

NEW MEXICO OIL CONSERVATION COMMISSION  
GAS WELL TEST DATA SHEET - - SAN JUAN BASIN

(TO BE USED FOR FRUITLAND, PICTURED CLIFFS, MESAVERDE, & ALL DAKOTA  
EXCEPT BARKER DOME STORAGE AREA)

Pool Blanco Formation Mesaverde County San Juan  
Purchasing Pipeline Southern Union Gas Company Date Test Filed February 7, 1956

Operator Aztec Oil & Gas Company Lease Culpepper-Martin Well No. 5  
Unit N Sec. 22 Twp. 32 N Rge. 12 W Pay Zone: From 4850' To 5188'  
Casing: OD 7" WT. 20# Set At 4807' Tubing: OD 2" WT. 4.7# T. Perf. 4853'  
Produced Through: Casing    Tubing X Gas Gravity: Measured 0.698 Estimated     
Date of Flow Test: From 1-8 To 1-16 \* Date S.I.P. Measured 1-24-56  
Meter Run Size 4" Orifice Size    Type Chart Normal Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt)    psig + 12 =    psia (a)  
Flowing tubing pressure (Dwt)    psig + 12 =    psia (b)  
Flowing meter pressure (Dwt)    psig + 12 =    psia (c)  
Flowing meter pressure (meter reading when Dwt. measurement taken:  
Normal chart reading    psig + 12 =    psia (d)  
Square root chart reading (    ) <sup>2</sup> x spring constant    =    psia (d)  
Meter error (c) - (d) or (d) - (c)    ±    =    psi (e)  
Friction loss, Flowing column to meter:  
(b) - (c) Flow through tubing; (a) - (c) Flow through casing    =    psi (f)  
Seven day average static meter pressure (from meter chart):  
Normal chart average reading 575 psig + 12 = 587 psia (g)  
Square root chart average reading (    ) <sup>2</sup> x sp. const.    =    psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e)    = 587 psia (h)  
P<sub>t</sub> = (h) + (f)    = 587 psia (i)  
Wellhead casing shut-in pressure (Dwt)    psig + 12 =    psia (j)  
Wellhead tubing shut-in pressure (Dwt) 767 psig + 12 = 779 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through    = 779 psia (l)  
Flowing Temp. (Meter Run) 79 °F + 460    = 539 °Abs (m)  
P<sub>d</sub> = ½ P<sub>c</sub> = ½ (l)    = 390 psia (n)

FLOW RATE CALCULATION

Q =    X  $\left( \frac{\sqrt{V(c)}}{\sqrt{V(d)}} \right) = \text{MCF/da}$   
(Integrated)

DELIVERABILITY CALCULATION

D = Q 135  $\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \text{MCF/da.}$   
455,131 <sup>0.75</sup> 1.515 205

SUMMARY

P<sub>c</sub> = 779 psia  
Q = 135 Mcf/day  
P<sub>w</sub> = 587 psia  
P<sub>d</sub> = 390 psia  
D = 205 Mcf/day

Company AZTEC OIL & GAS COMPANY  
By ORIGINAL SIGNED BY BILL R. HASTINGS  
Title Production Engineer  
Witnessed by     
Company   

\* This is date of completion test.  
\* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

| GL | (1-e <sup>-S</sup> ) | (F <sub>c</sub> Q) <sup>2</sup> | (F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-S</sup> )<br>R <sup>2</sup> | P <sub>t</sub> <sup>2</sup><br>(Column i) | P <sub>t</sub> <sup>2</sup> + R <sup>2</sup> | P <sub>w</sub> |
|----|----------------------|---------------------------------|--|---|--|----------------|
|    |                      | Friction                        | loss negligible  |   |  |                |

OK



|                              |                  |                                     |
|------------------------------|------------------|-------------------------------------|
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