

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

Form C-122  
Revised 9-1-65

|                                                                                                                         |          |                                |                                 |                          |                       |                                      |                |                     |          |
|-------------------------------------------------------------------------------------------------------------------------|----------|--------------------------------|---------------------------------|--------------------------|-----------------------|--------------------------------------|----------------|---------------------|----------|
| Type Test: <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |          |                                |                                 |                          |                       | Test Date: 4-23-85                   |                |                     |          |
| Company: Amoco Production Company                                                                                       |          |                                |                                 | Connection:              |                       |                                      |                |                     |          |
| Pool: Bravo Dome Carbon Dioxide Unit - 640 acre area                                                                    |          |                                |                                 | Formation: Tubb          |                       |                                      |                | Unit: BDCDGU        |          |
| Completion Date: 11-10-83                                                                                               |          | Total Depth: 2678              |                                 | Plug Back TD: 2612       |                       | Elevation: 4968                      |                | Farm or Lease Name: |          |
| Csg. Size: 7                                                                                                            | Wt.: 20  | Set At: 2678                   | Perforations: From 2356 To 2555 |                          | Well No.: 1933 011G   |                                      |                |                     |          |
| Tub. Size: 3.5                                                                                                          | Wt.: 9.3 | Set At: 2336                   | Perforations: From To           |                          | Unit: G               |                                      | Sec.: 01       | Twp.: 19            | Rge.: 33 |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple: <u>Single</u>                                                  |          |                                |                                 |                          |                       | Packer Set At: 2305                  |                | County: Harding     |          |
| Producing Thru: Tubing                                                                                                  |          | Reservoir Temp. °F: 90° @ 2456 |                                 | Mean Annual Temp. °F: 50 |                       | Baro. Press. - P <sub>a</sub> : 12.2 |                | State: New Mexico   |          |
| L: 2456                                                                                                                 | H: 2456  | G <sub>g</sub> : 1.529         | % CO <sub>2</sub> : 100         | % N <sub>2</sub> : 0     | % H <sub>2</sub> S: 0 | Prover:                              | Meter Run: 4.0 | Taps: 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. |                  |
| SI        |                  |   |              |                 |                      |             | 308             |             |                 |                  |
| 1.        | 4.026 x 1.875    |   |              | 244             | 59                   | 59          | 236.2           | 50          |                 |                  |
| 2.        | 4.026 x 1.875    |   |              | 251             | 27                   | 63          | 263.2           | 50          |                 |                  |
| 3.        | 4.026 x 1.875    |   |              | 270             | 12                   | 61          | 282.2           | 50          |                 |                  |
| 4.        | 4.026 x 1.875    |   |              | 290             | 3                    | 63          | 302.2           | 50          |                 |                  |
| 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, Mcfd |
| 1                         |                       |                  |                         |                       |                               |                                         | 1702                 |
| 2                         |                       |                  |                         |                       |                               |                                         | 1242                 |
| 3                         |                       |                  |                         |                       |                               |                                         | 868                  |
| 4                         |                       |                  |                         |                       |                               |                                         | 409                  |
| 5                         |                       |                  |                         |                       |                               |                                         |                      |

  

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

  

|                                                          |                             |                |                             |                                                           |
|----------------------------------------------------------|-----------------------------|----------------|-----------------------------|-----------------------------------------------------------|
| F <sub>c</sub> 320.2 P <sub>c</sub> <sup>2</sup> 102.528 |                             |                |                             |                                                           |
| NO.                                                      | F <sub>c</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                                                        |                             | 236.2          |                             | 46.738                                                    |
| 2                                                        |                             | 263.2          |                             | 33.254                                                    |
| 3                                                        |                             | 282.2          |                             | 22.891                                                    |
| 4                                                        |                             | 302.2          |                             | 11.203                                                    |
| 5                                                        |                             |                |                             |                                                           |

(1)  $\frac{P_c^2}{P_c^2 - P_w^2} = 2.19$       (2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.19$

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3734$

  

|                                        |  |                         |  |                             |  |
|----------------------------------------|--|-------------------------|--|-----------------------------|--|
| Absolute Open Flow: 3734 Mcfd @ 15.025 |  | Angle of Slope θ: _____ |  | Slope, n: 1.0               |  |
| Remarks: _____                         |  |                         |  |                             |  |
|                                        |  |                         |  |                             |  |
| Approved By Commission:                |  | Conducted By:           |  | Calculated By: D. D. Kimble |  |
|                                        |  |                         |  | Checked By:                 |  |