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 **Newsom** Well No. **5**

Unit **A** Sec. **19** Twp. **26-N** Rge. **8-W** Pay Zone: From **1962'** To **2040'**

Casing: OD **5-1/2"** WT. **15.5#** Set At **1968'** Tubing: OD **1"** WT. **1.7#** T. Perf. _____

Produced Through: Casing **XX** Tubing _____ Gas Gravity: Measured **.667** Estimated _____

Date of Flow Test: From **1/16/56** To **1/24/56** * Date S.I.P. Measured **6/5/55**

Meter Run Size **4"** Orifice Size **7/8"** 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 **185** psig + 12 = **197** psia (g)

Square root chart average reading (_____) ^{2} x sp. const. _____ = **---** psia (g)

Corrected seven day avge. meter press. (p_f) (g) + (e) = **197** psia (h)

P_t = (h) + (f) = **197** psia (i)

Wellhead casing shut-in pressure (Dwt) **610** psig + 12 = **622** psia (j)

Wellhead tubing shut-in pressure (Dwt) **610** psig + 12 = **622** psia (k)

P_c = (j) or (k) whichever well flowed through = **622** psia (l)

Flowing Temp. (Meter Run) **60** °F + 460 = **520** °Abs (m)

$P_d = \frac{1}{2} P_c + \frac{1}{2}$ (l) = **311** psia (n)

FLOW RATE CALCULATION

$$Q = \underline{\textbf{170}} \text{ X } \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \underline{} = \textbf{None} \right) = \underline{\textbf{170}} \text{ MCF/da}$$

(integrated)

DELIVERABILITY CALCULATION

$$D = Q \underline{\textbf{170}} \left[\frac{P_c^2 - P_d^2 = \textbf{290,163}}{P_c^2 - P_w^2 = \textbf{348,075}} \right]^{\textbf{0.85}}_n \quad \textbf{.85668} = \underline{\textbf{146}} \text{ MCF/da.}$$

SUMMARY

P_c = **622** psia

Q = **170** Mcf/day

P_w = **197** psia

P_d = **311** psia

D = **146** 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	$(1-e^{-S})$	$(F_cQ)2$	$\dfrac{(F_cQ)^2 \quad (1-e^{-S})}{R^2}$	$\dfrac{P_t^2}{\text{(Column i)}}$	$P_t^2 + R^2$	P_w
			Friction Loss Negligible			

OK