

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 Ballard Formation Pictured Cliffs County San Juan  
Purchasing Pipeline Southern Union Gas Company Date Test Filed December 23, 1957  
Operator Southern Union Gas Company Lease Brown Well No. 6  
Unit A Sec. 20 Twp. 24N Rge. 8W Pay Zone: From 2145 To 2242  
Casing: OD 5 1/2" WT. 13.54 Set At 2145 Tubing: OD 1" WT. 1.74 T. Perf. 2145  
Produced Through: Casing X Tubing \_\_\_\_\_ Gas Gravity: Measured .700 Estimated \_\_\_\_\_  
Date of Flow Test: From 12-8-57 To 12-16-57 \* Date S.I.P. Measured \_\_\_\_\_  
Meter Run Size 1/2" Orifice Size 3/8" Type Chart Normal Type Taps \_\_\_\_\_

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 193 psig + 12 = 205 psia (g)  
Square root chart average reading ( \_\_\_\_\_ ) <sup>2</sup> x sp. const. \_\_\_\_\_ = \_\_\_\_\_ psia (g)  
Corrected seven day avg. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 205 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 205 psia (i)  
Wellhead casing shut-in pressure (Dwt) 642 psig + 12 = 654 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 643 psig + 12 = 655 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 654 psia (l)  
Flowing Temp. (Meter Run) 60 °F + 460 \_\_\_\_\_ = 500 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 327 psia (n)

FLOW RATE CALCULATION

Q = 122 X  $\left( \frac{\sqrt{(c)}}{\sqrt{(d)}} \right)^* = \underline{122}$  MCF/da  
(integrated)

DELIVERABILITY CALCULATION

D = Q 122  $\left[ \frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^{0.85} = \underline{104}$  MCF/da.  
380,787 <sup>0.85</sup> .85502

SUMMARY

P<sub>c</sub> = 654 psia  
Q = 122 Mcf/day  
P<sub>w</sub> = 205 psia  
P<sub>d</sub> = 327 psia  
D = 104 Mcf/day  
Company Southern Union Gas Company  
By Bill McKinney  
Title Bill McKinney, Exploration Dept.  
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				



*[Handwritten signature]*

THE UNIVERSITY OF CHICAGO  
DIVISION OF THE PHYSICAL SCIENCES  
DEPARTMENT OF CHEMISTRY

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JAN 10 1964

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