NEW MEXICO OIL CONSERVATION COMMSSION

# MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special — Test Date: 5-10-85

| | | | | |
|---|---|---|---|---|
| Company: Amoco Production Company | Connection: | | | |
| Pool: Bravo Dome Carbon Dioxide Gas Unit 640-acre area | Formation: Tubb | | | Unit: BDCDGU |
| Completion Date: 1-26-84 | Total Depth: 2687' | Plug Back TD: 2630' | Elevation: 4970 GL | Farm or Lease Name: |
| Csg. Size: 7" / Wt.: 20# / d: / Set At: 2687' | Perforations: From 2380 To 2470 | | | Well No.: 1933 041G |
| Tbg. Size: 3-1/2" / Wt.: 9.3# / d: / Set At: 2350 | Perforations: From To | | | Unit: Sec.: Twp.: Rge.: |
| Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single | Packer Set At: 2320' | | | County: Harding |
| Producing Thru: Tubing | Reservoir Temp. °F: 88°@ 2425' | Mean Annual Temp. °F: 50 | Baro. Press. – $P_a$: 12.2 | State: New Mexico |

| L | H | Cg | % $CO_2$ | % $N_2$ | % $H_2S$ | Prover | Meter Run | Taps |
|---|---|---|---|---|---|---|---|---|
| 2425' | 2425' | 1.529 | 100 | 0 | 0 | | 4.0" | Flange |

| | FLOW DATA | | | | TUBING DATA | | CASING DATA | | |
|---|---|---|---|---|---|---|---|---|---|
| NO. | Prover Line Size X Orifice Size | Press. p.s.i.g. | Diff. $h_w$ | Temp. °F | Press. p.s.i.g. | Temp. °F | Press. p.s.i.g. | Temp. °F | Duration of Flow |
| SI | | | | | 300 | | | | |
| 1. | 4.026 x 1.500 | 226 | 5 | 60 | 238.2 | 50 | | | 24 hrs |
| 2. | 4.026 x 1.500 | 249 | 26 | 58 | 261.2 | 50 | | | 24 hrs |
| 3. | 4.026 x 1.500 | 268 | 11 | 57 | 280.2 | 50 | | | 24 hrs |
| 4. | 4.026 x 1.500 | 294 | 1 | 54 | 306.2 | 50 | | | 24 hrs |
| 5. | | | | | | | | | |

## RATE OF FLOW CALCULATIONS

| NO. | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure $P_m$ | Flow Temp. Factor Ft. | Gravity Factor Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2. | | | | | | | 998 |
| 3. | | | | | | | 749 |
| 4. | | | | | | | 522 |
| 5. | | | | | | | 196 |

| NO. | $P_t$ | Temp. °R | $T_t$ | Z |
|---|---|---|---|---|
| 1 | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |

Gas Liquid Hydrocarbon Ratio: 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 0 Deg.
Specific Gravity Separator Gas: 1.529 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 1072 P.S.I.A. ____ P.S.I.A.
Critical Temperature: 547 R ____ R

$P_c$ 312.2 $P_c^2$ 97.479

| NO | $P_t^2$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1 | | 238.2 | | 40.730 |
| 2 | | 261.2 | | 29.243 |
| 3 | | 280.2 | | 18.957 |
| 4 | | 306.2 | | 3.710 |
| 5 | | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.39$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.097$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2093$

Absolute Open Flow: 2093 Mcfd @ 15.025 — Angle of Slope θ: ____ — Slope, n: .85

Remarks:

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