

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 3/20/56
Operator Southern Union Gas Company Lease Norton Well No. 13
Unit I Sec. 20 Twp. 26-N Rge. 8-W Pay Zone: From 2070' To 2100'
Casing: OD 5-1/2" WT. 15.5# Set At 2100' Tubing: OD 1" WT. 1.7# T. Perf. _____
Produced Through: Casing IX Tubing _____ Gas Gravity: Measured _____ Estimated .660
Date of Flow Test: From 1/24/56 To 1/31/56 * Date S.I.P. Measured 12/6/55
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 (_____)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 186 psig + 12 = 198 psia (g)
Square root chart average reading (_____)² x sp. const. _____ = _____ psia (g)
Corrected seven day avg. meter press. (p_f) (g) + (e) _____ = 198 psia (h)
P_t = (h) + (f) _____ = 198 psia (i)
Wellhead casing shut-in pressure (Dwt) 635 psig + 12 = 647 psia (j)
Wellhead tubing shut-in pressure (Dwt) 635 psig + 12 = 647 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 647 psia (l)
Flowing Temp. (Meter Run) 60 °F + 460 _____ = 520 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 323 psia (n)

Q = 636 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \text{None} \right) = \text{None}$ MCF/da
(Integrated) $\sqrt{(d)}$

DELIVERABILITY CALCULATION

D = Q 636 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.85} = \frac{314,280}{379,405}^{0.85} = \frac{.85210}{.85210} = \text{542}$ MCF/da.

SUMMARY

P_c = 647 psia
Q = 636 Mcf/day
P_w = 198 psia
P_d = 323 psia
D = 542 Mcf/day

Company Southern Union Gas Company
By L. S. Muenink
Title Jr. Petroleum Engineer
Witnessed by _____
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
Friction Loss Negligible						

OK



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