

Initial Deliverability  
Test

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 AZTEC PICTURED CLIFFS Formation PICTURED CLIFFS County SAN JUAN  
Purchasing Pipeline EL PASO NATURAL GAS COMPANY Date Test Filed 3-26-57

Operator FRANK A. SCHULTZ, JR. STATE \_\_\_\_\_ Well No. 5-16  
Unit D Sec. 16 Twp. 29N Rge. 10W Pay Zone: From 2127 To 2206  
Casing: OD 5-1/2" WT. 15.5# Set At 2132 Tubing: OD 1" WT. 1.7# T. Perf. 2189  
Produced Through: Casing X Tubing \_\_\_\_\_ Gas Gravity: Measured 0.660 Estimated \_\_\_\_\_  
Date of Flow Test: From 2-20-57 To 2-28-57 \* Date S.I.P. Measured 7-19-56  
Meter Run Size 4" Orifice Size 1" Type Chart Sq. Rt. 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 \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (g)  
Square root chart average reading ( 7.10 )<sup>2</sup> x sp. const. 5 = 252 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) = 252 psia (h)  
P<sub>t</sub> = (h) + (f) = 252 psia (i)  
Wellhead casing shut-in pressure (Dwt) 637 psig + 12 = 649 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 637 psig + 12 = 649 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through = 649 psia (l)  
Flowing Temp. (Meter Run) 52 °F + 460 = 512 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) = 325 psia (n)

Q = \_\_\_\_\_ X  $\left( \frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} \right)^* = \text{_____ MCF/da}$   
(integrated)

DELIVERABILITY CALCULATION 335  
D = Q 376  $\left[ \frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n \frac{0.90 \cdot 89}{44.4} = \text{_____ MCF/da.}$   
338

SUMMARY  
P<sub>c</sub> = 649 psia  
Q = 376 Mcf/day  
P<sub>w</sub> = 252 psia  
P<sub>d</sub> = 325 psia  
D = 338 Mcf/day

Company FRANK A. SCHULTZ, JR.  
By Frank A. Schultz  
Title 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 negligible                                                    |                                           |                                              |                |



|                                    |                          |                                     |
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