

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: 5-30-85                      |                 |                     |  |
| Company: Amoco Production Company                                                                                       |           |                                 |                         | Connection:                       |                       |                                         |                 |                     |  |
| Pool: Bravo Dome Carbon Dioxide Gas Unit 640-acre area                                                                  |           |                                 |                         | Formation: Tubb                   |                       |                                         |                 | Unit: BDCDGU        |  |
| Completion Date: 1-21-74                                                                                                |           | Total Depth: 2668'              |                         | Plug Back TD: 2500'               |                       | Elevation: 2970 GL                      |                 | Farm or Lease Name: |  |
| Csg. Size: 4-1/2"                                                                                                       | Wt.: 9.5# | d:                              | Set At: 2668'           | Perforations: From 2370' To 2500' |                       | Well No.: 1933 031M                     |                 |                     |  |
| Thq. Size: 2-7/8"                                                                                                       | Wt.: 6.5# | d:                              | Set At: 2333'           | Perforations: From To             |                       | Unit: M    Soc: 3    Twp: 19    Hye: 33 |                 |                     |  |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple                                                                 |           |                                 |                         |                                   |                       | Packer Set At: 2333'                    |                 | County: Harding     |  |
| Producing Thru: Tubing                                                                                                  |           | Reservoir Temp. °F: 97° @ 2435' |                         | Mean Annual Temp. °F: 50          |                       | Baro. Press. - P <sub>a</sub> : 12.2    |                 | State: New Mexico   |  |
| L: 2435'                                                                                                                | H: 2435'  | Gg: 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. |                  | Temp. °F |
| 1.        | 4.026 x 1.75     |   |              | 216             | 44                   | 60          | 228.2           | 50          |                 |                  | 24 hrs   |
| 2.        | 4.026 x 1.75     |   |              | 233             | 26                   | 59          | 245.2           | 50          |                 |                  | 24 hrs   |
| 3.        | 4.026 x 1.75     |   |              | 251             | 15                   | 59          | 263.2           | 50          |                 |                  | 24 hrs   |
| 4.        | 4.026 x 1.75     |   |              | 283             | 1                    | 55          | 295.2           | 50          |                 |                  | 24 hrs   |
| 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 Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd |
| 1                         |                       |                  |                         |                       |                   |                             | 1267                 |
| 2                         |                       |                  |                         |                       |                   |                             | 1028                 |
| 3                         |                       |                  |                         |                       |                   |                             | 810                  |
| 4                         |                       |                  |                         |                       |                   |                             | 233                  |
| 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 | P.S.I.A. | P.S.I.A. |
|-----|----------------|----------|----------------|---|------------------------------|---------------------------------------|--------------------------------|--------------------------------|-------------------|----------------------|----------|----------|
| 1   |                |          |                |   | 0                            | 0                                     | 1.529                          | X X X X X X X X                | 1072              | 547                  |          |          |
| 2   |                |          |                |   |                              |                                       |                                |                                |                   |                      |          |          |
| 3   |                |          |                |   |                              |                                       |                                |                                |                   |                      |          |          |
| 4   |                |          |                |   |                              |                                       |                                |                                |                   |                      |          |          |
| 5   |                |          |                |   |                              |                                       |                                |                                |                   |                      |          |          |

  

|                        |                         |                                           |                                                                    |
|------------------------|-------------------------|-------------------------------------------|--------------------------------------------------------------------|
| P <sub>c</sub> : 301.2 | P <sub>w</sub> : 90.721 | (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.347$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.83$          |
| NO. 1                  | P <sub>f</sub> : 228.2  | P <sub>w</sub> : 228.2                    | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> : 38.646 |
| 2                      | 245.2                   | 245.2                                     | 30.598                                                             |
| 3                      | 263.2                   | 263.2                                     | 21.447                                                             |
| 4                      | 295.2                   | 295.2                                     | 3.578                                                              |
| 5                      |                         |                                           |                                                                    |

  

Absolute Open Flow: 2322 Mcfd @ 15.025    Angle of Slope θ:    Slope, n: .71

Remarks:

  

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