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: 12-13-73 | |
| Company: Aztec Oil & Gas Company | | Connection: Southern Union Gathering | | | |
| Pool: Aztec | | Formation: Pictured Cliff Ext. | | Unit | |
| Completion Date: 12-1-73 | Total Depth: 2180' | Plug Back TD: 2180' | Elevation: 5932 GR | Farm or Lease Name: Cain | |
| Csg. Size: 4½" / Wt.: 10.50# / d / Set At: 2180' | | Perforations: From 2050' To 2070' | | Well No.: #20 | |
| Tbg. Size: 1" / Wt.: 1.70# / d / Set At: 2076' | | Perforations: From ---- To ---- | | Unit: M / Sec.: 15 / Twp.: 28N / Rge.: 10W | |
| Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single | | Packer Set At: ---- | | County: San Juan | |
| Producing Thru: Casing | Reservoir Temp. °F: @ | Mean Annual Temp. °F: | Baro. Press. – $P_a$: | State: New Mexico | |

| L | H | Gg | % $CO_2$ | % $N_2$ | % $H_2S$ | 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 | Press. p.s.i.g. | Temp. °F | Press. p.s.i.g. | Temp. °F | Duration of Flow |
| SI | | | | | | 410 | | 420 | | 7d |
| 1. | 2" | 3/4" | | | | 142 | | 95 | | 3 Hours |
| 2. | | | | | | | | | | |
| 3. | | | | | | | | | | |
| 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 | | 107 | 1.0000 | .9258 | 1.0000 | 1,225 |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |

| NO. | $P_r$ | 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

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$P_c$ 432 $P_c^2$ 186,624

| NO | $P_t^2$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1 | | 164 | 26,896 | 159,728 |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1683$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1,1413$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1,398$

Absolute Open Flow 1,398 Mcfd @ 15.025 | Angle of Slope θ _____ | Slope, n _____

Remarks: _____

| Approved By Commission: | Conducted By: | Calculated By: | Checked By: |
|---|---|---|---|
| | | Jim O Johnson | |