

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 Astec Pictured Cliffs Formation Pictured Cliffs County San Juan
Purchasing Pipeline Southern Union Gas Company Date Test Filed 2/21/56
Operator Southern Union Gas Company Lease Zachry Well No. 8
Unit A Sec. 33 Twp. 29N Rge. 16W Pay Zone: From 1883' To 1978'
Casing: OD 5-1/2" WT. 15.74 Set At 1883' Tubing: OD 1" WT. 1.74 T. Perf. _____
Produced Through: Casing X Tubing _____ Gas Gravity: Measured .667 Estimated _____
Date of Flow Test: From 12/31/55 To 1/8/56 * Date S.I.P. Measured 9/14/55
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 209 ~~220~~ psig + 12 = 221 psia (g)
Square root chart average reading (_____)² x sp. const. _____ = _____ psia (g)
Corrected seven day avg. meter press. (p_f) (g) + (e) _____ = 221 psia (h)
P_t = (h) + (f) _____ = 221 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ 636 psig + 12 = 648 psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ 636 psig + 12 = 648 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 648 psia (l)
Flowing Temp. (Meter Run) _____ 60 °F + 460 _____ = 500 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 324 psia (n)

FLOW RATE CALCULATION

Q = 322 X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\text{None}}{\text{None}} \right) = \underline{\underline{322}}$ MCF/da
(integrated)

DELIVERABILITY CALCULATION

D = Q 322 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^{0.85} = \underline{\underline{280}}$ MCF/da.
 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right] = \frac{314,988}{371,063}$

SUMMARY

P_c = 648 psia
Q = 322 Mcf/day
P_w = 221 psia
P_d = 324 psia
D = 280 Mcf/day

Company Southern Union Gas Company
By L. S. Muesmink
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 1)	P _t ² + R ²	P _w
Friction Loss Negligible						



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