

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>4/6/81                   |                          |
| Company<br>Lively Exploration Co.                                                                                         |              |                            |                         | Connection<br>None                    |                          |
| Pool<br>Basin Dakota                                                                                                      |              |                            |                         | Formation<br>Dakota                   |                          |
| Completion Date<br>3/14/81                                                                                                |              | Total Depth<br>6890'       |                         | Plug Back TD<br>6847'                 |                          |
|                                                                                                                           |              |                            |                         | Elevation<br>6220' GL                 |                          |
| Farm or Lease Name<br>Lively                                                                                              |              |                            |                         | Well No.<br>18-E                      |                          |
| Csg. Size<br>4-1/2"                                                                                                       | Wt.<br>11.60 | d<br>4.000                 | Set At<br>6890'         | Perforations:<br>From 6654' To 6754'  |                          |
| Tbg. Size<br>2-3/8"                                                                                                       | Wt.<br>4.70  | d<br>1.995                 | Set At<br>6704'         | Perforations:<br>From Open To Ended   |                          |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single                                                         |              |                            |                         | Packer Set At                         |                          |
| Producing Thru<br>Tubing                                                                                                  |              |                            |                         | Baro. Press. - P <sub>a</sub><br>12.0 |                          |
| Reservoir Temp. °F<br>160 <sup>0</sup> @ 6890'                                                                            |              | Mean Annual Temp. °F<br>60 |                         | State<br>New Mexico                   |                          |
| L<br>6704                                                                                                                 | H<br>6704    | Gg<br>--                   | % CO <sub>2</sub><br>-- | % N <sub>2</sub><br>--                | % H <sub>2</sub> S<br>-- |
| Prover<br>--                                                                                                              |              | Meter Run<br>--            |                         | Taps<br>--                            |                          |

  

| FLOW DATA |                        |   |                 |                    |                         |             | TUBING DATA        |             | CASING DATA        |             | Duration<br>of<br>Flow |
|-----------|------------------------|---|-----------------|--------------------|-------------------------|-------------|--------------------|-------------|--------------------|-------------|------------------------|
| NO.       | Prover<br>Line<br>Size | X | Orifice<br>Size | Press.<br>p.s.i.g. | Diff.<br>h <sub>w</sub> | Temp.<br>°F | Press.<br>p.s.i.g. | Temp.<br>°F | Press.<br>p.s.i.g. | Temp.<br>°F |                        |
| SI        |                        |   |                 |                    |                         |             | 2160               |             | 2130               |             | 23 days                |
| 1.        | Pitot Tube             |   |                 |                    |                         |             | 700                | 60          | 930                |             | 3 hrs.                 |
| 2.        |                        |   |                 |                    |                         |             |                    |             |                    |             |                        |
| 3.        |                        |   |                 |                    |                         |             |                    |             |                    |             |                        |
| 4.        |                        |   |                 |                    |                         |             |                    |             |                    |             |                        |
| 5.        |                        |   |                 |                    |                         |             |                    |             |                    |             |                        |

  

| RATE OF FLOW CALCULATIONS |                          |                  |                            |                                        |                                     |                         |
|---------------------------|--------------------------|------------------|----------------------------|----------------------------------------|-------------------------------------|-------------------------|
| NO.                       | Coefficient<br>(24 Hour) | $\sqrt{h_w P_m}$ | Pressure<br>P <sub>m</sub> | Flow Temp.<br>Factor<br>F <sub>t</sub> | Gravity<br>Factor<br>F <sub>g</sub> | Rate of Flow<br>Q, Mcfd |
| 1                         |                          |                  |                            |                                        |                                     | 2/310                   |
| 2.                        |                          |                  |                            |                                        |                                     |                         |
| 3.                        |                          |                  |                            |                                        |                                     |                         |
| 4.                        |                          |                  |                            |                                        |                                     |                         |
| 5.                        |                          |                  |                            |                                        |                                     |                         |

  

| NO. | P <sub>t</sub> | Temp. °R | T <sub>r</sub> | Z | Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.          |
|-----|----------------|----------|----------------|---|------------------------------------------------------|
| 1.  |                |          |                |   | A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.     |
| 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                 |

  

| NO. | P <sub>t</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) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2398$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .9346$ |
|-----|-----------------------------|----------------|-----------------------------|-----------------------------------------------------------|--------------------------------------------|------------------------------------------------------------|
| 1   |                             | 942            | 887,364                     | 3,700,800                                                 |                                            |                                                            |
| 2   |                             |                |                             |                                                           |                                            |                                                            |
| 3   |                             |                |                             |                                                           |                                            |                                                            |
| 4   |                             |                |                             |                                                           |                                            |                                                            |
| 5   |                             |                |                             |                                                           |                                            |                                                            |

  

|                                                                |  |                |                               |
|----------------------------------------------------------------|--|----------------|-------------------------------|
| $ACF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2,158$ |  |                |                               |
| Absolute Open Flow<br>2,158                                    |  | Mcf/d @ 15.025 | Angle of Slope $\theta$ _____ |
| Slope, n                                                       |  | 0.75           |                               |
| Remarks: _____                                                 |  |                |                               |

  

|                         |                                   |                                    |             |
|-------------------------|-----------------------------------|------------------------------------|-------------|
| Approved By Commission: | Conducted By:<br>Dewayne Blancett | Calculated By:<br>Dewayne Blancett | Checked By: |
|-------------------------|-----------------------------------|------------------------------------|-------------|