

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 March 5, 1958  
Operator Southern Union Gas Company Lease Newsom Well No. 3-3  
Unit L Sec. 8 Twp. 26 N Rge. 8 W Pay Zone: From 2068 To 2164  
Casing: OD 5 1/4" WT. 15.94 Set At 2215 Tubing: OD 1" WT. 1.74 T. Perf. 2068  
Produced Through: Casing XX Tubing \_\_\_\_\_ Gas Gravity: Measured .688 Estimated \_\_\_\_\_  
Date of Flow Test: From 2/14/58 To 2/21/58 \* Date S.I.P. Measured 10/7/57  
Meter Run Size 1/2" 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 239 psig + 12 = 242 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) \_\_\_\_\_ = 242 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 242 psia (i)  
Wellhead casing shut-in pressure (Dwt) 661 psig + 12 = 661 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 661 psig + 12 = 661 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 661 psia (l)  
Flowing Temp. (Meter Run) 74 °F + 460 \_\_\_\_\_ = 514 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 331 psia (n)

Q = 307 X  $\left( \frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{\text{None}}{\sqrt{(d)}} \right)^* = \underline{307}$  MCF/da  
(integrated)

DELIVERABILITY CALCULATION

D = Q 307  $\left[ \frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^{0.85} \frac{.80422}{1} = \underline{271}$  MCF/da.

SUMMARY

P<sub>c</sub> = 661 psia  
Q = 307 Mcf/day  
P<sub>w</sub> = 242 psia  
P<sub>d</sub> = 331 psia  
D = 271 Mcf/day

Company Southern Union Gas Company  
By Bill McElaney  
Title 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 CALCULATION



UNITED STATES DEPARTMENT OF THE ARMY  
OFFICE OF THE CHIEF OF STAFF  
WASHINGTON, D. C. 20315  
MEMORANDUM FOR THE RECORD  
SUBJECT: [Illegible]

1. [Illegible]  
2. [Illegible]  
3. [Illegible]  
4. [Illegible]  
5. [Illegible]  
6. [Illegible]  
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11. [Illegible] 12. [Illegible] 13. [Illegible]

14. [Illegible] 15. [Illegible] 16. [Illegible] 17. [Illegible]

18. [Illegible] 19. [Illegible] 20. [Illegible]  
21. [Illegible] 22. [Illegible] 23. [Illegible]  
24. [Illegible] 25. [Illegible] 26. [Illegible]

27. [Illegible] 28. [Illegible] 29. [Illegible]

