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. **3**

Unit **3** Sec. **34** Twp. **26-N** Rge. **8-W** Pay Zone: From **2676'** **2722'** To **2738'**

Casing: OD **5½** WT. **15.5#** Set At **2755'** 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 **1/2"** 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 **150** psig + 12 = **162** psia (g)

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

Corrected seven day avge. meter press. (p_f) (g) + (e) = **162** psia (h)

P_t = (h) + (f) = **162** psia (i)

Wellhead casing shut-in pressure (Dwt) **651** psig + 12 = **663** psia (j)

Wellhead tubing shut-in pressure (Dwt) **651** psig + 12 = **663** psia (k)

P_c = (j) or (k) whichever well flowed through = **663** psia (l)

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

$P_d = \frac{1}{2} P_c = \frac{1}{2}$ (l) = **331** psia (n)

FLOW RATE CALCULATION

$$Q = \underbrace{\textbf{101}}_{\text{(integrated)}} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \underline{\qquad} = \textbf{None} \right)^* = \textbf{101} \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \, \textbf{101} \left[\frac{(P_c^2 - P_d^2) = \textbf{330,008}}{(P_c^2 - P_w^2) = \textbf{413,325}} \right]^{n \; \textbf{0.85}} \textbf{.82583} = \textbf{83} \text{ MCF/da.}$$

SUMMARY

P_c = **663** psia

Q = **101** Mcf/day

P_w = **162** psia

P_d = **331** psia

D = **83** Mcf/day

Company **Southern Union Gas Company**

By **L. S. Maennink**

Title **Jr. Petroleum Engineer**

Witnessed by _____

Company _____

* This is date of completion test.
* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	$(1-e^{-s})$	$(F_cQ)2$	$\frac{(F_cQ)^2 \quad (1-e^{-s})}{R^2}$	$\frac{Pt^2}{\text{(Column i)}}$	$P_t^2 + R^2$	P_w
			Friction Loss Negligible			

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