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:

Company: Amoco Production Company — Connection:

Pool: Bravo Dome Carbon Dioxide Gas Unit-640 Acre Area — Formation:

Unit: BDCDGU

Completion Date: 11-6-85 — Total Depth: 2586 — Plug Back TD: 2497 — Elevation: 4850 — Farm or Lease Name:

Csg. Size: 7 — Wt.: 20 — d: — Set At: 2586 — Perforations: From 2368 To 2450 — Well No.: 2134 331G

Tbg. Size: 3-1/2 — Wt.: 9.3 — d: — Set At: 2230 — Perforations: From To — Unit: G — Sec.: 33 — Twp.: 21 — Rge.: 34

Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Singe — Packer Set At: 2199 — County: Union

Producing Thru: Tubing — Reservoir Temp. °F: 90 @ 2409 — Mean Annual Temp. °F: 50 — Baro. Press. – $P_a$: 12.25 — State: New Mexico

| L | H | Gg | % $CO_2$ | % $N_2$ | % $H_2S$ | Prover | Meter Run | Taps |
|---|---|---|---|---|---|---|---|---|
| 2409 | 2409 | 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 | Tubing Press. p.s.i.g. | Tubing Temp. °F | Casing Press. p.s.i.g. | Casing Temp. °F | Duration of Flow |
|---|---|---|---|---|---|---|---|---|---|
| SI | | | | | 316 | | | | |
| 1. | 4.026 x 2.000 | 175.5 | 23 | 53 | 187.75 | 53 | | | 1.5 |
| 2. | 4.026 x 2.000 | 153.0 | 35.5 | 55 | 165.25 | 55 | | | 1.5 |
| 3. | 4.026 x 2.000 | 135.7 | 49 | 55 | 147.95 | 55 | | | 1.5 |
| 4. | 4.026 x 2.000 | 95.2 | 93.5 | 55 | 107.45 | 55 | | | 1.5 |
| 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 | | | | | | | 1341 |
| 2. | | | | | | | 1421 |
| 3. | | | | | | | 1505 |
| 4. | | | | | | | 1615 |
| 5. | | | | | | | |

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

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons ____ Deg.

Specific Gravity Separator Gas 1.529

Specific Gravity Flowing Fluid XXXXX XXXXXXXXX

Critical Pressure 1072 P.S.I.A. ____ P.S.I.A.

Critical Temperature 496 R ____ R

$P_c$ 328.2 $P_c^2$ 107.751

| NO | $P_t^2$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1 | | 188 | | 72.371 |
| 2 | | 165 | | 80.490 |
| 3 | | 148 | | 85.811 |
| 4 | | 107 | | 96.266 |
| 5 | | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.12$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.08$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1737$

Absolute Open Flow 1737 Mcfd @ 15.025 — Angle of Slope θ ____ — Slope, n .65

Remarks:

| Approved by Commission: | Conducted By: | Calculated By: | Checked By: |
|---|---|---|---|
| | | Don Kimble | |