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: 10-9-76 | |
| Company: Aztec Oil & Gas Company | | Connection: Southern Union Gathering | | |
| Pool: Blanco | | Formation: Mesa Verde | | Unit |
| Completion Date: 9-19-76 | Total Depth: 5218' | Plug Back TD: 5140' | Elevation: 5888' GR | Farm or Lease Name: Crandall |
| Csg. Size: 7.000 / 4.500 — Wt.: 23# / 10.50# — d — Set At: 2881 / 2719-5217 | | Perforations: From 4810 To 5119 | | Well No.: 2A |
| Tbg. Size: 2.0625 — Wt.: 3.40# — d — Set At: 5109 | | Perforations: From 4180 To 4740 | | Unit: C — Sec.: 19 — Twp.: 31N — Rge.: 10W |
| Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single | | Packer Set At | | County: San Juan |
| Producing Thru: tubing | Reservoir Temp. °F: @ | Mean Annual Temp. °F | Baro. Press. – $P_a$: 12.2 | State: New Mexico |
| L | H | Gg: .680 | % $CO_2$ | % $N_2$ — % $H_2S$ — 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 | | | | | | | | | | | |
| 1. | 2 | X | 3/4 | | | | 759 | | 796 | | |
| 2. | | | | | | | 251 | | 761 | | |
| 3. | | | | | | | 241 | | 753 | | |
| 4. | | | | | | | 238 | | 745 | | 3 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 | 12.365 | | 250.2 | 1.0000 | 1.213 | 1.0000 | 3753 |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |

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DIST. 3

| 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 _____ XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

$P_c$ 808.2 $P_c^2$ 653,187

| NO | $P_t^2$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1 | | 757.2 | 573,352 | 79835 |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 8.1799$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4.8368$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 18,153$

Absolute Open Flow 18,153 Mcfd @ 15.025 — Angle of Slope θ _____ — Slope, n .75

Remarks: _____

Approved By Commission: — Conducted By: RT Hendricks — Calculated By: James Smith — Checked By: Ken Ryan