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State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-122  
Revised October, 1999  
**RECEIVED**  
APR 04 2005  
30-015-33559

**MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL**

|                                                                                                                           |            |                        |                           |                                           |                                        |                                     |                     |                                            |  |
|---------------------------------------------------------------------------------------------------------------------------|------------|------------------------|---------------------------|-------------------------------------------|----------------------------------------|-------------------------------------|---------------------|--------------------------------------------|--|
| Operator <b>MEWBOURNE OIL COMPANY</b>                                                                                     |            |                        |                           |                                           | Lease or Unit Name <b>RUGER 31 FED</b> |                                     |                     |                                            |  |
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |            |                        |                           |                                           | Test Date<br>2/1/2005                  |                                     | Well No.<br>1       |                                            |  |
| Completion Date<br>1/21/2005                                                                                              |            | Total Depth<br>11784   |                           | Plug Back TD<br>11463                     |                                        | Elevation<br>3289                   |                     | Unit Ltr - Sec - TWP - Rge<br>M 31 19S 29E |  |
| Csg. Size<br>5 1/2                                                                                                        | Wt.<br>17  | d<br>4.892             | Set At<br>11560           | Perforations:<br>From: 11120    To: 11220 |                                        |                                     | County<br>EDDY      |                                            |  |
| Tbg. Size<br>2 7/8                                                                                                        | Wt.<br>6.5 | d<br>2.44              | Set At<br>10711           | Perforations:<br>From:    To:             |                                        |                                     | Pool<br>WINCHESTER  |                                            |  |
| Type Well-Single-Bradenhead-G.G. or G.O. Multiple<br><b>SINGLE</b>                                                        |            |                        |                           | Packer Set At<br>10692                    |                                        |                                     | Formation<br>MORROW |                                            |  |
| Producing Thru<br>TUBING                                                                                                  |            | Reservoir Temp.<br>181 |                           | Mean Annual Temp.<br>60                   |                                        | Baro. Press.-P <sub>a</sub><br>13.2 |                     | Connection<br>SALES                        |  |
| L<br>10711                                                                                                                | H<br>10711 | Gg<br>0.671            | %CO <sub>2</sub><br>3.026 | %N <sub>2</sub><br>1.237                  | %H <sub>2</sub> S<br>0                 | Prover<br>N/A                       | Meter Run<br>3.068  | Taps<br>FLG                                |  |

| FLOW DATA |                        |                      |                   | TUBING DATA             |       |                   |       | CASING DATA       |       | Duration<br>of<br>Flow |
|-----------|------------------------|----------------------|-------------------|-------------------------|-------|-------------------|-------|-------------------|-------|------------------------|
| No.       | Prover<br>Line<br>Size | Orifice<br>x<br>Size | Press<br>p.s.i.g. | Diff.<br>h <sub>w</sub> | Temp. | Press<br>p.s.i.g. | Temp. | Press<br>p.s.i.g. | Temp. |                        |
| SI        |                        | 3.0 X 1.50           |                   |                         |       | 1550              |       |                   |       |                        |
| 1         |                        |                      | 535               | 19.67                   | 115   | 950               |       |                   |       | 24 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 Ft. | Gravity Factor<br>F <sub>g</sub> | Super Compress<br>Factor F <sub>pv</sub> | Rate of Flow<br>Q, Mcfd |
| 1                         | 9.64                     |                  |                            |                          |                                  |                                          | 1967                    |
| 2                         |                          | TOTAL            | FLOW                       |                          |                                  |                                          |                         |
| 3                         |                          |                  |                            |                          |                                  |                                          |                         |
| 4                         |                          |                  |                            |                          |                                  |                                          |                         |
| 5                         |                          |                  |                            |                          |                                  |                                          |                         |

|     |                |         |                |   |                                        |        |                       |
|-----|----------------|---------|----------------|---|----------------------------------------|--------|-----------------------|
| No. | P <sub>r</sub> | Temp. R | T <sub>r</sub> | Z | Gas Liquid Hydrocarbon Ratio           | n/a    | Mcf bbl.              |
| 1   |                |         |                |   | A.P. I. Gravity of Liquid Hydrocarbons |        | Deg.                  |
| 2   | TOTAL          | FLOW    | METER          |   | Specific Gravity Separator Gas         | 0.671  | XXXXXXX               |
| 3   |                |         |                |   | Specific Gravity Flowing Fluid         | XXXXXX |                       |
| 4   |                |         |                |   | Critical Pressure                      | 680    | P.S.I.A. N/A P.S.I.A. |
| 5   |                |         |                |   | Critical Temperature                   | 374    | R. N/A R              |

|                       |                             |                        |                             |
|-----------------------|-----------------------------|------------------------|-----------------------------|
| P <sub>c</sub> 1563.2 |                             | P <sub>c2</sub> 1130.4 |                             |
| No.                   | P <sub>t</sub> <sup>2</sup> | P <sub>w</sub>         | P <sub>w</sub> <sup>2</sup> |
| 1                     |                             | 978.4                  | 957.3                       |
| 2                     |                             |                        |                             |
| 3                     |                             |                        |                             |
| 4                     |                             |                        |                             |
| 5                     |                             |                        |                             |

(1)  $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{6.532}{10.237}$     (2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{6.532}{10.237}$

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 10.237$

|                    |        |              |                   |    |           |   |
|--------------------|--------|--------------|-------------------|----|-----------|---|
| Absolute Open Flow | 10.237 | Mcf @ 15.025 | Angle of Slope 0: | 45 | Slope, n: | 1 |
|--------------------|--------|--------------|-------------------|----|-----------|---|

Remarks:

|                       |                                |                                |                   |
|-----------------------|--------------------------------|--------------------------------|-------------------|
| Approved By Division: | Conducted By:<br>MEWBOURNE OIL | Calculated By:<br>MREV BUECKER | Checked By:<br>MB |
|-----------------------|--------------------------------|--------------------------------|-------------------|

|                         |  |                |          |                      |          |                |          |                |          |                        |  |
|-------------------------|--|----------------|----------|----------------------|----------|----------------|----------|----------------|----------|------------------------|--|
| COMPANY : MEWBOURNE OIL |  |                |          | LEASE : RUGER 31 FED |          | WELL NO. : 1   |          | Pc = 1063.2    |          | Pc2 = 1130.4           |  |
| UNIT : m                |  | SECTION : 31   |          | TOWNSHIP : 19S       |          |                |          | P12 = 927.8    |          | Pw = 978.4             |  |
| L : 10711               |  | H : 10771      |          | L/H : 1              |          | G/GMIX : 0.671 |          | DATE : 0.0     |          | #DIV/0!                |  |
| %CO2 : 3.026            |  | %N2 : 1.235    |          | H2S : 7227.3         |          |                |          | RANGE : 29e    |          | #DIV/0!                |  |
| d : 2.441               |  | Fr : 0.010763  |          | GH :                 |          |                |          |                |          | #DIV/0!                |  |
| =====                   |  |                |          |                      |          |                |          |                |          |                        |  |
| VOL 1 : 1567.2          |  | PSIA 1 : 963.2 |          | RESV.TEMP : 181.7    |          |                |          | Pc2-Pw2= 173.1 |          | Pw2 = 957.3            |  |
| VOL 2 :                 |  | PSIA 2 :       |          |                      |          |                |          | #DIV/0!        |          | #DIV/0!                |  |
| VOL 3 :                 |  | PSIA 3 :       |          | SHUT-IN PRI = 1063.2 |          |                |          | #DIV/0!        |          | #DIV/0!                |  |
| VOL 4 :                 |  | PSIA 4 :       |          |                      |          |                |          | #DIV/0!        |          | #DIV/0!                |  |
|                         |  |                |          | PCR : 680            |          |                |          |                |          | n = 1.000              |  |
|                         |  |                |          | TCR : 374            |          |                |          |                |          |                        |  |
| LINE                    |  | RATE 1         |          | RATE 2               |          | RATE 3         |          | RATE 4         |          | Pc2/(Pc2-Pw2) = 6.532  |  |
|                         |  |                |          |                      |          |                |          |                |          | #DIV/0!                |  |
|                         |  | 1ST            |          | 2ND                  |          | 1ST            |          | 2ND            |          | #DIV/0!                |  |
|                         |  |                |          |                      |          |                |          |                |          | #DIV/0!                |  |
| 1 QM                    |  | 1.567          | 1.567    | 0.000                | 0.000    | 0.000          | 0.000    | 0.000          | 0.000    |                        |  |
| 2 TW                    |  | 534            | 534      | 534                  | 534      | 534            | 534      | 534            | 534      | [Pc2/Pc2-Pw2]n = 6.532 |  |
| 3 Ts                    |  | 641.7          | 641.7    | 641.7                | 641.7    | 641.7          | 641.7    | 641.7          | 641.7    | #DIV/0!                |  |
| 4 T                     |  | 587.9          | 587.9    | 587.9                | 587.9    | 587.9          | 587.9    | 587.9          | 587.9    | #DIV/0!                |  |
| PR (est)                |  | 1.42           |          | 0.00                 |          | 0.00           |          | 0.00           |          | #DIV/0!                |  |
| 5 Z(est)                |  | 0.865          | 0.850    | #DIV/0!              | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!        | #DIV/0!  |                        |  |
| 6 TZ                    |  | 508.7          | 499.9    | #DIV/0!              | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!        | #DIV/0!  | AOF= Q 10.237          |  |
| 7 GH/TZ                 |  | 14.207         | 14.458   | #DIV/0!              | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!                |  |
| 8 eS                    |  | 1.704          | 1.720    | #DIV/0!              | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!                |  |
| 9 l-e-S                 |  | 0.413          | 0.419    | #DIV/0!              | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!                |  |
| 10 Pt                   |  | 963.2          | 963.2    | 0.0                  | 0.0      | 0.0            | 0.0      | 0.0            | 0.0      |                        |  |
| 11 Pt2 /1000            |  | 927.8          | 927.8    | 0.0                  | 0.0      | 0.0            | 0.0      | 0.0            | 0.0      |                        |  |
| 12 Fr                   |  | 0.010763       | 0.010763 | 0.010763             | 0.010763 | 0.010763       | 0.010763 | 0.010763       | 0.010763 |                        |  |
| 13 Fc=FrTZ              |  | 5.476          | 5.380    | #DIV/0!              | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!        | #DIV/0!  |                        |  |
| 14 FcQm                 |  | 8.58           | 8.43     | #DIV/0!              | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!        | #DIV/0!  |                        |  |
| 15 L/H(FcQm)2           |  | 73.2           | 70.7     | #DIV/0!              | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!        | #DIV/0!  |                        |  |
| 16 Fw                   |  | 30.24363       | 29.58994 | #DIV/0!              | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!        | #DIV/0!  |                        |  |
| 17 Pw2                  |  | 958.0          | 957.3    | #DIV/0!              | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!        | #DIV/0!  |                        |  |
| 18 Ps2                  |  | 1632.1         | 1646.4   | #DIV/0!              | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!        | #DIV/0!  |                        |  |
| 19 Ps                   |  | 1277.5         | 1283.1   | #DIV/0!              | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!        | #DIV/0!  |                        |  |
| 20 P                    |  | 1120.4         | 1123.2   | #DIV/0!              | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!        | #DIV/0!  |                        |  |
| 21 Pr                   |  | 1.65           | 1.65     | #DIV/0!              | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!        | #DIV/0!  |                        |  |
| 22 Tr                   |  | 1.57           | 1.57     | 1.57                 | 1.57     | 1.57           | 1.57     | 1.57           | 1.57     |                        |  |
| 23 Z                    |  | 0.850          | 0.850    | #DIV/0!              | #DIV/0!  | #DIV/0!        | #DIV/0!  | #DIV/0!        | #DIV/0!  | FORM C122-D            |  |

# MEWBOURNE OIL

RUGER 31 FED #1

