

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

Form C-122  
 Revised 9-1-65

|                                                                                                                           |            |                                 |                          |                                               |                         |
|---------------------------------------------------------------------------------------------------------------------------|------------|---------------------------------|--------------------------|-----------------------------------------------|-------------------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |            |                                 |                          | Test Date<br>4-29-85                          |                         |
| Company<br>Amoco Production Company                                                                                       |            |                                 |                          | Connection                                    |                         |
| Pool<br>Bravo Dome <u>Carbon Dioxide Gas Unit 140-Are Area</u>                                                            |            |                                 |                          | Formation<br>Tubb                             |                         |
| Completion Date<br>2/13/81                                                                                                |            | Total Depth<br>2636             |                          | Plug Back TD<br>2591                          |                         |
| Elevation GL<br>4932                                                                                                      |            | Farm or Lease Name              |                          |                                               |                         |
| Csg. Size<br>5.5                                                                                                          | Wt.<br>14  | d                               | Set At<br>2637           | Perforations:<br>From 2290 To 2528            |                         |
| Tbg. Size<br>2-7/8                                                                                                        | Wt.<br>6.5 | d                               | Set At<br>2140           | Perforations:<br>From                      To |                         |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>Single                                                         |            |                                 |                          | Packer Set At<br>2109'                        |                         |
| Producing Thru<br>Tubing                                                                                                  |            | Reservoir Temp. °F<br>90 @ 2409 |                          | Mean Annual Temp. °F<br>50                    |                         |
| Baro. Press. - P <sub>g</sub><br>12.2                                                                                     |            | State<br>New Mexico             |                          |                                               |                         |
| L<br>2409                                                                                                                 | H<br>2409  | G <sub>g</sub><br>1.529         | % CO <sub>2</sub><br>100 | % N <sub>2</sub><br>0                         | % H <sub>2</sub> S<br>0 |
| Prover<br>Meter Run<br>4.0                                                                                                |            | Taps<br>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        |                  |   |              |                 |                      |             | 3/4             | 50          |                 |                  |          |
| 1.        | 4.026 x 2.125    |   |              | 212             | 29                   | 55          | 224.2           | 50          |                 |                  | 24 hr    |
| 2.        | 4.026 x 2.125    |   |              | 230             | 22                   | 56          | 242.2           | 50          |                 |                  | 24 hr    |
| 3.        | 4.026 x 2.125    |   |              | 253             | 15                   | 58          | 265.2           | 50          |                 |                  | 24 hr    |
| 4.        | 4.026 x 2.125    |   |              | 280             | 7                    | 59          | 292.2           | 50          |                 |                  | 24 hr    |
| 5.        |                  |   |              |                 |                      |             |                 |             |                 |                  |          |

| RATE OF FLOW CALCULATIONS |                       |                  |                         |                       |                               |                                         |                      |
|---------------------------|-----------------------|------------------|-------------------------|-----------------------|-------------------------------|-----------------------------------------|----------------------|
| NO.                       | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure P <sub>m</sub> | Flow Temp. Factor Ft. | Gravity Factor F <sub>g</sub> | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mc/d |
| 1.                        |                       |                  |                         |                       |                               |                                         | 1484                 |
| 2.                        |                       |                  |                         |                       |                               |                                         | 1410                 |
| 3.                        |                       |                  |                         |                       |                               |                                         | 1200                 |
| 4.                        |                       |                  |                         |                       |                               |                                         | 889                  |
| 5.                        |                       |                  |                         |                       |                               |                                         |                      |

| NO. | P <sub>f</sub> | Temp. °R | T <sub>f</sub> | Z | Gas Liquid Hydrocarbon Ratio | A.P.I. Gravity of Liquid Hydrocarbons | Specific Gravity Separator Gas | Specific Gravity Flowing Fluid | Critical Pressure | Critical Temperature |
|-----|----------------|----------|----------------|---|------------------------------|---------------------------------------|--------------------------------|--------------------------------|-------------------|----------------------|
| 1.  |                |          |                |   | 0                            | 0                                     | 1.529                          | X X X X X X X X                | 1072              | 547                  |
| 2.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 3.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 4.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 5.  |                |          |                |   |                              |                                       |                                |                                |                   |                      |

|                                                           |                             |                |                             |
|-----------------------------------------------------------|-----------------------------|----------------|-----------------------------|
| P <sub>c</sub> 331.2    P <sub>c</sub> <sup>2</sup> 109,7 |                             |                |                             |
| NO.                                                       | P <sub>f</sub> <sup>2</sup> | P <sub>w</sub> | P <sub>w</sub> <sup>2</sup> |
| 1                                                         | 224.2                       |                | 59.439                      |
| 2                                                         | 242.2                       |                | 51.042                      |
| 3                                                         | 265.2                       |                | 39.369                      |
| 4                                                         | 292.2                       |                | 24.317                      |
| 5                                                         |                             |                |                             |

(1)  $\frac{P_c^2}{P_c^2 - P_w^2} = 1.846$

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2090$

(2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.418$

|                    |      |               |                       |          |     |
|--------------------|------|---------------|-----------------------|----------|-----|
| Absolute Open Flow | 2090 | Mc/d @ 15.025 | Angle of Slope $\phi$ | Slope, n | .57 |
|--------------------|------|---------------|-----------------------|----------|-----|

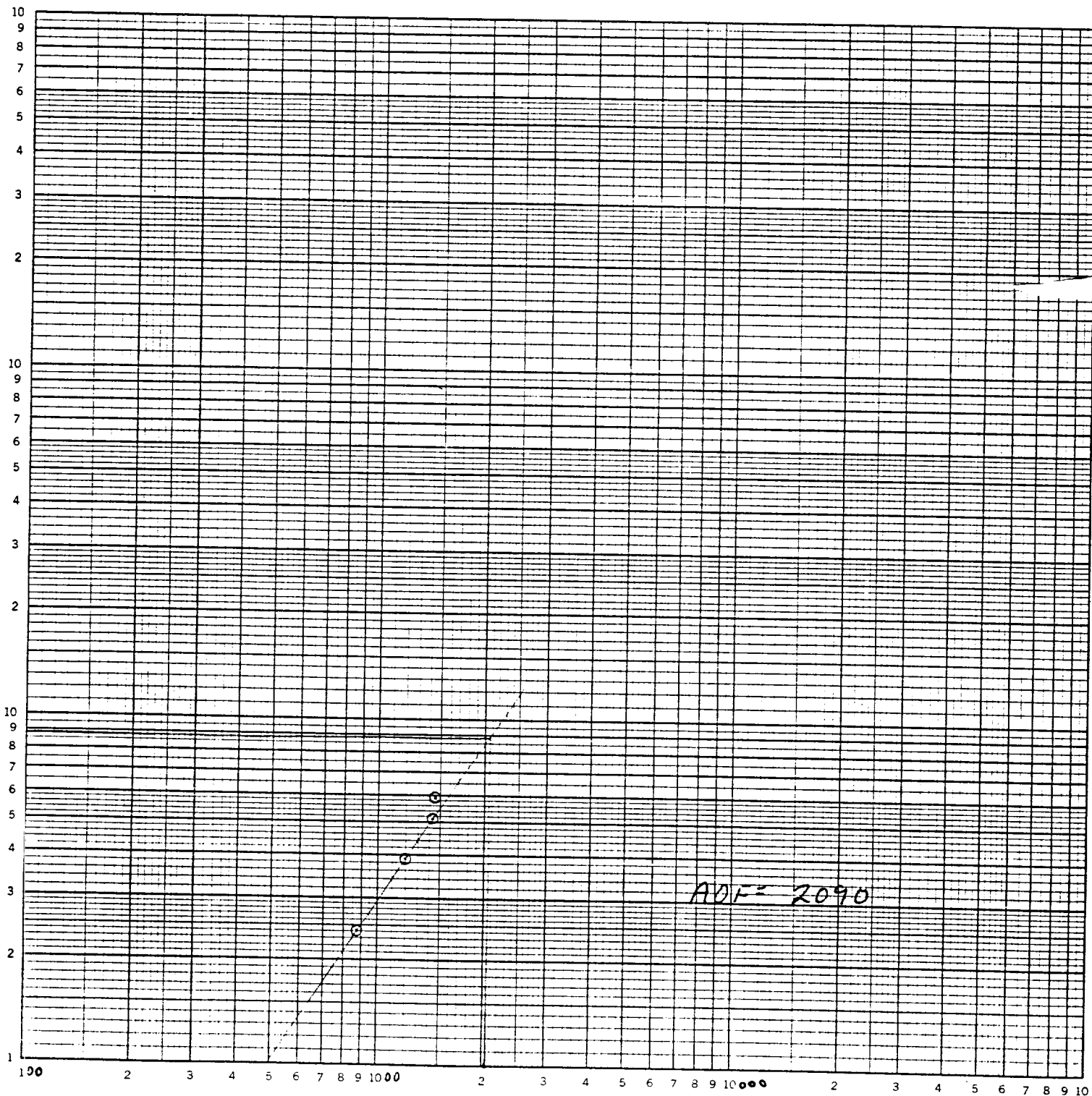
  

|                         |               |                |             |
|-------------------------|---------------|----------------|-------------|
| Remarks:                |               |                |             |
| Approved by Commission: | Conducted By: | Calculated By: | Checked By: |
|                         |               | D. D. Kimble   |             |

1934 1815

46 7400

$P_c \sim f \omega$   
 $K \sim \Sigma$   
 LOGARITHMIC 3 X 3 CYCLES  
 KEUFFEL & ESSER CO. MADE IN U.S.A.



$$Q = MCF$$