Form C-122-A
Revised April 20, 1955

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 April 10, 1956

Operator Southern Union Gas Company Lease Ruthven Well No. 1

Unit H Sec. 16 Twp. 26N Rge. 8W Pay Zone: From 2174 To 2265

Casing: OD 5-1/2" WT. 15.5# Set At 2174 Tubing: OD 1" WT. 1.7# T. Perf. ____

Produced Through: Casing XX Tubing ____ Gas Gravity: Measured ____ Estimated .660

Date of Flow Test: From 3/23/56 To 3/31/56 Date S.I.P. Measured 11/9/55

Meter Run Size 4" Orifice Size .875 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	175 psig + 12 =	187	psia	(g)
Square root chart average reading (____)^2 x sp. const.	=	---	psia	(g)
Corrected seven day avge. meter press. (p_f) (g) + (e)	=	187	psia	(h)
P_t = (h) + (f)	=	187	psia	(i)
Wellhead casing shut-in pressure (Dwt)	661 psig + 12 =	673	psia	(j)
Wellhead tubing shut-in pressure (Dwt)	661 psig + 12 =	673	psia	(k)
P_c = (j) or (k) whichever well flowed through	=	673	psia	(l)
Flowing Temp. (Meter Run)	60 °F + 460 =	520	°Abs	(m)
P_d = ½ P_c = ½ (l)	=	336	psia	(n)

FLOW RATE CALCULATION

$$Q = 295 \text{ (integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\quad}{\quad} = \text{None} \right)^{*} = 295 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{340,033}{417,960} \right]^{n} = 295 \left[\quad \right]^{0.85} = 295 \times .83912 = 248 \text{ MCF/da.}$$

SUMMARY

P_c =	673	psia	
Q =	295	Mcf/day	
P_w =	187	psia	
P_d =	336	psia	
D =	248	Mcf/day	

Company Southern Union Gas Company
By L. S. Muenink 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	$(1-e^{-s})$	$(F_cQ)^2$	$\frac{(FcQ)^2 \quad (1-e^{-s})}{R^2}$	Pt^2 (Column i)	$P_t^2 + R^2$	P_w
			Friction Loss Negligible			

OK

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