

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 Co. Lease Nowson Well No. 8
Unit G Sec. 29 Twp. 26-N Rge. 8-W Pay Zone: From 2151' To 2235'
Casing: OD 5-1/2" WT. 15.5# Set At 2158' 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 5-9-55
Meter Run Size 4" Orifice Size 1/2" 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 171 psig + 12 = 183 psia (g)
Square root chart average reading (_____) ² x sp. const. _____ = 183 psia (g)
Corrected seven day avg. meter press. (p_f) (g) + (e) _____ = 183 psia (h)
P_t = (h) + (f) _____ = 607 psia (i)
Wellhead casing shut-in pressure (Dwt) 607 psig + 12 = 619 psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ psig + 12 = 619 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 619 psia (l)
Flowing Temp. (Meter Run) 60 °F + 460 _____ = 309 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = _____ psia (n)

Q = 79 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(d)}} \right) = \underline{\hspace{2cm}}$ MCF/day
(integrated) $\sqrt{(c)} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

D = Q 79 $\left[\frac{\text{DELIVERABILITY CALCULATION}}{\left(\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right)^n} \right] = \underline{\hspace{2cm}}$ MCF/day
 $\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{287,680}{334,960} = 0.85$
 $\frac{287,680}{349,672} = 0.82$

SUMMARY

P_c = 619 psia
Q = 79 Mcf/day
P_w = 183 psia
P_d = 309 psia
D = 66 Mcf/day

Company Southern Union Gas Company
By 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 ^{-S}) | (F _c Q) ² | (F _c Q) ² R ² | (1-e ^{-S}) | P _t ² (Column i) | P _t ² + R ² | P _w |
|----|----------------------|---------------------------------|---|----------------------|---|--|----------------|
| | | | | | | | |
| | | | | | | | |

Friction Loss Negligible

OK



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| OIL CONSERVATION COMMISSION | |
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| Inspector | 1 |
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| Production | |
| State Land | |
| U. S. G. S. | 1 |
| Transporter | |
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