

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                                        |                      |
| Company<br><i>Lively Exploration Co.</i>                                                                                  |                        |                                            |                             | Connection                                                |                                                                                                              |                                                  |                      |
| Pool<br><i>Basin - Dakota</i>                                                                                             |                        |                                            |                             | Formation<br><i>Dakota</i>                                |                                                                                                              | Unit                                             |                      |
| Completion Date<br><i>12-8-73</i>                                                                                         |                        | Total Depth<br><i>7400</i>                 |                             | Plug Back TD<br><i>7357</i>                               |                                                                                                              | Elevation<br><i>6052 RKB</i>                     |                      |
| Csg. Size<br><i>4 1/2"</i>                                                                                                |                        | Wt.<br><i>10.5 lb/ft</i>                   |                             | Set At<br><i>7400</i>                                     |                                                                                                              | Perforations:<br>From <i>7154</i> To <i>7326</i> |                      |
| Tub. Size<br><i>1 1/4"</i>                                                                                                |                        | Wt.<br><i>2.4 lb/ft</i>                    |                             | Set At<br><i>7298</i>                                     |                                                                                                              | Perforations:<br>From <i>Open End</i> To         |                      |
| Type Well - Single - Brdhead - G.G. or G.O. Multiple<br><i>Single - Gas</i>                                               |                        |                                            |                             |                                                           |                                                                                                              | Packer Set At                                    |                      |
| Producing Thru<br><i>Tub.</i>                                                                                             |                        | Reservoir Temp. °F<br><i>80</i>            |                             | Mean Annual Temp. °F                                      |                                                                                                              | Baro. Press. - P <sub>a</sub>                    |                      |
| L                                                                                                                         |                        | H                                          |                             | Gg<br><i>1.25 est.</i>                                    |                                                                                                              | % CO <sub>2</sub>                                |                      |
|                                                                                                                           |                        |                                            |                             | % N <sub>2</sub>                                          |                                                                                                              | % H <sub>2</sub> S                               |                      |
|                                                                                                                           |                        |                                            |                             | Prover                                                    |                                                                                                              | Meter Run                                        |                      |
|                                                                                                                           |                        |                                            |                             |                                                           |                                                                                                              | Taps                                             |                      |
| FLOW DATA                                                                                                                 |                        |                                            |                             | TUBING DATA                                               |                                                                                                              | CASING DATA                                      |                      |
| NO.                                                                                                                       | Prover Line Size       | X                                          | Orifice Size                | Press. p.s.i.g.                                           | Diff. h <sub>w</sub>                                                                                         | Temp. °F                                         | Duration of Flow     |
| 1.                                                                                                                        |                        |                                            |                             |                                                           |                                                                                                              |                                                  |                      |
| 2.                                                                                                                        |                        |                                            |                             |                                                           |                                                                                                              |                                                  |                      |
| 3.                                                                                                                        | <i>3/8" Pass Choke</i> |                                            |                             | <i>129</i>                                                |                                                                                                              | <i>53°</i>                                       | <i>3 Hrs</i>         |
| 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.                                                                                                                        |                        |                                            |                             |                                                           |                                                                                                              |                                                  |                      |
| 2.                                                                                                                        |                        |                                            |                             |                                                           |                                                                                                              |                                                  |                      |
| 3.                                                                                                                        | <i>12.365</i>          |                                            | <i>141</i>                  | <i>1.0068</i>                                             | <i>.9608</i>                                                                                                 | <i>1.015</i>                                     | <i>1712</i>          |
| 4.                                                                                                                        |                        |                                            |                             |                                                           |                                                                                                              |                                                  |                      |
| 5.                                                                                                                        |                        |                                            |                             |                                                           |                                                                                                              |                                                  |                      |
| NO.                                                                                                                       | P <sub>i</sub>         | Temp. °R                                   | T <sub>f</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                                                                         |                                                  |                      |
| $P_c = 2616$ $P_c^2 = 6,843,456$                                                                                          |                        |                                            |                             |                                                           | $(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.2862$ $(2) \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^{n+.75} = 1.2048$ |                                                  |                      |
| NO.                                                                                                                       | P <sub>i</sub>         | 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> | $ACF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2063$                                                |                                                  |                      |
| 1.                                                                                                                        |                        |                                            |                             |                                                           |                                                                                                              |                                                  |                      |
| 2.                                                                                                                        |                        |                                            |                             |                                                           |                                                                                                              |                                                  |                      |
| 3.                                                                                                                        |                        | <i>1234</i>                                | <i>1,522,756</i>            | <i>5,320,700</i>                                          |                                                                                                              |                                                  |                      |
| 4.                                                                                                                        |                        |                                            |                             |                                                           |                                                                                                              |                                                  |                      |
| 5.                                                                                                                        |                        |                                            |                             |                                                           |                                                                                                              |                                                  |                      |
| Absolute Open Flow <i>2063</i> Mcfd @ 15.025                                                                              |                        |                                            |                             |                                                           | Angle of Slope $\theta$ _____ Slope, n <i>.75</i>                                                            |                                                  |                      |
| Remarks: _____                                                                                                            |                        |                                            |                             |                                                           |                                                                                                              |                                                  |                      |
| OIL CON. COM. DIST. 3                                                                                                     |                        |                                            |                             |                                                           |                                                                                                              |                                                  |                      |
| Approved By Commission:                                                                                                   |                        | Conducted By:<br><i>Jacobs &amp; Welch</i> |                             | Calculated By:<br><i>Jacobs</i>                           |                                                                                                              | Checked By:                                      |                      |

