

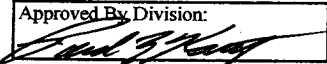
Submit in duplicate to  
appropriate district office.  
See Rule 401 & Rule 1122

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

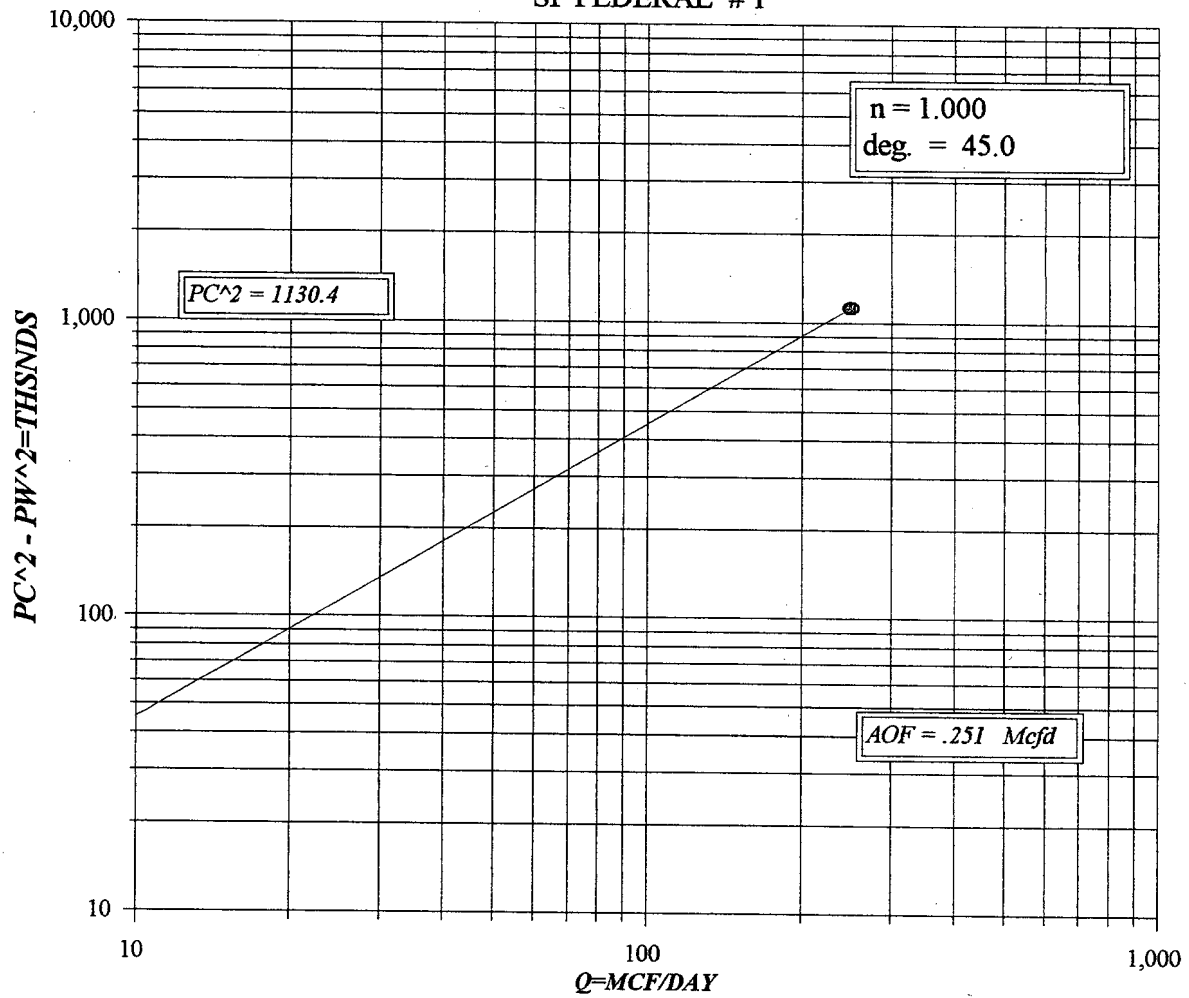
Form C-122  
Revised October, 1999

30-025-36347

# MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

|                                                                                                                           |                             |                                   |                             |                                                           |                                                                                                      |                                          |                                              |
|---------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------|-----------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------------|
| Operator<br>MEWBOURNE OIL CO.                                                                                             |                             |                                   |                             | Lease or Unit Name<br>SF "22" FED                         |                                                                                                      |                                          |                                              |
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                             |                                   |                             |                                                           |                                                                                                      | Test Date<br>11/20/03                    | Well No.<br>1                                |
| Completion Date<br>10/26/03                                                                                               |                             | Total Depth<br>13050              |                             | Plug Back TD<br>12987                                     |                                                                                                      | Elevation<br>3760                        | Unit Ltr - Sec - TWP - Rge<br>22 18S 27E 32E |
| Csg. Size<br>8 3/4                                                                                                        | Wt.<br>17                   | d                                 | Set At<br>13045             | Perforations:<br>From: 12554 To: 12656                    |                                                                                                      | County<br>Lea Eddy                       |                                              |
| Tbg. Size<br>2 7/8                                                                                                        | Wt.<br>6.5                  | d<br>2.441                        | Set At<br>12464             | Perforations:<br>From: To:                                |                                                                                                      | Pool<br>LUSK MORROW NORTH                |                                              |
| Type Well-Single-Bradenhead-G.G. or G.O. Multiple<br>SINGLE                                                               |                             |                                   |                             | Packer Set At<br>12340                                    |                                                                                                      | Formation<br>MORROW                      |                                              |
| Producing Thru<br>TUBING                                                                                                  |                             | Reservoir Temp.<br>168            | Mean Annual Temp.<br>60     | Baro. Press.-P <sub>a</sub><br>13.2                       |                                                                                                      | Connection<br>SALES                      |                                              |
| L<br>12464                                                                                                                | H<br>12464                  | Gg<br>0.677                       | %CO <sub>2</sub><br>1.32    | %N <sub>2</sub><br>6.411                                  | %H <sub>2</sub> S                                                                                    | Prover                                   | Meter Run<br>3.068                           |
| 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.                                        |
| SI                                                                                                                        |                             |                                   |                             |                                                           |                                                                                                      |                                          |                                              |
| 1                                                                                                                         | 3.068 X .750                |                                   | 65                          | 22                                                        | 68                                                                                                   | 50                                       |                                              |
| 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                                                                                                                         | 3.41                        | 41.4                              | 78.2                        | 0.9924                                                    | 1.215                                                                                                | 1.048                                    | 250                                          |
| 2                                                                                                                         |                             |                                   |                             |                                                           |                                                                                                      |                                          |                                              |
| 3                                                                                                                         |                             |                                   |                             |                                                           |                                                                                                      |                                          |                                              |
| 4                                                                                                                         |                             |                                   |                             |                                                           |                                                                                                      |                                          |                                              |
| 5                                                                                                                         |                             |                                   |                             |                                                           |                                                                                                      |                                          |                                              |
| No.                                                                                                                       | P <sub>r</sub>              | Temp. R                           | T <sub>r</sub>              | Z                                                         | Gas Liquid Hydrocarbon Ratio<br>2.083 Mcf bbl.                                                       |                                          |                                              |
| 1                                                                                                                         | 0.79                        | 528                               | 1.45                        | 0.911                                                     | A.P.I. Gravity of Liquid Hydrocarbons<br>40.6 Deg.                                                   |                                          |                                              |
| 2                                                                                                                         |                             |                                   |                             |                                                           | Specific Gravity Separator Gas<br>0.677 XXXXXXXX                                                     |                                          |                                              |
| 3                                                                                                                         |                             |                                   |                             |                                                           | Specific Gravity Flowing Fluid<br>XXXXXX GMIX = 1.907                                                |                                          |                                              |
| 4                                                                                                                         |                             |                                   |                             |                                                           | Critical Pressure<br>662 P.S.I.A. 646 P.S.I.A.                                                       |                                          |                                              |
| 5                                                                                                                         |                             |                                   |                             |                                                           | Critical Temperature<br>364 R. 502 R                                                                 |                                          |                                              |
| P <sub>c</sub> 1063.2 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> | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> | (1) $P_c^2 = \frac{1.004}{P_c^2 - P_w^2}$ (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.004$ |                                          |                                              |
| 1                                                                                                                         |                             | 70.2                              | 4.9                         | 1125.5                                                    |                                                                                                      |                                          |                                              |
| 2                                                                                                                         |                             |                                   |                             |                                                           |                                                                                                      |                                          |                                              |
| 3                                                                                                                         |                             |                                   |                             |                                                           |                                                                                                      |                                          |                                              |
| 4                                                                                                                         |                             |                                   |                             |                                                           |                                                                                                      |                                          |                                              |
| 5                                                                                                                         |                             |                                   |                             |                                                           |                                                                                                      |                                          |                                              |
| Absolute Open Flow<br>0.251 Mcfd @ 15.025                                                                                 |                             |                                   |                             | Angle of Slope (°)<br>45                                  |                                                                                                      | Slope n:<br>1                            |                                              |
| Remarks:<br>* WELL MADE 5 BBLs OF 40.6 API GRAVITY CONDENSATE DURING TEST.                                                |                             |                                   |                             |                                                           |                                                                                                      |                                          |                                              |
| Approved By Division:<br>              |                             | Conducted By:<br>PRO WELL TESTING |                             | Calculated By:<br>MERV BUECKER                            |                                                                                                      | Checked By:<br>BM                        |                                              |

MEWBOURNE OIL CO.  
SF FEDERAL # 1



|                         |          |                   |          |                |          |             |          |                       |         |
|-------------------------|----------|-------------------|----------|----------------|----------|-------------|----------|-----------------------|---------|
| COMPANY : MEWBOURNE OIL |          | LEASE : SF 22 FED |          | WELL NO. : 1   |          | Pc = 1063.2 |          | Pc2 = 1130.4          |         |
| UNIT :                  |          | SECTION : 22      |          | TOWNSHIP : 18S |          | P12 = 4.0   |          | Pw = 70.2             |         |
| L :                     | 12464    | H :               | 12464    | L/H :          | 1        | G/GMIX :    | 0.677    | 0.0                   |         |
| %CO2 :                  | 1.32     | %N2 :             | 6.411    | H2S :          |          | DATE :      | 11/20/03 | #DIV/O!               |         |
| d :                     | 2.441    | Fr :              | 0.010763 | GH :           | 8197.0   | RANGE :     | 32E      | #DIV/O!               |         |
|                         |          |                   |          |                |          |             |          | 0.0                   |         |
|                         |          |                   |          |                |          |             |          | #DIV/O!               |         |
| VOL 1 :                 | 250      | PSIA 1 :          | 63.2     | RESV.TEMP      |          | 168.0       |          | Pc2-Pw2 = 1125.5      |         |
| VOL 2 :                 |          | PSIA 2 :          |          |                |          |             |          | Pw2 = 4.9             |         |
| VOL 3 :                 |          | PSIA 3 :          |          | SHUT-IN PRE!   |          | = 1063.2    |          | #DIV/O!               |         |
| VOL 4 :                 |          | PSIA 4 :          |          |                |          |             |          | #DIV/O!               |         |
|                         |          | PCR :             |          | 646            |          |             |          | n = 1.000             |         |
|                         |          | TCR :             |          | 502            |          |             |          | Pc2/(Pc2-Pw2) = 1.004 |         |
| LINE                    | RATE 1   |                   | RATE 2   |                | RATE 3   |             | RATE 4   |                       | #DIV/O! |
|                         | 1ST      | 2ND               | 1ST      | 2ND            | 1ST      | 2ND         | 1ST      | 2ND                   | #DIV/O! |
| 1 QM                    | 0.250    | 0.250             | 0.000    | 0.000          | 0.000    | 0.000       | 0.000    | 0.000                 | #DIV/O! |
| 2 TW                    | 534      | 534               | 534      | 534            | 534      | 534         | 534      | 534                   | #DIV/O! |
| 3 Ts                    | 628.0    | 628.0             | 628.0    | 628.0          | 628.0    | 628.0       | 628.0    | 628.0                 | #DIV/O! |
| 4 T                     | 581.0    | 581.0             | 581.0    | 581.0          | 581.0    | 581.0       | 581.0    | 581.0                 | #DIV/O! |
| PR (est)                | 0.10     |                   | 0.00     |                | 0.00     |             | 0.00     |                       | #DIV/O! |
| 5 Z(est)                | 0.954    | 0.949             | #DIV/O!  | #DIV/O!        | #DIV/O!  | #DIV/O!     | #DIV/O!  | #DIV/O!               | #DIV/O! |
| 6 TZ                    | 554.2    | 551.2             | #DIV/O!  | #DIV/O!        | #DIV/O!  | #DIV/O!     | #DIV/O!  | #DIV/O!               | #DIV/O! |
| 7 GH/TZ                 | 14.791   | 14.872            | #DIV/O!  | #DIV/O!        | #DIV/O!  | #DIV/O!     | #DIV/O!  | #DIV/O!               | #DIV/O! |
| 8 eS                    | 1.741    | 1.747             | #DIV/O!  | #DIV/O!        | #DIV/O!  | #DIV/O!     | #DIV/O!  | #DIV/O!               | #DIV/O! |
| 9 I-e-S                 | 0.426    | 0.427             | #DIV/O!  | #DIV/O!        | #DIV/O!  | #DIV/O!     | #DIV/O!  | #DIV/O!               | #DIV/O! |
| 10 Pt                   | 63.2     | 63.2              | 0.0      | 0.0            | 0.0      | 0.0         | 0.0      | 0.0                   | #DIV/O! |
| 11 Pt2 /1000            | 4.0      | 4.0               | 0.0      | 0.0            | 0.0      | 0.0         | 0.0      | 0.0                   | #DIV/O! |
| 12 Fr                   | 0.010763 | 0.010763          | 0.010763 | 0.010763       | 0.010763 | 0.010763    | 0.010763 | 0.010763              | #DIV/O! |
| 13 Fc=FrTZ              | 5.965    | 5.932             | #DIV/O!  | #DIV/O!        | #DIV/O!  | #DIV/O!     | #DIV/O!  | #DIV/O!               | #DIV/O! |
| 14 FcQm                 | 1.49     | 1.48              | #DIV/O!  | #DIV/O!        | #DIV/O!  | #DIV/O!     | #DIV/O!  | #DIV/O!               | #DIV/O! |
| 15 L/H(FcQm)2           | 2.2      | 2.2               | #DIV/O!  | #DIV/O!        | #DIV/O!  | #DIV/O!     | #DIV/O!  | #DIV/O!               | #DIV/O! |
| 16 Fw                   | 0.946637 | 0.9402485         | #DIV/O!  | #DIV/O!        | #DIV/O!  | #DIV/O!     | #DIV/O!  | #DIV/O!               | #DIV/O! |
| 17 Pw2                  | 4.9      | 4.9               | #DIV/O!  | #DIV/O!        | #DIV/O!  | #DIV/O!     | #DIV/O!  | #DIV/O!               | #DIV/O! |
| 18 Ps2                  | 8.6      | 8.6               | #DIV/O!  | #DIV/O!        | #DIV/O!  | #DIV/O!     | #DIV/O!  | #DIV/O!               | #DIV/O! |
| 19 Ps                   | 92.8     | 92.8              | #DIV/O!  | #DIV/O!        | #DIV/O!  | #DIV/O!     | #DIV/O!  | #DIV/O!               | #DIV/O! |
| 20 P                    | 78.0     | 78.0              | #DIV/O!  | #DIV/O!        | #DIV/O!  | #DIV/O!     | #DIV/O!  | #DIV/O!               | #DIV/O! |
| 21 Pr                   | 0.12     | 0.12              | #DIV/O!  | #DIV/O!        | #DIV/O!  | #DIV/O!     | #DIV/O!  | #DIV/O!               | #DIV/O! |
| 22 Tr                   | 1.16     | 1.16              | 1.16     | 1.16           | 1.16     | 1.16        | 1.16     | 1.16                  | #DIV/O! |
| 23 Z                    | 0.949    | 0.949             | #DIV/O!  | #DIV/O!        | #DIV/O!  | #DIV/O!     | #DIV/O!  | #DIV/O!               | #DIV/O! |

FORM C122-D