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See Rule 401 & Rule 1122

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

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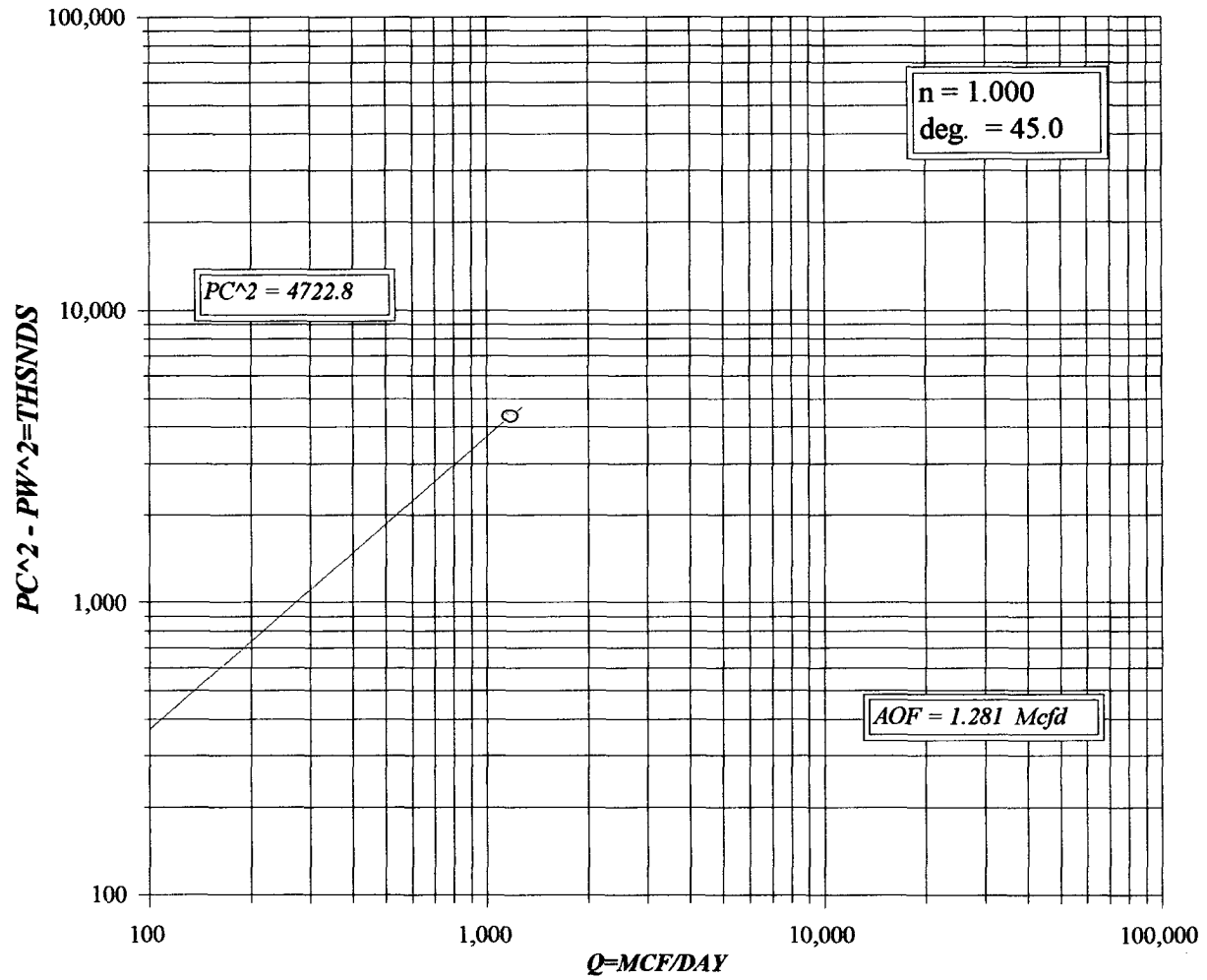
30-015-39930

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

|                                                                                                                           |                             |                        |                                   |                                                           |                                                                                                      |                                     |                                          |                                            |        |
|---------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------|-----------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------------|------------------------------------------|--------------------------------------------|--------|
| Operator<br>MEWBOURNE OIL                                                                                                 |                             |                        |                                   |                                                           | Lease or Unit Name<br>FREEDOM "36" ST.                                                               |                                     |                                          |                                            |        |
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                             |                        |                                   |                                                           | Test Date                                                                                            |                                     | Well No.<br>1                            |                                            |        |
| Completion Date<br>12/22/03                                                                                               |                             | Total Depth<br>11927   |                                   | Plug Back TD                                              |                                                                                                      | Elevation                           |                                          | Unit Ltr - Sec - TWP - Rge<br>1 36 20S 28E |        |
| Csg. Size<br>5 1/2                                                                                                        | Wt.<br>17                   | d<br>4.892             | Set At<br>11927                   |                                                           | Perforations:<br>From: 11466 To: 11550                                                               |                                     | County<br>EDDY                           |                                            |        |
| Tbg. Size<br>2 7/8                                                                                                        | Wt.<br>6.5                  | d<br>2.441             | Set At<br>11312                   |                                                           | Perforations:<br>From: To:                                                                           |                                     | Pool<br>BURTON FLATS MORROW              |                                            |        |
| Type Well-Single-Bradenhead-G.G. or G.O. Multiple<br>SINGLE                                                               |                             |                        |                                   |                                                           | Packer Set At<br>11296                                                                               |                                     | 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>11312                                                                                                                | H<br>11312                  | Gg<br>0.677            | %CO <sub>2</sub><br>6.166         | %N <sub>2</sub><br>3.496                                  | %H <sub>2</sub> S                                                                                    | Prover                              | Meter Run<br>3.067                       | Taps<br>FLG                                |        |
| FLOW DATA                                                                                                                 |                             |                        |                                   |                                                           | TUBING DATA                                                                                          |                                     |                                          | CASING DATA                                |        |
| 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                                                                                                                        |                             |                        |                                   |                                                           |                                                                                                      | 2160                                |                                          |                                            |        |
| 1                                                                                                                         | 3.067 X 1.250               |                        | 472                               | 11                                                        | 74                                                                                                   | 570                                 |                                          |                                            | 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                                                                                                                         |                             |                        |                                   |                                                           |                                                                                                      |                                     |                                          | 1182                                       |        |
| 2                                                                                                                         | TOTAL                       |                        | FLOW                              | METER                                                     |                                                                                                      |                                     |                                          |                                            |        |
| 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 N/A Deg.                                                      |                                     |                                          |                                            |        |
| 2                                                                                                                         |                             |                        |                                   |                                                           | Specific Gravity Separator Gas 0.677 XXXXXXXX                                                        |                                     |                                          |                                            |        |
| 3                                                                                                                         | TOTAL                       | FLOW                   | METER                             |                                                           | Specific Gravity Flowing Fluid XXXXX                                                                 |                                     |                                          |                                            |        |
| 4                                                                                                                         |                             |                        |                                   |                                                           | Critical Pressure 689 P.S.I.A. P.S.I.A.                                                              |                                     |                                          |                                            |        |
| 5                                                                                                                         |                             |                        |                                   |                                                           | Critical Temperature 362 R R                                                                         |                                     |                                          |                                            |        |
| P <sub>c</sub> 2173.2 P <sub>w</sub> 4722.8                                                                               |                             |                        |                                   |                                                           |                                                                                                      |                                     |                                          |                                            |        |
| 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) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.083$ (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.083$ |                                     |                                          |                                            |        |
| 1                                                                                                                         |                             | 600.1                  | 360.2                             | 4362.6                                                    | $AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.281$                                       |                                     |                                          |                                            |        |
| 2                                                                                                                         |                             |                        |                                   |                                                           |                                                                                                      |                                     |                                          |                                            |        |
| 3                                                                                                                         |                             |                        |                                   |                                                           |                                                                                                      |                                     |                                          |                                            |        |
| 4                                                                                                                         |                             |                        |                                   |                                                           |                                                                                                      |                                     |                                          |                                            |        |
| 5                                                                                                                         |                             |                        |                                   |                                                           |                                                                                                      |                                     |                                          |                                            |        |
| Absolute Open Flow 1.281 Mcfd @ 15.025                                                                                    |                             |                        |                                   |                                                           | Angle of Slope (°): 45                                                                               |                                     | Slope n: 1                               |                                            |        |
| Remarks:                                                                                                                  |                             |                        |                                   |                                                           |                                                                                                      |                                     |                                          |                                            |        |
| Approved By Division:                                                                                                     |                             |                        | Conducted By:<br>PRO WELL TESTING |                                                           | Calculated By:<br>MERV BUECKER                                                                       |                                     | Checked By:<br>BM                        |                                            |        |

# MEWBOURNE OIL

FREEDOM "36" ST. #1



|                            |  |                          |  |                       |  |                  |  |              |  |                       |  |
|----------------------------|--|--------------------------|--|-----------------------|--|------------------|--|--------------|--|-----------------------|--|
| COMPANY : MEWBORNE OIL CO. |  | LEASE : FREEDOM "36" ST. |  | WELL NO. : 1          |  | Pc = 2173.2      |  | Pc2 = 4722.8 |  | *                     |  |
| UNIT : I                   |  | SECTION : 36             |  | TOWNSHIP : 24S        |  | Pt2 = 340.1      |  | Pw = 600.1   |  | *                     |  |
| L : 11312                  |  | H : 11312                |  | L/H : 1               |  | G/GMIX : 0.677   |  |              |  | *                     |  |
| %CO2 : 6.166               |  | %N2 : 3.496              |  | H2S : 1               |  | DATE : 0.0       |  | #DIV/0!      |  | *                     |  |
| d : 2.441                  |  | Fr : 0.010763            |  | GH : 8197.0           |  | RANGE : 28E      |  | 0.0          |  | #DIV/0!               |  |
|                            |  |                          |  |                       |  |                  |  | 0.0          |  | #DIV/0!               |  |
| VOL 1 : 1182               |  | PSIA 1 : 583.2           |  | RESV.TEMP : 181.0     |  | Pc2-Pw2 = 4362.6 |  | Pw2 = 360.2  |  | *                     |  |
| VOL 2 :                    |  | PSIA 2 :                 |  |                       |  | #DIV/0!          |  | #DIV/0!      |  | *                     |  |
| VOL 3 :                    |  | PSIA 3 :                 |  | SHUT-IN PRES = 2173.2 |  | #DIV/0!          |  | #DIV/0!      |  | *                     |  |
| VOL 4 :                    |  | PSIA 4 :                 |  |                       |  | #DIV/0!          |  | #DIV/0!      |  | *                     |  |
|                            |  | PCR : 689                |  |                       |  |                  |  | n = 1.000    |  | *                     |  |
|                            |  | TCR : 362                |  |                       |  |                  |  |              |  | *                     |  |
| LINE                       |  | RATE 1                   |  | RATE 2                |  | RATE 3           |  | RATE 4       |  | Pc2/(Pc2-Pw2) = 1.083 |  |
|                            |  | '1ST                     |  | '2ND                  |  | '1ST             |  | '2ND         |  | #DIV/0!               |  |
| 1 QM                       |  | 1.182                    |  | 0.000                 |  | 0.000            |  | 0.000        |  | #DIV/0!               |  |
| 2 TW                       |  | 534                      |  | 534                   |  | 534              |  | 534          |  | #DIV/0!               |  |
| 3 Ts                       |  | 641.0                    |  | 641.0                 |  | 641.0            |  | 641.0        |  | #DIV/0!               |  |
| 4 T                        |  | 587.5                    |  | 587.5                 |  | 587.5            |  | 587.5        |  | #DIV/0!               |  |
| PR (est)                   |  | 0.85                     |  | 0.00                  |  | 0.00             |  | 0.00         |  | #DIV/0!               |  |
| 5 Z(est)                   |  | 0.914                    |  | #DIV/0!               |  | #DIV/0!          |  | #DIV/0!      |  | #DIV/0!               |  |
| 6 TZ                       |  | 537.2                    |  | 531.0                 |  | #DIV/0!          |  | #DIV/0!      |  | #DIV/0!               |  |
| 7 GH/TZ                    |  | 15.260                   |  | 15.437                |  | #DIV/0!          |  | #DIV/0!      |  | #DIV/0!               |  |
| 8 eS                       |  | 1.772                    |  | 1.784                 |  | #DIV/0!          |  | #DIV/0!      |  | #DIV/0!               |  |
| 9 I-e-S                    |  | 0.436                    |  | 0.439                 |  | #DIV/0!          |  | #DIV/0!      |  | #DIV/0!               |  |
| 10 Pt                      |  | 583.2                    |  | 583.2                 |  | 0.0              |  | 0.0          |  | #DIV/0!               |  |
| 11 Pt2 /1000               |  | 340.1                    |  | 340.1                 |  | 0.0              |  | 0.0          |  | #DIV/0!               |  |
| 12 Fr                      |  | 0.010763                 |  | 0.010763              |  | 0.010763         |  | 0.010763     |  | #DIV/0!               |  |
| 13 Fc=FrTZ                 |  | 5.781                    |  | 5.715                 |  | #DIV/0!          |  | #DIV/0!      |  | #DIV/0!               |  |
| 14 FcQm                    |  | 6.83                     |  | 6.76                  |  | #DIV/0!          |  | #DIV/0!      |  | #DIV/0!               |  |
| 15 L/H(FcQm)2              |  | 46.7                     |  | 45.6                  |  | #DIV/0!          |  | #DIV/0!      |  | #DIV/0!               |  |
| 16 Fw                      |  | 20.348834                |  | 20.054578             |  | #DIV/0!          |  | #DIV/0!      |  | #DIV/0!               |  |
| 17 Pw2                     |  | 360.5                    |  | 360.2                 |  | #DIV/0!          |  | #DIV/0!      |  | #DIV/0!               |  |
| 18 Ps2                     |  | 638.8                    |  | 642.6                 |  | #DIV/0!          |  | #DIV/0!      |  | #DIV/0!               |  |
| 19 Ps                      |  | 799.3                    |  | 801.6                 |  | #DIV/0!          |  | #DIV/0!      |  | #DIV/0!               |  |
| 20 P                       |  | 691.2                    |  | 692.4                 |  | #DIV/0!          |  | #DIV/0!      |  | #DIV/0!               |  |
| 21 Pr                      |  | 1.00                     |  | 1.00                  |  | #DIV/0!          |  | #DIV/0!      |  | #DIV/0!               |  |
| 22 Tr                      |  | 1.62                     |  | 1.62                  |  | 1.62             |  | 1.62         |  | #DIV/0!               |  |
| 23 Z                       |  | 0.904                    |  | 0.904                 |  | #DIV/0!          |  | #DIV/0!      |  | #DIV/0!               |  |
|                            |  |                          |  |                       |  |                  |  |              |  | FORM C122-D           |  |