

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 WILSON Sapito Formation Pictured Cliff County Rio Arriba
Purchasing Pipeline Southern Union Gas Company Date Test Filed 4/3/51
Operator Southern Union Gas Company Lease McGroden Well No. 1-A
Unit A Sec. 9 Twp. 23N Rge. 3E Pay Zone: From 3675 To 3713
Casing: OD 2 1/2 WT. 13.5 Set At 3758 Tubing: OD 2 3/8 WT. 4.7 T. Perf. 3672
Produced Through: Casing _____ Tubing XX Gas Gravity: Measured .667 Estimated _____
Date of Flow Test: From 3/16/51 To 3/24/51 * Date S.I.P. Measured 7/18/56
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 (_____) ² 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 644 psig + 12 = 656 psia (g)
Square root chart average reading (_____) ² x sp. const. _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = _____ psia (h)
P_t = (h) + (f) _____ = _____ psia (i)
Wellhead casing shut-in pressure (Dwt) 1087 psig + 12 = 1099 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1087 psig + 12 = 1099 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1099 psia (l)
Flowing Temp. (Meter Run) _____ 60° F + 460 _____ = 508° Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 549 psia (n)

FLOW RATE CALCULATION

Q = 694 X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right)^* = \underline{\underline{694}}$ MCF/da
(integrated)

DELIVERABILITY CALCULATION

D = Q 694 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^{0.85} \frac{1.2176}{1.2176} = \underline{\underline{845}}$ MCF/da.

SUMMARY

P_c = 1099 psia Company Southern Union Gas Company
Q = 694 Mcf/day By L.S. Muenich
P_w = 661 psia Title Exploration Engineer
P_d = 549 psia Witnessed by _____
D = 845 Mcf/day Company _____

* This is date of completion test.

* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-s})	(F _c Q) ²	(F _c Q) ² (1-e ^{-s}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
<u>2449</u>	<u>0.163</u>	<u>42.775</u>	<u>6.939</u>	<u>430.336</u>	<u>437.275</u>	<u>661</u>

OK



