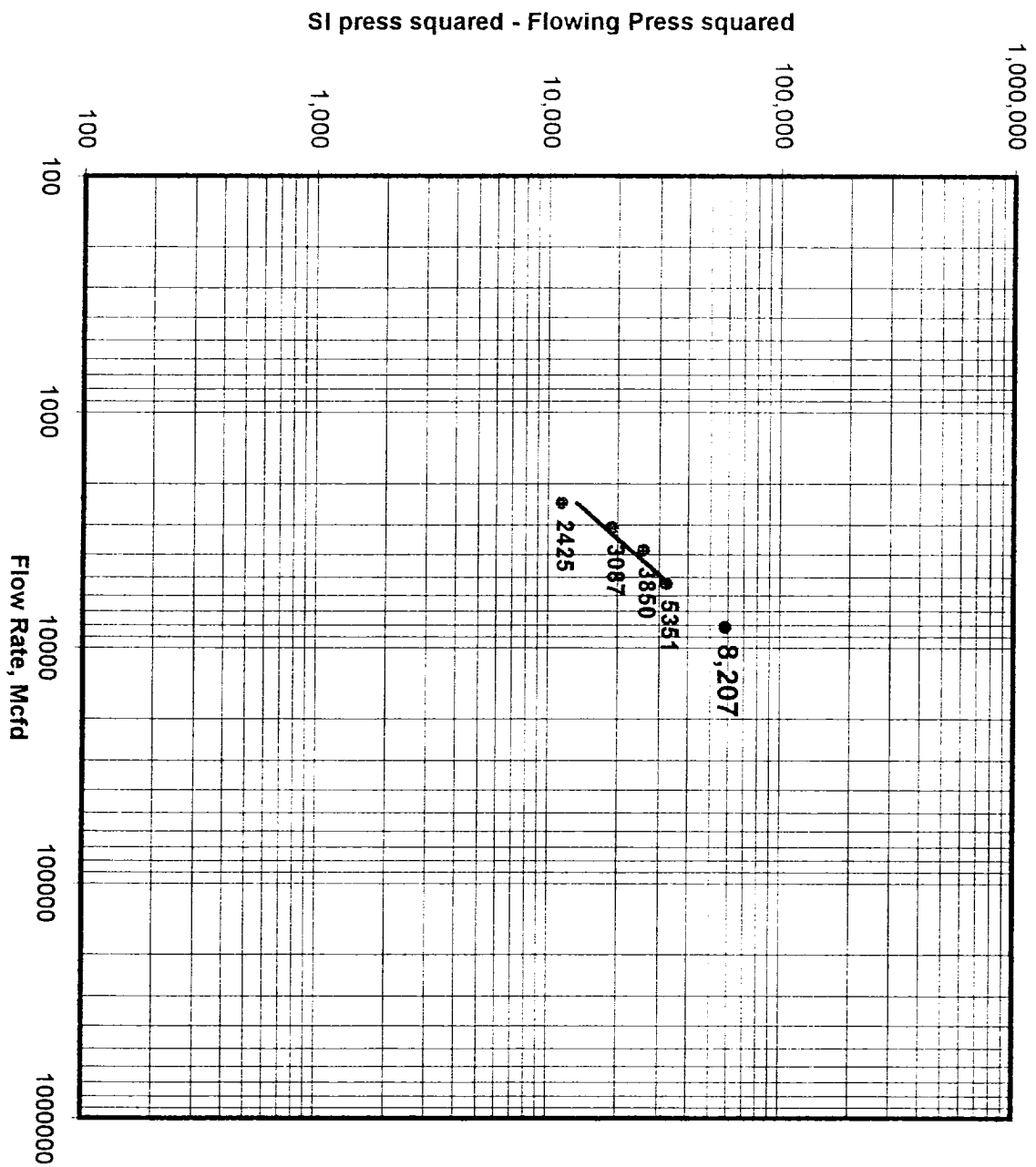


NEW MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL Revised 9-1-63

Form C-122

|                                                                                                                           |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          |                                                |                                                |
|---------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------|-------------------------------------------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------------------------------------------------|------------------------------------------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                           |                                |                                                 |                                                 | Test Date<br><b>6/29/96</b>                                                                                                                                                                                                                                   |                                                          | API Number<br><b>30-059-20333</b>              |                                                |
| Company<br><b>Amoco Corporation</b>                                                                                       |                           |                                |                                                 | Connection<br><b>Bravo Dome CO2 Plant</b>       |                                                                                                                                                                                                                                                               |                                                          |                                                |                                                |
| Pool<br><b>N/A</b>                                                                                                        |                           |                                |                                                 | Formation<br><b>Tubb</b>                        |                                                                                                                                                                                                                                                               |                                                          |                                                | Unit<br><b>BDCDGU</b>                          |
| Completion Date<br><b>8/31/95</b>                                                                                         |                           | Total Depth<br><b>2511</b>     |                                                 | Plug Back Depth<br><b>2500</b>                  |                                                                                                                                                                                                                                                               | Elevation<br><b>4930</b>                                 |                                                | Farm or Lease Name<br><b>Bravo Dome</b>        |
| Csg. Size<br><b>5 1/2</b>                                                                                                 | Wt.<br><b>fg</b>          | Csg. Inside Dia<br><b>4.75</b> | Set At<br><b>2511</b>                           | Perforations<br>From <b>2246</b> To <b>2448</b> |                                                                                                                                                                                                                                                               |                                                          | Well Number<br><b>2234-271g</b>                |                                                |
| Tbg. Size<br><b>na</b>                                                                                                    | Wt.<br><b>x</b>           | Tbg. Inside Dia<br><b>x</b>    | Set At.<br><b>x</b>                             | Perforations<br>From <b>x</b> To <b>x</b>       |                                                                                                                                                                                                                                                               |                                                          | Unit Sec. Twp. Rge.<br><b>sec 27,T-22,R-34</b> |                                                |
| Type well -Single-Bradenhead-G.G. or G.O. Multiple<br><b>Single</b>                                                       |                           |                                |                                                 |                                                 | Packer Set At<br><b>na</b>                                                                                                                                                                                                                                    |                                                          | County<br><b>Union</b>                         |                                                |
| Producing Through<br><b>csg</b>                                                                                           |                           | Reservoir Temp. F<br><b>95</b> |                                                 | Mean Annual Temp. F<br><b>60</b>                |                                                                                                                                                                                                                                                               | Baro. Press. - PSIA<br><b>12.2</b>                       |                                                | State<br><b>New Mexico</b>                     |
| Flow Channel, L<br><b>2511</b>                                                                                            | Depth, H<br><b>2511</b>   | Gg<br><b>1.5192</b>            | %CO2<br><b>100</b>                              | %N2<br><b>0</b>                                 | %H2S<br><b>0</b>                                                                                                                                                                                                                                              | Prover<br><b>ORIFICE</b>                                 | Meter Run<br><b>4 inch</b>                     | Taps<br><b>FLANGE</b>                          |
| FLOW DATA                                                                                                                 |                           |                                |                                                 |                                                 | TUBING DATA                                                                                                                                                                                                                                                   |                                                          | CASING DATA                                    |                                                |
| NO.                                                                                                                       | Prover Size               | X                              | Stat. Pres<br>psig                              | Diff. Press.<br>Hw                              | Temp.<br>°F                                                                                                                                                                                                                                                   | Press.<br>p.s.i.g.                                       | Temp.<br>°F                                    | Press.<br>p.s.i.g.                             |
| SI                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               | <b>228</b>                                               |                                                |                                                |
| 1.                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               | <b>203</b>                                               |                                                |                                                |
| 2.                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               | <b>185</b>                                               |                                                |                                                |
| 3.                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               | <b>167</b>                                               |                                                |                                                |
| 4.                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               | <b>148</b>                                               |                                                |                                                |
| 5.                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               | <b>0</b>                                                 |                                                |                                                |
| RATE OF FLOW CALCULATIONS                                                                                                 |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          |                                                |                                                |
| NO.                                                                                                                       | Coefficient<br>(24 Hours) | $\frac{1}{hw} \cdot P_m$       | Pressure<br>Pm                                  | Flow Temp.<br>Factor, Ft                        | Gravity<br>Factor, Fg                                                                                                                                                                                                                                         | Super Compressibility<br>Factor, Fpv                     | Rate of Flow Q, Mcfd                           |                                                |
|                                                                                                                           |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          | Values                                         | Log(10)                                        |
| SI                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          | <b>0</b>                                       |                                                |
| 1.                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          | <b>2425</b>                                    | <b>3.3847</b>                                  |
| 2.                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          | <b>3087</b>                                    | <b>3.4895</b>                                  |
| 3.                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          | <b>3850</b>                                    | <b>3.5855</b>                                  |
| 4.                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          | <b>5351</b>                                    | <b>3.7284</b>                                  |
| 5.                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          | <b>8207</b>                                    | <b>AOF</b>                                     |
| NO.                                                                                                                       | P r                       | Temp. °R                       | T r                                             | Z                                               | Gas Liquid Hydrocarbon Ratio    N/A Mcf/bbl<br>A. P. I. Gravity of Liquid Hydrocarbon    N/A Deg.<br>Specific Gravity Separator Gas    N/A<br>Specific Gravity Flowing Fluid    1.5192<br>Critical Pressure    1072 P.S.I.A.<br>Critical Temperature    548 R |                                                          |                                                |                                                |
| 1.                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          |                                                |                                                |
| 2.                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          |                                                |                                                |
| 3.                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          |                                                |                                                |
| 4.                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          |                                                |                                                |
| 5.                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          |                                                |                                                |
| Pc                                                                                                                        | <b>240.2</b>              | Pc^                            | <b>57,696</b>                                   |                                                 |                                                                                                                                                                                                                                                               |                                                          |                                                |                                                |
| NO.                                                                                                                       | P t^2                     | Pw                             | P w^2                                           | Pc^2 - P w^2                                    | Pc^2 - P w^2                                                                                                                                                                                                                                                  |                                                          |                                                |                                                |
| SI                                                                                                                        |                           | <b>240.2</b>                   | <b>57,696</b>                                   | <b>0</b>                                        | Log(10)                                                                                                                                                                                                                                                       |                                                          |                                                |                                                |
| 1.                                                                                                                        |                           | <b>215.2</b>                   | <b>46,311</b>                                   | <b>11,385</b>                                   | <b>4.0563</b>                                                                                                                                                                                                                                                 |                                                          |                                                |                                                |
| 2.                                                                                                                        |                           | <b>197.2</b>                   | <b>38,888</b>                                   | <b>18,808</b>                                   | <b>4.2743</b>                                                                                                                                                                                                                                                 |                                                          |                                                |                                                |
| 3.                                                                                                                        |                           | <b>179.2</b>                   | <b>32,113</b>                                   | <b>25,583</b>                                   | <b>4.4080</b>                                                                                                                                                                                                                                                 |                                                          |                                                |                                                |
| 4.                                                                                                                        |                           | <b>160.2</b>                   | <b>25,664</b>                                   | <b>32,032</b>                                   | <b>4.5056</b>                                                                                                                                                                                                                                                 |                                                          |                                                |                                                |
| 5.                                                                                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          |                                                |                                                |
| (1) 4th test point<br>$\frac{Pc^2}{Pc^2 - Pw^2} = 1.801$                                                                  |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               | (2) 4th test point<br>$\frac{Pc^2}{Pc^2 - Pw^2} = 1.534$ |                                                |                                                |
| 4th test point<br>$Q \cdot \frac{Pc^2}{Pc^2 - Pw^2} = 8,207 = AOF$                                                        |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          |                                                |                                                |
| Absolute Open Flow <b>8,207</b> Mcfd @ 15.025                                                                             |                           |                                |                                                 |                                                 | Angle of Slope <b>53.99</b>                                                                                                                                                                                                                                   |                                                          | Slope, n = <b>0.727</b> (Cotangent)            |                                                |
| Remarks:                                                                                                                  |                           |                                |                                                 |                                                 |                                                                                                                                                                                                                                                               |                                                          |                                                |                                                |
| Approved By Commission:                                                                                                   |                           |                                | Conducted By:<br><b>Bill Prichard, Contract</b> |                                                 |                                                                                                                                                                                                                                                               | Calculated By:<br><b>Automation Software</b>             |                                                | Checked By:<br><b>Gary Ford, Bill Prichard</b> |

GAS WELL BACK PRESSURE TEST - ABSOLUTE OPEN FLOW



GAS WELL BACK PRESSURE TEST INFLOW PERFORMANCE

