|