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 **Hodges** Well No. **4**

Unit **G** Sec. **27** Twp. **26-N** Rge. **8-W** Pay Zone: From **2617'** To **2737'**

Casing: OD **5½"** WT. **15.5#** Set At **2617'** Tubing: OD **1"** WT. **1.7#** T. Perf. _____

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

Date of Flow Test: From **1-24-56** To **1-31-56** *Date S.I.P. Measured **1-5-55**

Meter Run Size **4"** Orifice Size **5/8"** Type Chart **Normal** Type Taps **Flanges**

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 **160** psig + 12 = **172** psia (g)

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

Corrected seven day avge. meter press. (p_f) (g) + (e) = **172** psia (h)

P_t = (h) + (f) = **172** 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 = **520** °Abs (m)

P_d = ½ P_c = ½ (l) = **324** psia (n)

FLOW RATE CALCULATION

$$Q = \underset{\text{(integrated)}}{\textbf{103}} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \underline{\quad} = \textbf{None} \right) = \textbf{103} \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \, \textbf{103} \left[\frac{(P_c^2 - P_d^2) = \textbf{314,928}}{(P_c^2 - P_w^2) = \textbf{390,320}} \right]^{n} \quad \textbf{0.85} \quad \textbf{.83324} = \textbf{86} \text{ MCF/da.}$$

SUMMARY

P_c = **648** psia

Q = **103** Mcf/day

P_w = **172** psia

P_d = **324** psia

D = **86** 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	$(1-e^{-S})$	$(F_cQ)2$	$\dfrac{(F_cQ)^2 \quad (1-e^{-S})}{R^2}$	$\dfrac{Pt^2}{\text{(Column i)}}$	$P_t^2 + R^2$	P_w
		Friction Loss Negligible				