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 **Newson** Well No. **2**

Unit **M** Sec. **17** Twp. **26-N** Rge. **8-W** Pay Zone: From **2012'** To **2055'**

Casing: OD **5½"** WT. **15.5#** Set At **2012'** Tubing: OD **1"** WT. **1.7#** T. Perf. ___

Produced Through: Casing **XX** Tubing ___ Gas Gravity: Measured **.673** Estimated ___

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 **1¼"** 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 **172** psig + 12 = **184** psia (g)

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

Corrected seven day avge. meter press. (p_f) (g) + (e) = **184** psia (h)

P_t = (h) + (f) = **184** psia (i)

Wellhead casing shut-in pressure (Dwt) **643** psig + 12 = **655** psia (j)

Wellhead tubing shut-in pressure (Dwt) **643** psig + 12 = **655** psia (k)

P_c = (j) or (k) whichever well flowed through = **655** psia (l)

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

P_d = ½ P_c = ½ (l) = **327** psia (n)

FLOW RATE CALCULATION

$$Q = \frac{\textbf{622}}{\text{(integrated)}} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \_\_\_ = \textbf{None} \right)^* = \textbf{622} \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \textbf{ 622} \left[\frac{\left(P_c^2 - P_d^2 \right) = \textbf{322,096}}{\left(P_c^2 - P_w^2 \right) = \textbf{395,169}} \right]^{n \, \textbf{0.85}} \textbf{.84046} = \textbf{523} \text{ MCF/da.}$$

SUMMARY

P_c = **655** psia

Q = **622** Mcf/day

P_w = **184** psia

P_d = **327** psia

D = **523** 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	$(1-e^{-s})$	$(F_cQ)2$	$(F_cQ)^2 (1-e^{-s})$ R^2	P_t^2 (Column i)	$P_t^2 + R^2$	P_w
			Friction Loss Negligible			