

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Vacuum Formation Undesignated County Lea  
Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 9-3-65  
Company Marathon Oil Co. Lease State Bridges "B" Well No. 1  
Unit E Sec. 12 Twp. 17S Rge. 34E Purchaser Not connected  
Casing 5 1/2 Wt. 15.5 I.D. 4.950 Set at 4000' Perf. 3890 To 3918  
Tubing 2 3/8 Wt. 4.7 I.D. 1.995 Set at 3816' Perf. Op. Ended To \_\_\_\_\_  
Gas Pay: From 3890 To 3918 L \_\_\_\_\_ xG \_\_\_\_\_ -GL \_\_\_\_\_ Bar.Press. 13.2  
Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single  
Date of Completion: 8-10-65 Packer 3651' Reservoir Temp. 100° F.

## OBSERVED DATA

Tested Through ~~x(XXXXXX)~~ (Choke) ~~(XXXXXX)~~

Type Taps \_\_\_\_\_

| Flow Data |                                       |                                        |                |                         |              | Tubing Data    |              | Casing Data    |              | Duration<br>of Flow<br>Hr. |
|-----------|---------------------------------------|----------------------------------------|----------------|-------------------------|--------------|----------------|--------------|----------------|--------------|----------------------------|
| No.       | <del>(XXXXXX)</del><br>(Line)<br>Size | (Choke)<br><del>(XXXXXX)</del><br>Size | Press.<br>psig | Diff.<br>h <sub>w</sub> | Temp.<br>°F. | Press.<br>psig | Temp.<br>°F. | Press.<br>psig | Temp.<br>°F. |                            |
|           |                                       |                                        |                |                         |              |                |              |                |              |                            |
| SI        |                                       |                                        |                |                         |              | 740            |              | Pkr.           | -            | 48 Hr. SI                  |
| 1.        | 2                                     | 1/4                                    |                |                         |              | 657            | 85           | "              | -            | 1                          |
| 2.        | 2                                     | 3/8                                    |                |                         |              | 495            | 81           | "              | -            | 1                          |
| 3.        | 2                                     | 1/2                                    |                |                         |              | 353            | 82           | "              | -            | 1                          |
| 4.        | 2                                     | 5/8                                    |                |                         |              | 250            | 80           | "              | -            | 1                          |
| 5.        |                                       |                                        |                |                         |              |                |              |                |              |                            |

## FLOW CALCULATIONS

| No. | Coefficient<br>(24-Hour) | $\sqrt{h_w D_f}$ | Pressure<br>psia | Flow Temp.<br>Factor<br>F <sub>t</sub> | Gravity<br>Factor<br>F <sub>g</sub> | Compress.<br>Factor<br>F <sub>pv</sub> | Rate of Flow<br>Q-MCFPD<br>@ 15.025 psia |
|-----|--------------------------|------------------|------------------|----------------------------------------|-------------------------------------|----------------------------------------|------------------------------------------|
| 1.  | 1.3309                   |                  | 670.2            | 0.9768                                 | 0.8239                              | 1.114                                  | 799                                      |
| 2.  | 3.0300                   |                  | 503.2            | 0.9804                                 | 0.8239                              | 1.092                                  | 1358                                     |
| 3.  | 5.4315                   |                  | 359.2            | 0.9795                                 | 0.8239                              | 1.061                                  | 1680                                     |
| 4.  | 8.5417                   |                  | 263.2            | 0.9813                                 | 0.8239                              | 1.045                                  | 1899                                     |
| 5.  |                          |                  |                  |                                        |                                     |                                        |                                          |

## PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
F<sub>c</sub> \_\_\_\_\_ (1-e<sup>-s</sup>) \_\_\_\_\_

Specific Gravity Separator Gas .882  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> \_\_\_\_\_ P<sub>c</sub><sup>2</sup> \_\_\_\_\_

| No. | P <sub>w</sub><br>P <sub>t</sub> (psia) | P <sub>t</sub> <sup>2</sup> | F <sub>c</sub> Q | (F <sub>c</sub> Q) <sup>2</sup> | (F <sub>c</sub> Q) <sup>2</sup><br>(1-e <sup>-s</sup> ) | P <sub>w</sub> <sup>2</sup> | P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup> | Cal.<br>P <sub>w</sub> | P <sub>w</sub><br>P <sub>c</sub> |
|-----|-----------------------------------------|-----------------------------|------------------|---------------------------------|---------------------------------------------------------|-----------------------------|----------------------------------------------------------|------------------------|----------------------------------|
| 1.  |                                         |                             |                  |                                 |                                                         |                             |                                                          |                        |                                  |
| 2.  |                                         |                             |                  |                                 |                                                         |                             |                                                          |                        |                                  |
| 3.  | BHP Method                              |                             |                  |                                 |                                                         |                             |                                                          |                        |                                  |
| 4.  |                                         |                             |                  |                                 |                                                         |                             |                                                          |                        |                                  |
| 5.  |                                         |                             |                  |                                 |                                                         |                             |                                                          |                        |                                  |

Absolute Potential: 2167 MCFPD; n .64859COMPANY Marathon Oil CompanyADDRESS P. O. Box 220, Hobbs, N.M.AGENT and TITLE Petr. Engr.

WITNESSED \_\_\_\_\_

COMPANY \_\_\_\_\_

|      | P <sub>f</sub> & P <sub>s</sub> | (P <sub>f</sub> or P <sub>s</sub> ) <sup>2</sup> | P <sub>f</sub> <sup>2</sup> -P <sub>s</sub> <sup>2</sup> | REMARKS |
|------|---------------------------------|--------------------------------------------------|----------------------------------------------------------|---------|
| S.I. | 356.2                           | 7330.8                                           | -                                                        |         |
| 1    | 759.2                           | 5763.8                                           | 1567.0                                                   |         |
| 2    | 609.2                           | 3711.2                                           | 3619.6                                                   |         |
| 3    | 499.2                           | 2492.0                                           | 4838.8                                                   |         |
| 4    | 469.2                           | 2201.5                                           | 5129.3                                                   |         |