

NEW MEXICO OIL CONSERVATION COMMISSION Form C-122  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL Revised 9-1-63

|                                                                                                                           |                  |                          |                |                                           |           |                                           |                     |                                         |  |
|---------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------|----------------|-------------------------------------------|-----------|-------------------------------------------|---------------------|-----------------------------------------|--|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                  |                          |                |                                           |           | Test Date<br>8/21/95                      |                     | API Number<br>30-059-20085              |  |
| Company<br><b>Amoco Corporation</b>                                                                                       |                  |                          |                | Connection<br><b>Bravo Dome CO2 Plant</b> |           |                                           |                     | RTU Number<br>5069                      |  |
| Pool<br><b>N/A</b>                                                                                                        |                  |                          |                | Formation<br><b>Tubb</b>                  |           |                                           |                     | Unit<br><b>BDCDGU</b>                   |  |
| Completion Date<br>4/6/81                                                                                                 |                  | Total Depth<br>2727      |                | Plug Back Depth<br>2535                   |           | Elevation<br>4645 GL                      |                     | Farm or Lease Name<br><b>Bravo Dome</b> |  |
| Csg. Size<br>3.5                                                                                                          | Wt.<br>14        | Csg. Inside Dia<br>5.012 | Set At<br>2726 | Perforations<br>From 2023 To 2166         |           | Well Number<br>2134-121-K                 |                     |                                         |  |
| Tbg. Size<br>3.5                                                                                                          | Wt.<br>FG        | Tbg. Inside Dia<br>2.95  | Set At<br>1982 | Perforations<br>From n/a To n/a           |           | Unit Sec. Twp. Rge.<br>sec 12, T-21, R-34 |                     |                                         |  |
| Type well - Single-Bradenhead-G.G. or G.O. Multiple<br><b>Single</b>                                                      |                  |                          |                |                                           |           | Packer Set At<br>1993                     |                     | County<br><b>Union</b>                  |  |
| Producing Through<br><b>Tubing</b>                                                                                        |                  | Reservoir Temp. F<br>95  |                | Mean Annual Temp. F<br>60                 |           | Baro. Press. - PSIA<br>12.2               |                     | State<br><b>New Mexico</b>              |  |
| Flow Channel, L<br>2535                                                                                                   | Depth, H<br>2535 | Gg<br>1.5192             | %CO2<br>100    | %N2<br>0                                  | %H2S<br>0 | Prover<br><b>ORIFICE</b>                  | Meter Run<br>4 inch | Taps<br><b>FLANGE</b>                   |  |

| FLOW DATA |             |   |                   |                 | TUBING DATA |                 | CASING DATA |                 | Duration of Flow |          |
|-----------|-------------|---|-------------------|-----------------|-------------|-----------------|-------------|-----------------|------------------|----------|
| NO.       | Prover Size | X | Stat. Press. psig | Diff. Press. Hw | Temp. °F    | Press. p.s.i.g. | Temp. °F    | Press. p.s.i.g. |                  | Temp. °F |
| SI        |             |   |                   |                 |             | 315             |             |                 |                  | 24 hour  |
| 1.        |             |   |                   |                 |             | 270             |             |                 |                  | 60 MIN   |
| 2.        |             |   |                   |                 |             | 250             |             |                 |                  | 60 MIN   |
| 3.        |             |   |                   |                 |             | 220             |             |                 |                  | 60 MIN   |
| 4.        |             |   |                   |                 |             | 190             |             |                 |                  | 60 MIN   |
| 5.        |             |   |                   |                 |             | 0               |             |                 |                  |          |

| RATE OF FLOW CALCULATIONS |                        |         |             |                       |                    |                                    |                      |         |
|---------------------------|------------------------|---------|-------------|-----------------------|--------------------|------------------------------------|----------------------|---------|
| NO.                       | Coefficient (24 Hours) | hw * Pm | Pressure Pm | Flow Temp. Factor, Ft | Gravity Factor, Fg | Super. Compressibility Factor, Fpv | Rate of Flow Q, Mcfd |         |
|                           |                        |         |             |                       |                    |                                    | Values               | Log(10) |
| SI                        |                        |         |             |                       |                    |                                    | 0                    |         |
| 1.                        |                        |         |             |                       |                    |                                    | 1800                 | 3.2553  |
| 2.                        |                        |         |             |                       |                    |                                    | 1933                 | 3.2862  |
| 3.                        |                        |         |             |                       |                    |                                    | 2200                 | 3.3424  |
| 4.                        |                        |         |             |                       |                    |                                    | 2533                 | 3.4036  |
| 5.                        |                        |         |             |                       |                    |                                    | 3043                 | AOF     |

|     |    |          |    |   |                                        |               |
|-----|----|----------|----|---|----------------------------------------|---------------|
| NO. | Pr | Temp. °R | Tr | Z | Gas Liquid Hydrocarbon Ratio           | N/A Mcf/bbl   |
| 1.  |    |          |    |   | A. P. I. Gravity of Liquid Hydrocarbon | N/A Deg.      |
| 2.  |    |          |    |   | Specific Gravity Separator Gas         | N/A           |
| 3.  |    |          |    |   | Specific Gravity Flowing Fluid         | 1.5192        |
| 4.  |    |          |    |   | Critical Pressure                      | 1072 P.S.I.A. |
| 5.  |    |          |    |   | Critical Temperature                   | 548 R         |

|            |                |                    |                    |
|------------|----------------|--------------------|--------------------|
| Pc = 327.2 | Pc^2 = 107,060 | (1) 4th test point | (2) 4th test point |
| NO.        | P t^2          | Pw                 | P w^2              |
| SI         |                | 327.2              | 107,060            |
| 1.         |                | 282.2              | 79,637             |
| 2.         |                | 262.2              | 68,749             |
| 3.         |                | 232.2              | 53,917             |
| 4.         |                | 202.2              | 40,885             |
| 5.         |                |                    |                    |

|              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Pc^2 - P w^2 | Pc^2 - P w^2 | Pc^2 - P w^2 | Pc^2 - P w^2 | Pc^2 - P w^2 | Pc^2 - P w^2 | Pc^2 - P w^2 | Pc^2 - P w^2 |
| 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            |
| Log(10)      | Log(10)      | Log(10)      | Log(10)      | Log(10)      | Log(10)      | Log(10)      | Log(10)      |
| 4.4381       | 4.5833       | 4.7254       | 4.8207       | 4.9159       | 5.0111       | 5.1063       | 5.2015       |

|                                               |  |                             |                                     |
|-----------------------------------------------|--|-----------------------------|-------------------------------------|
| Absolute Open Flow <b>3,043</b> Mcfd @ 15.025 |  | Angle of Slope <b>69.13</b> | Slope, n = <b>0.381</b> (Cotangent) |
|-----------------------------------------------|--|-----------------------------|-------------------------------------|

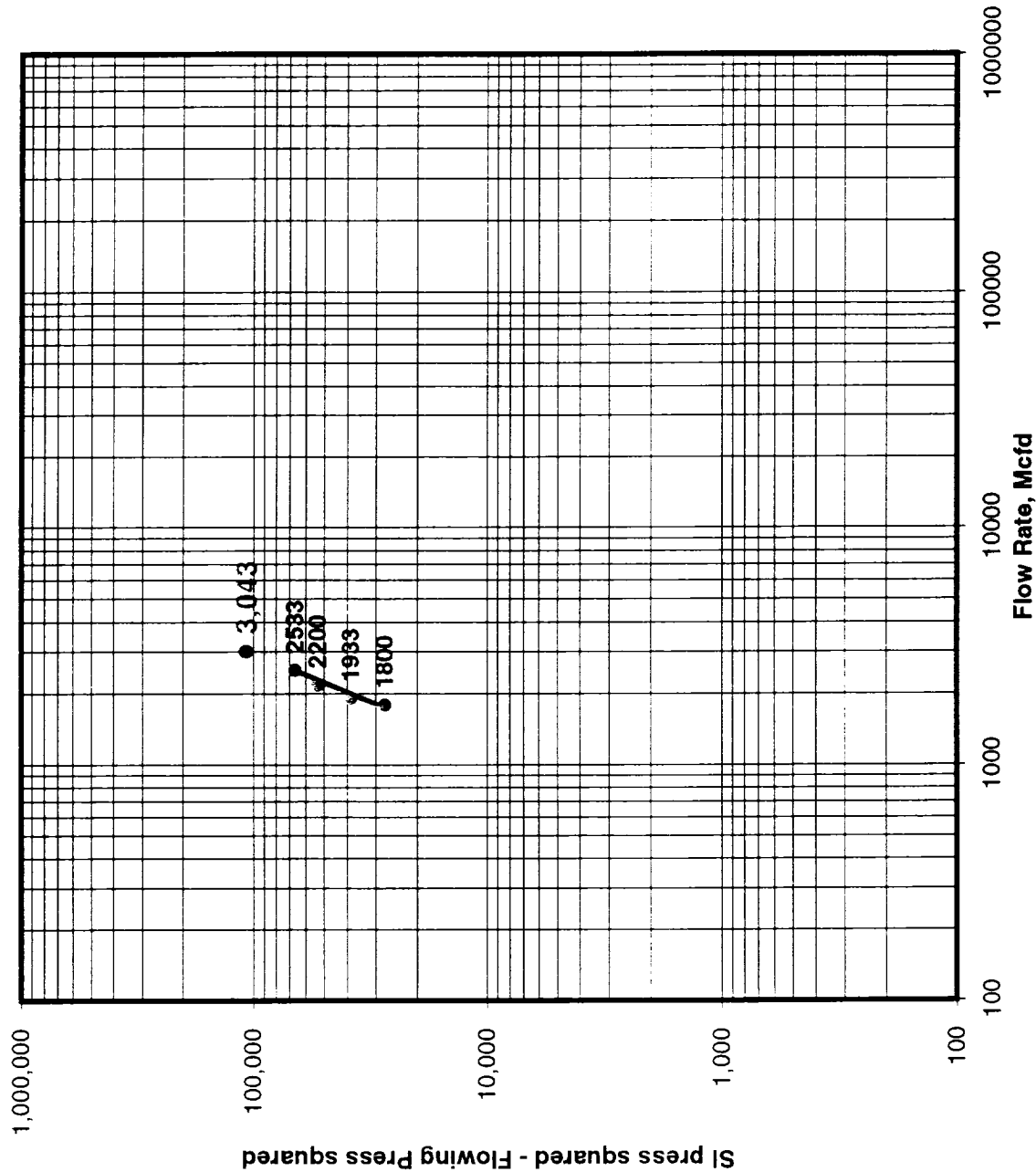
  

|          |  |  |  |
|----------|--|--|--|
| Remarks: |  |  |  |
|          |  |  |  |

|                         |                                       |                                              |                                                |
|-------------------------|---------------------------------------|----------------------------------------------|------------------------------------------------|
| Approved By Commission: | Conducted By:<br><b>Bill Prichard</b> | Calculated By:<br><b>Automation Software</b> | Checked By:<br><b>Garv Ford, Bill Prichard</b> |
|-------------------------|---------------------------------------|----------------------------------------------|------------------------------------------------|

GAS WELL BACK PRESSURE TEST - ABSOLUTE OPEN FLOW



**GAS WELL BACK PRESSURE TEST INFLOW PERFORMANCE**

