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: 6-1-77 | |
| Company: Aztec Oil & Gas Company | Connection: Gas Company of New Mexico | | | |
| Pool: Blanco | Formation: Mesa Verde | | Unit | |
| Completion Date: 5-24-77 | Total Depth: 6160' | Plug Back TD: 5843' | Elevation: 6977' GR | Farm or Lease Name: Arizona Jicarilla B |
| Csg. Size: 7.000 / 4.500 — Wt.: 23# / 10.50# — d: 6.366 / 4.052 — Set At: 3864 / 3692-6159 | | Perforations: From 5297' To 5836' | | Well No.: #5-A |
| Tbg. Size: 2.375 — Wt.: 4.7# — d: 1.995 — Set At: 5575 | | Perforations: From To | | Unit: E — Sec.: 10 — Twp.: T26N — Rge.: R5W |
| Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single | | Packer Set At: 5575' | | County: Rio Arriba |
| Producing Thru: Tbg. | Reservoir Temp. °F: @ | Mean Annual Temp. °F | Baro. Press. – $P_a$: 12.2 | State: New Mexico |
| L: . | H: | Gg: .700 | % $CO_2$: | % $N_2$: — % $H_2S$: — Prover: — Meter Run: — Taps: |

## 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 | | | | | | | 1329 | | | | |
| 1. | 2" | X | 3/4" | | | | 119 | | | | 1 hr |
| 2. | | | | | | | 97 | | | | 2 hrs |
| 3. | | | | | | | 86 | | | | 3 hrs |
| 4. | | | | | | | | | | | |
| 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 | 12.365 | | 98.2 | 1.0000 | .9258 | 1.0000 | 1124 |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |

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

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

$P_c$ 1341.2 $P_c^2$ 179,882

| NO | $P_t^2$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1 | | 98.2 | 9,643 | 170,239 |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0566$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.0422$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1,171$

Absolute Open Flow 1,171 Mcfd @ 15.025 — Angle of Slope θ _____ — Slope, n .75

Remarks: _____

| Approved By Commission: | Conducted By: | Calculated By: | Checked By: |
|---|---|---|---|
| | Bobby Joe Warren | James Smith | Curtis C. Parsons |