

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

Form C-121  
Revised 9-1-63

|                                                                                                                           |       |                    |                   |                      |                    |                               |           |                    |      |
|---------------------------------------------------------------------------------------------------------------------------|-------|--------------------|-------------------|----------------------|--------------------|-------------------------------|-----------|--------------------|------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |       |                    |                   |                      |                    | Test Date<br>7-17-80          |           |                    |      |
| Company<br>Dinero Operating Company                                                                                       |       |                    |                   |                      |                    | Connection<br>None            |           |                    |      |
| Pool<br>Undesignated Townsend                                                                                             |       |                    |                   |                      |                    | Morrow (Lower)                |           |                    |      |
| Completion Date                                                                                                           |       | Total Depth        |                   | Plug Back ID         |                    | Elevation                     |           | Farm or Lease Name |      |
|                                                                                                                           |       |                    |                   | 12998                |                    |                               |           | Eidson             |      |
| Casing Size                                                                                                               | Wt.   | d                  | Set At            | Perforations:        |                    | Well No.                      |           |                    |      |
| 41/2                                                                                                                      | 11.6  | 4.000              | 13005             | From 12332 To 12947  |                    | 1                             |           |                    |      |
| Tubg. Size                                                                                                                | Wt.   | d                  | Set At            | Perforations:        |                    | Unit                          |           | Sec.               | Twp. |
| 2 3/8                                                                                                                     | 4.7   | 1.995              | 12290             | From To              |                    | H                             |           | 20                 | 16   |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple                                                                   |       |                    |                   |                      |                    | Packer Set At                 |           | County             |      |
| Single                                                                                                                    |       |                    |                   |                      |                    | 12290                         |           | Lea                |      |
| Producing Thru                                                                                                            |       | Reservoir Temp. °F |                   | Mean Annual Temp. °F |                    | Baro. Press. - P <sub>a</sub> |           | State              |      |
| Tubing                                                                                                                    |       | 196 12640          |                   | 60                   |                    | 13.2                          |           | New Mexico         |      |
| L                                                                                                                         | H     | Ga                 | % CO <sub>2</sub> | % N <sub>2</sub>     | % H <sub>2</sub> S | Prover                        | Meter Run | Paps               |      |
| 12640                                                                                                                     | 12640 | .689               | 0.48              | 1.11                 | 0.00               |                               | 3         | Flange             |      |

  

| 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 |
| SI        |                  |   |              |                 |                      |             | 3160            | 74          | Pkr.            |                  | 70       |
| 1.        | 3 X 1.000        |   |              | 330.0           | 7.0                  | 100         | 350             | 100         |                 |                  | 5        |
| 2.        |                  |   |              |                 |                      |             |                 |             |                 |                  |          |
| 3.        |                  |   |              |                 |                      |             |                 |             |                 |                  |          |
| 4.        |                  |   |              |                 |                      |             |                 |             |                 |                  |          |
| 5.        |                  |   |              |                 |                      |             |                 |             |                 |                  |          |

  

| RATE OF FLOW CALCULATIONS |                       |                     |                         |                      |                   |                             |                      |
|---------------------------|-----------------------|---------------------|-------------------------|----------------------|-------------------|-----------------------------|----------------------|
| NO.                       | Coefficient (24 Hour) | $\sqrt{h_w P_{tm}}$ | Pressure P <sub>m</sub> | Flow Temp. Factor Ft | Gravity Factor Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd |
| 1                         | 4.789                 | 48.06               | 343.2                   | .9636                | 1.205             | 1.030                       | 275.3                |
| 2.                        |                       |                     |                         |                      |                   |                             |                      |
| 3.                        |                       |                     |                         |                      |                   |                             |                      |
| 4.                        |                       |                     |                         |                      |                   |                             |                      |
| 5.                        |                       |                     |                         |                      |                   |                             |                      |

  

|     |                |          |                |      |                                       |                       |
|-----|----------------|----------|----------------|------|---------------------------------------|-----------------------|
| NO. | P <sub>t</sub> | Temp. °R | T <sub>f</sub> | Z    | Gas Liquid Hydrocarbon Ratio          | 12.075 Mcf/bbl.       |
| 1   | .511           | 560      | 1.46           | .942 | A.P.I. Gravity of Liquid Hydrocarbons | 51.6 @ 60° Deg.       |
| 2.  |                |          |                |      | Specific Gravity Separator Gas        | .680 XXXXXXXXX        |
| 3.  |                |          |                |      | Specific Gravity Flowing Fluid        | XXXXXX                |
| 4.  |                |          |                |      | Critical Pressure                     | 669 P.S.I.A. P.S.I.A. |
| 5.  |                |          |                |      | Critical Temperature                  | 388 R R               |

  

|                |                             |                             |                             |
|----------------|-----------------------------|-----------------------------|-----------------------------|
| P <sub>c</sub> | 3173.2                      | P <sub>c</sub> <sup>2</sup> | 10069.2                     |
| NO.            | P <sub>t</sub> <sup>2</sup> | P <sub>w</sub>              | P <sub>w</sub> <sup>2</sup> |
| 1              | 131.9                       | 11.49                       | 131.92                      |
| 2              |                             |                             |                             |
| 3              |                             |                             |                             |
| 4              |                             |                             |                             |
| 5              |                             |                             |                             |

  

|                                                        |  |                                                            |  |
|--------------------------------------------------------|--|------------------------------------------------------------|--|
| (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.013$              |  | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.005$ |  |
| $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 276.2$ |  |                                                            |  |

  

|                    |                     |                  |       |          |      |
|--------------------|---------------------|------------------|-------|----------|------|
| Absolute Open Flow | 276.2 Mcfd @ 15.025 | Angle of Slope θ | 55° * | Slope, n | .700 |
|--------------------|---------------------|------------------|-------|----------|------|

  

|                         |                  |                 |             |
|-------------------------|------------------|-----------------|-------------|
| Remarks: * Assumed      |                  |                 |             |
| Approved By Commission: | Conducted By:    | Calculated By:  | Checked By: |
|                         | Marv Hansen-NNGC | James Rowe-NNGC |             |