

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 Pictured Cliffs Formation Pictured Cliffs County San Juan  
Purchasing Pipeline Southern Union Gas Company Date Test Filed April 10, 1956  
Operator Southern Union Gas Company Lease Howson Well No. 4-B  
Unit M Sec. 15 Twp. 26N Rge. 8W Pay Zone: From 2442 To 2485  
Casing: OD 5-1/2" WT. 15.5# Set At 2442 Tubing: OD 1" WT. 1.7# T. Perf. \_\_\_\_\_  
Produced Through: Casing IX Tubing \_\_\_\_\_ Gas Gravity: Measured \_\_\_\_\_ Estimated .660  
Date of Flow Test: From 3/23/56 To 3/31/56 \* Date S.I.P. Measured 12/6/55  
Meter Run Size 4" Orifice Size 1.250 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 173 psig + 12 = 185 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) \_\_\_\_\_ = 185 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 185 psia (i)  
Wellhead casing shut-in pressure (Dwt) 621 psig + 12 = 633 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 621 psig + 12 = 633 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 633 psia (l)  
Flowing Temp. (Meter Run) 60 °F + 460 \_\_\_\_\_ = 520 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 316 psia (n)

Q = 391 X  $\left( \frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)} = \text{None} = \sqrt{(d)}} \right)^* = \text{391 MCF/da}$   
(Integrated)

DELIVERABILITY CALCULATION  
D = Q 391  $\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.85} \frac{.84557}{1} = \text{331 MCF/da.}$

SUMMARY

P<sub>c</sub> = 633 psia  
Q = 391 Mcf/day  
P<sub>w</sub> = 185 psia  
P<sub>d</sub> = 316 psia  
D = 331 Mcf/day

Company Southern Union Gas Company  
By L. S. Muesink L. S. Muesink  
Title Jr. 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> )<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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