

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 Astec Pictured Cliffs Formation Pictured Cliffs County San Juan  
Purchasing Pipeline Southern Union Gas Company Date Test Filed 2/21/56

Operator Southern Union Gas Company Lease Zachry Well No. 11  
Unit N Sec. 10 Twp. 28N Rge. 10W Pay Zone: From 1992' To 2030'  
Casing: OD 5-1/2" WT. 15.5# Set At 2075' Tubing: OD 1" WT. 1.7# T. Perf. 2  
Produced Through: Casing X Tubing \_\_\_\_\_ Gas Gravity: Measured .667 Estimated \_\_\_\_\_  
Date of Flow Test: From 12/31/55 To 1/8/56 \* Date S.I.P. Measured 7/22/55  
Meter Run Size 4" Orifice Size 1" 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 197 psig + 12 = 209 psia (g)  
Square root chart average reading (\_\_\_\_\_) <sup>2</sup> x sp. const. \_\_\_\_\_ = 209 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 209 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 209 psia (i)  
Wellhead casing shut-in pressure (Dwt) 594 psig + 12 = 606 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 594 psig + 12 = 606 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 606 psia (l)  
Flowing Temp. (Meter Run) 60 °F + 460 \_\_\_\_\_ = 320 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 303 psia (n)

Q = 600 X  $\left( \frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{\text{None}}{\sqrt{(d)}} \right) = \underline{600} MCF/da  
(integrated)$

DELIVERABILITY CALCULATION  
D = Q 600  $\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.85} = \underline{723} MCF/da.  
 $\frac{275,427}{323,555}$   $\frac{.85}{.87204}$$

SUMMARY

P<sub>c</sub> = 606 psia  
Q = 600 Mcf/day  
P<sub>w</sub> = 209 psia  
P<sub>d</sub> = 303 psia  
D = 723 Mcf/day

Company Southern Union Gas Company  
By L. S. Moorman, Jr.  
Title Petroleum 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> ) R <sup>2</sup>	P <sub>t</sub> <sup>2</sup> (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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