

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 Nickson Well No. 3
Unit H Sec. 22 Twp. 26-N Rge. 8-W Pay Zone: From 2293' To 2355'
Casing: OD 5-1/2" WT. 15.5# Set At 2293' 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 9-8-55
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 178 psig + 12 = 190 psia (g)
Square root chart average reading (_____) ² x sp. const. _____ = 190 psia (g)
Corrected seven day avge. meter press. (pg) (g) + (e) _____ = 190 psia (h)
 $P_t = (h) + (f)$ _____ = 190 psia (i)
Wellhead casing shut-in pressure (Dwt) 668 psig + 12 = 680 psia (j)
Wellhead tubing shut-in pressure (Dwt) 668 psig + 12 = 680 psia (k)
 $P_c = (j)$ or (k) whichever well flowed through _____ = 680 psia (l)
Flowing Temp. (Meter Run) 60 °F + 460 _____ = 520 °Abs (m)
 $P_d = \frac{1}{2} P_c = \frac{1}{2} (l)$ _____ = 340 psia (n)

Q = 226 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \text{None} \right)^* = \text{226 MCF/da}$
(Integrated) $\sqrt{(d)}$

DELIVERABILITY CALCULATION
 $D = Q \text{ } \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.85} = \text{190 MCF/da.}$
 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = \frac{346,800}{426,300}$ $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.85} = .83910$

SUMMARY

$P_c =$ 680 psia
 $Q =$ 226 Mcf/day
 $P_w =$ 190 psia
 $P_d =$ 340 psia
 $D =$ 190 Mcf/day

Company Southern Union Gas Company
By L. S. Muennink
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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