# MEXICO OIL CONSERVATION COMMISSION
## 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: 3/15/75 | |
| Company: McClellan Oil Corporation | | | Connection: None | | |
| Pool: Wildcat | | | Formation: Queen | | Unit |
| Completion Date: 2/11/75 | Total Depth: 2109 | | Plug Back TD | Elevation | Farm or Lease Name: Sam State |
| Csg. Size: 4 1/2 | Wt.: 10.5# | d: 4.052 | Set At: 2109 | Perforations: From 2078 To 2090 | Well No.: 1 |
| Tbg. Size: 2 3/8 | Wt.: 4.7 | d: 1.995 | Set At: 2068 | Perforations: From To | Unit: A Sec.: 32 Twp.: 14S Rge.: 30E |
| Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single | | | Packer Set At: None | | County: Chaves |
| Producing Thru: Tubing | Reservoir Temp. °F: @ | | Mean Annual Temp. °F: 60° | Baro. Press. – $P_a$: 13.2 | State: New Mexico |

| L | H | Gg | % $CO_2$ | % $N_2$ | % $H_2S$ | Prover | Meter Run | Taps |
|---|---|---|---|---|---|---|---|---|
| | | .897 | 0.20 | 61.36 | --- | 2" | | |

| | 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 | | | | | | | | | 700 | | 72 |
| 1. | 2 | x | 3/32 | 610 | | 49 | 610 | 49 | 614 | | 1 |
| 2. | 2 | x | 3/16 | 475 | | 50 | 475 | 50 | 494 | | 1 |
| 3. | 2 | x | 1/4 | 340 | | 52 | 340 | 52 | 380 | | 1 |
| 4. | 2 | x | 3/8 | 225 | | 53 | 225 | 53 | 261 | | 1 |
| 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 | 0.1410 | | 623.2 | 1.011 | 1.056 | 1.029 | 97 |
| 2. | 0.6082 | | 488.2 | 1.010 | 1.056 | 1.022 | 324 |
| 3. | 1.087 | | 353.2 | 1.008 | 1.056 | 1.016 | 415 |
| 4. | 2.378 | | 238.2 | 1.007 | 1.056 | 1.011 | 609 |
| 5. | | | | | | | |

| NO. | $P_t$ | Temp. °R | $T_r$ | Z |
|---|---|---|---|---|
| 1 | 1.11 | 509 | 1.77 | .945 |
| 2. | 0.87 | 510 | 1.78 | .957 |
| 3. | 0.65 | 512 | 1.78 | .968 |
| 4. | 0.45 | 515 | 1.79 | .978 |
| 5. | | | | |

Gas Liquid Hydrocarbon Ratio: TSTM Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: .897 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 559 P.S.I.A. ____ P.S.I.A.
Critical Temperature: 287 R ____ R

$P_c$ 713.2 $P_c^2$ 508.7

| NO | $P_t^2$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1 | | 627.2 | 393.4 | 115.3 |
| 2 | | 507.2 | 257.2 | 251.5 |
| 3 | | 393.2 | 154.6 | 354.1 |
| 4 | | 274.2 | 75.2 | 433.5 |
| 5 | | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.169$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.169$

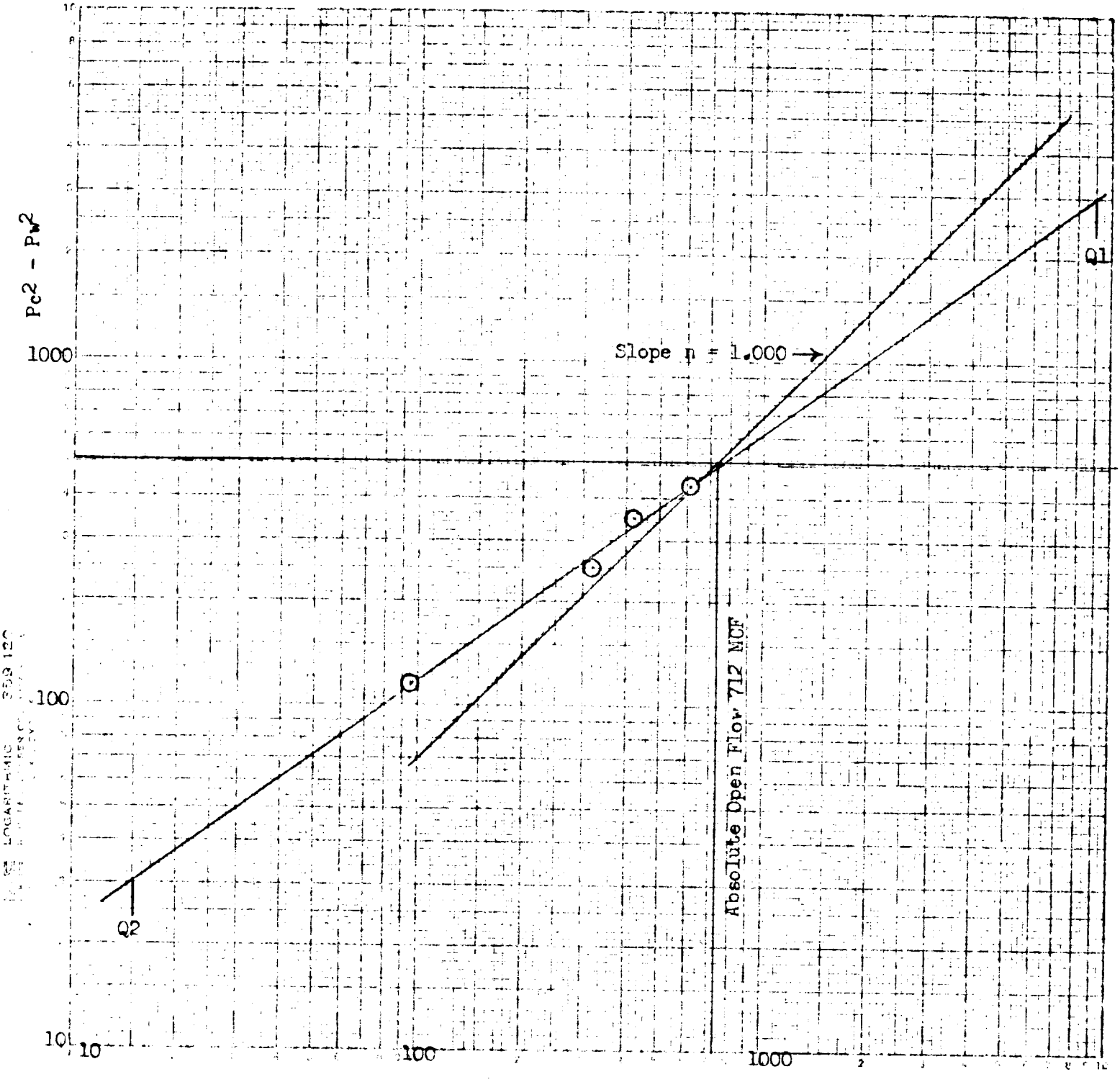
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 712$

Absolute Open Flow: 712 Mcfd @ 15.025 Angle of Slope θ: 45° Slope, n: 1.000

Remarks:

| Approved By Commission | Conducted By: | Calculated By: | Checked By: |
|---|---|---|---|
| | Larry Davis | Donna Holler | |

Clellan Oil Corporation
Sam State No. 1
Unit A, Sec. 32, T14S, R30E
Chaves County, New Mexico
March 15, 1975




Log Q1 = 2.95424
Log Q2 = 1.17609
n = 1.78815